

Training Workshop Programme 2014

# Geographic Information in Boundary-Making & Dispute Resolution

28 - 30 July 2014, Durham University, United Kingdom



Explore how maps, imagery and modern Geographic Information Systems can contribute to effective boundary creation, management and dispute resolution.



## INTRODUCTION

Geographic information, particularly as presented on maps and charts, has always been central to the process of creating and managing international boundaries. Access to accurate geographical information does not guarantee that a boundary will be problem-free, but boundaries created on the basis of poor geographical information almost invariably become a source of friction and occasionally even armed conflict between states.

This workshop is designed to help boundary practitioners make the best use of geographical information in their work. The workshop will examine the use of maps, charts and other traditional sources of geographic information in boundary settings and explore how modern Geographic Information Systems (GIS) can contribute to effective boundary creation, management and dispute resolution. The workshop will include hands-on exercises designed to allow participants to evaluate key geographic technologies and resources in a range of boundary-related settings.

### Who should attend?

- Surveyors
- Cartographers
- Senior Academics
- Diplomats
- Borderland Resource Managers
- Military attachés and border guard commanders
- GIS Managers
- Legal Advisors
- Boundary Administrators

## Tutors



**Mr Leo Dillon, Chief of the Geographic Information Unit, U.S. Department of State's Office of the Geographer and Global Issues** has worked as a cartographer and political geographer with this office since 1986, specializing in foreign geographic names and mapping international boundary and sovereignty issues. He is the U.S. Department of State member to the U.S. Board on Geographic Names, and is currently Chair of that Board's Foreign Names Committee. Leo serves in the United Nations Group of Experts on Geographical Names as convener of that organization's Working Group on Country Names. He serves on the Board of the North American Cartographic Information Society, and is a past member of the U.S. National Committee to the International Cartographic Association.



**Professor Danny Donoghue, Professor, Geography Department, Durham University** has a broadly based research profile that covers applications of remote sensing technology in the fields of spectrometry, forestry, coastal ecology, land use change and archaeology. Danny is Chairman of the UK Natural Environment Research Council's Airborne Science Steering Committee, consultant to Government of Guyana for their UN REDD+ project, and is Acting Director of Durham's NERC Doctoral Training Partnership. He currently holds research grants with NERC, the Qatar Foundation, the EU and the German Space Agency (DLR). In 2012 he was awarded the President's Prize by the Remote Sensing and Photogrammetry Society.



**Dr David Fairbairn, Senior Lecturer in Geomatics, Newcastle University** has taught subjects focusing on mapping and the handling of geospatial data at Newcastle since 1978. David has many research interests which include map and image data extraction (LIDAR, landscape analysis, historic maps and images), spatial data handling (map use, mobile technologies), practical map making ('crowdsourcing', generalisation, geovisualization) and theoretical cartography (information content, map complexity). David is a fellow of the British Cartographic Society and was previously employed as an Atlas Editor for George Philip Ltd. He has also served as Vice President (2003-2007), then Secretary General & Treasurer (2007-2011), of the International Cartographic Association.



**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, Thailand 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 Ray Milefsky, Office of the Geographer and Global Issues, United States Department of State** is a lead geographic advisor to the US Department of State providing briefs, reports, and analyses to policy-makers on matters related to boundary, territorial, and sovereignty claims and disputes. He collaborates closely with the Department's Legal Bureau as well as government, commercial and international mapping and research organizations. He lectures regularly to various universities and institutions, and has briefed several heads of state on boundary matters.



**Professor Martin Pratt, Consultancy Director, IBRU** has two decades' experience advising governments, commercial organisations and NGOs on land and maritime boundary issues around the world. Recent projects in which he has served as a geographical expert include the Cambodia-Thailand *Temple of Preah Vihear* case, the Abyei arbitration in Sudan, and maritime boundary negotiation in the southwest Indian Ocean. Martin coordinates IBRU's training workshop programme and consultancy activities; he also manages IBRU's GIS resources and the *int-boundaries* email list. In 2010 Martin received the Michael Barrett Award of the Royal Institution of Chartered Surveyors for his contribution to boundary studies.

# PROGRAMME

Monday 28 July	0900-0945	<b>Introduction</b> <ul style="list-style-type: none"><li>• The process of boundary-making</li><li>• The role of geographers in boundary-making and dispute resolution</li></ul>
	0945-1100	<b>Sources of Geographic Information 1: maps and charts</b> <ul style="list-style-type: none"><li>• Types of map</li><li>• The science and art of cartography</li><li>• The significance of coordinate systems, scale and projection</li></ul>
	1100-1130	<b>Refreshments</b>
	1130-1300	<b>Sources of Geographic Information 2: remotely-sensed imagery</b> <ul style="list-style-type: none"><li>• Types of imagery</li><li>• Applications of remotely-sensed imagery</li><li>• Acquiring and interpreting imagery</li></ul>
	1300-1400	<b>Lunch</b>
	1400-1530	<b>Geographic information in land boundary definition</b> <ul style="list-style-type: none"><li>• Treaty interpretation and boundary 'recovery'</li><li>• Geographical support for boundary negotiators</li><li>• Using maps and imagery in boundary demarcation</li><li>• Mapping international boundaries</li></ul>
	1530-1600	<b>Refreshments</b>
	1600-1700	<b>Practical exercise</b> <ul style="list-style-type: none"><li>• Using maps and imagery to identify uncertain boundaries</li></ul>
Tuesday 29 July	0900-1030	<b>Geographic information in maritime boundary delimitation</b> <ul style="list-style-type: none"><li>• Geographic aspects of maritime jurisdiction</li><li>• The use of nautical charts and other sources of geographic information in delimiting maritime limits and boundaries</li><li>• The role of the technical expert in maritime boundary delimitation</li><li>• Software for boundary definition analysis</li></ul>
	1030-1100	<b>Refreshments</b>
	1100-1230	<b>Geographic information in border management and cross-border conflict resolution</b> <ul style="list-style-type: none"><li>• Integrating geographic aspects of border management</li><li>• Analysing cross border land use conflicts/environmental damage/resource problems</li><li>• Analysing the territorial implications of an ethnic conflict</li><li>• Future directions for using geospatial tools for assisting conflict mediation</li></ul>
	1230-1330	<b>Lunch</b>
	1330-1700	<b>Practical exercises</b> <ul style="list-style-type: none"><li>• PC Classroom-based exercises with GIS software and datasets</li></ul>
	1900	<b>Workshop dinner at Durham Castle</b>
Wednesday 30 July	0900-1030	<b>Geographic information in third-party boundary dispute resolution</b> <ul style="list-style-type: none"><li>• The evidentiary value of maps</li><li>• Other geographical evidence</li><li>• Presenting geographical information to courts and tribunals</li></ul>
	1030-1100	<b>Refreshments</b>
	1100-1230	<b>Where's the line? Fitting inadequate boundary maps to the landscape</b> <ul style="list-style-type: none"><li>• Limitations of early boundary mapping</li><li>• Map interpretation skills and tools</li><li>• Case studies of boundary map analysis and interpretation</li><li>• Recommendations for policy makers</li></ul>
	1230-1300	<b>Wrap-up</b>
	1300-1400	<b>Lunch</b>

Cover image: Variations in land use and irrigation across the Mexico USA boundary in vicinity of Calexico-Mexicali (ASTER Sarelitte image courtesy of NASA/GSFC/MITI/ERSDAC/JAROS and the US/Japan ASTER Science team)

### What will it cost?

The cost of the workshop will be £1,920 per participant.

Fees include VAT of 20%, accommodation and meals.

We regret that 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 **4 July 2014**, any provisional places booked will be removed. Bookings made after 4 July 2014 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 27, 28 and 29 July
- Evening dinner on 27, 28 and 29 July
- Breakfast, lunch and refreshment breaks on 28, 29 and 30 July

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



### 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 Payment must be made to confirm your booking. 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 in full and if a place is still available.
- 4 Please ensure you have a valid VISA to travel to the UK before booking on the workshop. Refunds cannot be made to individuals that do not have the required travel documentation after the deadline date has passed with no exceptions.

#### 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 4 July 2014 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 with no exceptions.

***If you require a Visa to travel to the UK, please ensure you have obtained your Visa prior to booking on the workshop as all cancellations will be charged the full registration fee after the deadline date.***

#### 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.

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