

Training Workshop Programme 2012

# Boundary Demarcation & Maintenance

30 July – 1 August 2012, Durham, United Kingdom



**Develop effective strategies and techniques  
for making international boundaries visible  
and peaceful**

  
**IBRU**  
International Boundaries  
Research Unit

## INTRODUCTION

**Delimitation of a boundary in a treaty is a crucial first step in boundary-making, but on its own delimitation is of limited value. For borderland populations, boundaries rarely have much meaning until they are identifiable on the ground – and it is arguable that it is only when a boundary has been physically demarcated that it can begin to function effectively.**

**Many of the world's international boundaries have never been made visible on the ground, and many of those that have been demarcated have subsequently become invisible due to inefficient maintenance regimes. Led by a hugely experienced team of tutors and combining classroom sessions and practical exercises, this unique workshop will assist policymakers and practitioners in developing strategies for the effective demarcation and maintenance of international boundaries in different physical and human landscapes.**

### Who should attend?

- Surveyors
- Diplomats
- Border guards
- Borderland resource managers
- Legal advisors
- Cartographers
- Boundary commissioners
- Remote sensing specialists

## Tutors



**Dr. John W. Donaldson, Principal Research Fellow, Department of Law, University of Wollongong** was the senior research associate at the International Boundaries Research Unit from 2003-2012, where he conducted archive research, map analysis and fieldwork in support of boundary recovery and dispute resolution. Dr. Donaldson has written widely on the subjects of boundary demarcation and river boundaries, as well as guidebooks on the establishment and workings of boundary commissions in Africa. In 2006, he created the International River Boundaries Database and has collected information on over 1100 river boundary sections worldwide. He holds a PhD concerning boundary demarcation practices in southern Africa and an MA in international boundaries, both from Durham University, and currently serves as an advisor to the African Union Border Programme.



**Mr Kyoung-Soo Eom, Chief, Cartographic Section, United Nations** has 30 years of technical and management experience in the public and private sectors as well as military service. In March 2005, Kyong-Soo was appointed as Chief of the UN Cartographic Section, and in accordance with the Peace Agreement between Eritrea and Ethiopia, the UN Secretary-General designated Kyoung-Soo to serve as the Secretary of the Eritrea-Ethiopia Boundary Commission (EEBC) where he successfully provided all administrative and technical service support to the EEBC activities from March 2006 to November 2008. The Section is currently supporting the Iraq-Kuwait Boundary Maintenance Project (IKBMP) and the Cameroon Nigeria Mixed Commission (CNMC). The Cartographic Section supports the cartographic and geographic needs of the Security Council and the UN Secretariat, oversees global GIS programmes at UN Headquarters and in the field, and provides a wide array of geospatial services. It also supports Member States in boundary making activities upon request.



**Mr Alastair Macdonald, former Director of Surveys and Production, Ordnance Survey, UK** spent his whole career as a professional surveyor in the service of the UK Government. For 15 years he worked in the field in Africa and Southeast Asia before returning to UK to work for the Ministry of Defence. His final posting before retirement in 1992 was as Director of Surveys and Production at the Ordnance Survey, the National Mapping Agency of Great Britain. Since retirement he has advised the Governments of Nigeria, Ethiopia, Sudan and the Palestinian Authority on boundary-related matters. In 2009 Alastair was awarded an MBE for services to mapping and the resolution of boundary disputes in Africa.



**Mr Peter Merrett, Director, Merrett Survey Ltd** originally trained as a mining engineer at the Camborne School of Mines in Cornwall, UK. After working in seismic oil exploration, Peter returned to UK and started his own surveying practice, Merrett Survey Ltd a land survey company which specialises in GPS and Geodesy work, and has to date worked with 52 different countries on international boundary projects including projects with the United Nations. In recent years Peter has developed the laser scanning (Lidar) side of surveying and has presented papers for 3 years in a row at the ILMF (International Lidar Mapping Forum) in the USA. Peter has also presented papers at two pipeline conferences in Europe.



**Mr J.T. Moore, Lead Survey Engineering Technician, International Boundary Commission, United States and Canada (IBC)** has overseen field operations for the past 6 years. JT has 24 years in geodetic surveying and mapping, with 20 years in the public sector. Working for the National Geodetic Survey, Department of Defense and now the International Boundary Commission, he has been fortunate to travel to all 50 U.S. states and over 25 countries, giving him a unique perspective of real world scenarios and varying conditions on the ground and in all kinds of environments. During his tenure with the IBC, JT has worked on water and land boundaries most recently along the Alaska – Canada boundary.



**Mr Jochen Petring, former Project Manager, Hansa Luftbild Consulting International** worked at Hansa Luftbild - German Air Surveys, an engineering company operating internationally in the fields of geospatial data acquisition, data processing, and related consultancy services. Jochen has worked on several large scale boundary demarcation projects, culminating in head of surveying, demarcation and mapping for the Boundary Demarcation Project between the Kingdom of Saudi Arabia and the Republic of Yemen (2001-06). While continuing as Project Manager he was appointed Quality Manager of Hansa Luftbild, having upgraded the company's Quality Management System to certified ISO 9001 standards. In 2010 he joined the staff of a regional high school, teaching maths and geography.



**Professor Martin Pratt, Director of Research, International Boundaries Research Unit** has been a member of the IBRU research team since 1994 and coordinates the Unit's training programmes and consultancy activities. He has advised governments, NGOs and commercial organisations on a wide range of boundary and sovereignty disputes around the world, and has extensive experience conducting research in archives in the UK and overseas. Martin has served as an advisor to the African Union Border Programme and the International Boundaries Task Force of the United Nations Geographic Information Working Group. In 2010 he received the Michael Barratt Award of the Royal Institute of Chartered Surveyors for his contribution to the understanding of international boundary issues.

## PROGRAMME

Monday 30 July	0830-0900	<b>Registration</b>
	0900-0930	<b>Introduction</b>
	0930-1030	<b>Principles of boundary demarcation and maintenance</b> <ul style="list-style-type: none"><li>• The purpose and value of boundary demarcation</li><li>• The changing nature of boundary-making</li><li>• Demarcation options in different physical and human landscapes</li><li>• The importance of field research</li><li>• Key challenges in boundary demarcation and maintenance</li></ul>
	1030-1100	<b>Refreshments</b>
	1100-1300	<b>Maps and imagery in boundary demarcation and maintenance</b> <ul style="list-style-type: none"><li>• The use and abuse of maps, aerial photographs and satellite imagery</li><li>• Maps and imagery as tools for boundary research and recovery</li><li>• Working with imprecise mapping</li><li>• Base maps for boundary demarcation</li><li>• Practicalities of map production</li></ul>
	1300-1400	<b>Lunch</b>
	1400-1500	<b>Practical exercise</b> Participants will seek to use maps and imagery in support of a range of demarcation-related tasks
	1500-1530	<b>Refreshments</b>
	1530-1700	<b>Case study: Demarcation and maintenance of the Canada-USA boundary</b>
	1900	<b>Dinner</b>

Tuesday 31 July	0900-1030	<b>International boundary commissions</b> <ul style="list-style-type: none"><li>• Types of commission</li><li>• Mandate and rules of procedure</li><li>• Resolving disputes</li><li>• Good practice guidelines</li></ul>
	1030-1100	<b>Refreshments</b>
	1100-1230	<b>Practical considerations for boundary survey work</b> <ul style="list-style-type: none"><li>• Practical field work: planning, survey control stations, building monuments, access, safety and security</li><li>• Using and understanding coordinate systems and GPS</li><li>• Airborne lidar surveys for boundary work</li></ul>
	1230-1330	<b>Lunch</b>
	1330-1700	<b>Practical exercise</b> Working in teams, participants will undertake a field-based survey of a fictional border landscape in preparation for boundary demarcation
1900	<b>Dinner at Durham Castle</b>	

Wednesday 1 August	0900-1030	<b>United Nations support for boundary demarcation projects</b> <ul style="list-style-type: none"><li>• The context for UN support</li><li>• Expertise and resources</li><li>• Case studies: Iraq-Kuwait, Cameroon-Nigeria</li></ul>
	1030-1100	<b>Refreshments</b>
	1100-1230	<b>Developing good practice in boundary demarcation and maintenance</b> <ul style="list-style-type: none"><li>• Demarcating river, swamp and lake boundaries</li><li>• Positional accuracy requirements</li><li>• Boundary visibility requirements</li><li>• Maximising flexibility</li><li>• Involving borderland communities in demarcation and maintenance</li></ul>
	1230-1300	<b>Wrap Up</b>
	1300	<b>Lunch</b>

IBRU reserves the right to modify the programme and tutors as necessary without prior notice to participants

Cover image: Associated Press/Bukaty. The painting of a new boundary marker between Houlton, Maine, and Richmond, New Brunswick on the Canada-USA international boundary, the world's longest (8891 kilometres).

### What will it cost?

The cost of the workshop will be **£1,860** per participant. Fees include VAT of 20%.

Payment can only be accepted in GBP sterling, however we are able to accept payment by most major credit and debit cards.

Full payment **MUST** be received prior to the workshop to guarantee the booking. If full payment is not received before the deadline date of **13 July 2012**, any provisional places booked will be removed. Bookings made after 13 July 2012 will only be guaranteed with payment in full and if places are still available.

In addition to tuition and all course materials, the fees cover the following:

- Accommodation in a single en-suite room at Collingwood College for the nights of 29, 30 and 31 July
- Evening dinner on 29, 30 and 31 July
- Breakfast, lunch and refreshment breaks on 30 July, 31 July and 1 August

Accommodation for additional nights can be booked at additional cost to the participant.



### How to book

Places are limited and early booking is highly recommended:

- 1 Contact the IBRU Events Team or complete the online booking form at [www.durham.ac.uk/ibru/workshops/booking](http://www.durham.ac.uk/ibru/workshops/booking)
- 2 Acknowledgement of the provisional booking will be sent by email with information on how to pay.
- 3 If payment is not received by the deadline specified, the reserved place will be cancelled and your booking removed to a waiting list. Your place will only be confirmed when payment is received and if a place is still available.

### Additional Information

#### Venue and travel

Workshop accommodation and teaching will be based at Collingwood College which is part of Durham University and located approximately 25 minutes walk from the city centre. Full details of the venue will be sent to participants following payment and confirmation of the booking.

Durham is located in the North East of England about 250 miles north of London. It lies on main road and rail lines between London and Edinburgh and nearby airports offer connections to London Heathrow, Paris and Amsterdam.

#### Language

Teaching and workshop materials will be in English. We regret that we are unable to provide translation or interpreting services.

#### Cancellations

Cancellations must be received in writing not later than 13 July 2012 and will be subject to a £50 cancellation fee, unless a substitute participant is offered. After this date the full registration fee will be charged for all cancellations.

#### Programme changes

IBRU reserves the right to modify the programme as necessary without notice to participants.



### Contact Information

If you have any questions about the workshop please contact the IBRU Events Team.

International Boundaries Research Unit, Department of Geography,  
Durham University, DH1 3LE, United Kingdom

Tel: +44 (0)191 334 1961 Fax: +44 (0)191 334 1962

Email: [ibru-events@durham.ac.uk](mailto:ibru-events@durham.ac.uk)

Web: [www.durham.ac.uk/ibru/workshops](http://www.durham.ac.uk/ibru/workshops)