



Wits University Graduate School of  
Public and Development Management

# **PADM7006**

## **Global Trends Affecting ICT Regulation**

A fundamental course in the degree of  
Master of Management  
in the field of ICT Policy and Regulation

**Course Convenor:**

Charley Lewis, Senior Lecturer & Degree Leader, LINK Centre

25 – 29 January 2010

Classroom F

# CONTENTS

## 1 Content overview

This fundamental course on the Master of Management in ICT Policy and Regulation (MM(ICTPR)) provides the contextual background to the environment within which policy formulation for, and regulation of, the ICT sector take place. The course begins with a brief basic overview of the technologies underpinning the development of the telecommunications sector, before examining the broad trend of globalisation and the consequent rise of the information society and the knowledge economy. Global trends in telecommunications, including convergence, deregulation, liberalisation, privatisation, are examined. The scope, principles, role and functions of the regulation of telecommunications are discussed, and the institutional environment governing the sector at various levels is reviewed. The trends driving growth in the telecommunications, broadcasting and Internet markets are reviewed. The course concludes with an examination of the impact of convergence and other likely future developments, and a review of a broad range of projects and initiatives undertaken in the sector.

## 2 Session Summary

	Time	Topic	Presenter
<b>Monday 25 January</b>			
1	09:00 – 09:30	Welcome and introductions	Dr Ivor Sarakinsky, Academic Director, P&DM Luci Abrahams, Director, LINK Centre
2	09:30 – 10:00	Module 1 overview – coursework, readings and assignment	Charley Lewis, Senior Lecturer, LINK Centre
3	10:30 – 13:00	Overview of communications technologies: from semaphore to bluetooth	Charley Lewis
4	14:00 – 17:00	Globalisation, the information age and the knowledge economy	Luci Abrahams
<b>Tuesday 26 January</b>			
5	09:00 – 12:00	The telecommunications market: drivers, trends and indicators	Charley Lewis, Senior Lecturer, LINK Centre
6	12:00 – 13:00	Writing exercise	Charley Lewis, Senior Lecturer, LINK Centre
7	14:00 - 17:00	The broadcasting market: drivers, trends and indicators	Mlamli Booi, Z-Coms
<b>Wednesday 27 January</b>			
8	09:00 – 12:00	Global trends driving ICT sector reform: from monopoly provision to competition, liberalisation, privatisation, deregulation	Charley Lewis
9	12:00 – 13:00	Writing exercise	Charley Lewis
10	14:00 - 17:00	The institutional environment of ICT regulation: policy, law, institutions - scope, principles, roles and functions	Nadia Bulbulia, Cell C
<b>Thursday 28 January</b>			
11	09:00 – 12:00	Policy formulation, implementation and monitoring: a theoretical introduction	Stephen Porter, P&DM

	Time	Topic	Presenter
12	12:00 – 13:00	Writing exercise	Charley Lewis
13	14:00 - 17:00	ICT Governance: global, regional and national institutions and initiatives	Prof Andrew Barendse, LINK Centre & Telkom
<b>Friday 29 January</b>			
14	09:00 – 11:00	Digitised Information and Intellectual Property Rights	Dr Tobias Schonwetter, UCT
15	11:30 – 13:30	ICT futures in Africa: market trends and regulatory responses	Mark Williams, World Bank
16	14:30 - 17:00	Group presentations (for evaluation)	Charley Lewis, Senior Lecturer, LINK Centre

### 3 Course Outcomes

On completion of this course, participants will be able to:

- analyse the role and impact of ICT in socio-economic development in SA & Africa;
- assess the key trends governing development in the telecommunications, broadcasting and Internet sectors in Africa;
- apply the conceptual framework of the "information society" to the macro-environment of telecommunications in Africa
- demonstrate an understanding of the basic trends in telecommunications reform, their drivers, and their implications domestically and internationally;
- demonstrate an understanding of how ICT policy is made, and the roles and functions of different state actors in its implementation;
- articulate the basic tenets of regulatory governance, and the interplay between state actors in this regard;
- test their understanding of the above concepts in the national policy context and market, as well as globally.

### 4 Core Readings

The following books are recommended as background reading to the entire MM (ICTPR) programme. All are available in electronic format. The books edited by Intven (2000) and Melody (1997) are probably the best starting points:

- Intven, H (ed) (2000) *Telecommunications Regulation Handbook*, Mccarthy Tétrault. Infodev, Washington, available online at <http://www.infodev.org/en/Publication.22.html>
- James, T (ed) (2001) *An Information Policy Handbook for Southern Africa*, International Development Research Centre, Ottawa, available online at <http://www.apc.org/books/ictpolsa/>
- Mansell, R & Wehn, U (1998) *Knowledge Societies: Information Technology for Sustainable Development*, University of Sussex, available online at <http://www.sussex.ac.uk/spru/ink/knowledge.html>
- Mansell, R, Samarajiva, R & Mahan, A (eds) (2002) *Networking Knowledge for Information Societies: Institutions & Intervention*, Delft University Press, Delft, available online at <http://lirne.net/live/content/view/11/38/>
- Melody, W (ed) (1997) *Telecom Reform: Principles, Policies and Regulatory Practices*, Den Private Ingeniørfond, Technical University of Denmark, Lyngby, available online at <http://lirne.net/live/content/view/7/38/>
- Souter, D (ed) (2009) *The APC ICT Policy Handbook*, The Association for Progressive Communications, Johannesburg, available online at [http://www.apc.org/en/system/files/APCHandbookWeb\\_EN.pdf](http://www.apc.org/en/system/files/APCHandbookWeb_EN.pdf).

## 5 Required Readings

One or more readings are **required** to be completed for each session. A number of these are distributed by e-mail, commencing several weeks in advance of the course. They are usually sent out in APA referencing format, and you are required to locate each reading via a search engine (such as Google or Google Scholar) or on the university's database of journals, and download and read each (they will **not** be reprinted for the course pack).

Other readings are printed out and included in your course pack.

**You are expected to complete ALL readings required for each session IN ADVANCE, as the lecture will assume familiarity with their content.**

Lecturers who use teaching aids or provide additional material, will distribute these notes to you as they become available. These notes should be added to your course file and included as part of your course materials.

## 6 Additional Readings

Additional readings for each session are listed in this course outline. They are intended to provide a starting point (but far from the last word) for exploring each of the topic areas in greater depth and detail.

Should you choose to submit an assignment on one of these topic areas, you should track down and read each of these additional readings as a matter of course - together with several further relevant readings.

An electronic library of course notes and additional reference material relevant to this course is made available via the Wits Ignite web site at <http://ignite.wits.ac.za>. You will be given a logon ID and password to allow you to access this material: a folder named 'PADM 7006 Global Trends Affecting ICT Regulation' contains material relevant to this specific module. You are strongly encouraged to make extensive use of resources and features of this course web site.

You may also be required to contribute to online discussions or to complete assignments and other forms of assessment via this web site.

Note that many of these readings are presented in Acrobat Reader format, which will require you to have Acrobat Reader installed on your computer.

## 7 Preparation Requirements

Your preparation work – mainly reading - should be done individually *in advance* of the respective course sessions. Please note that there may be tasks to prepare for specific sessions. These will assist you to work through the conceptual and theoretical understandings in each of the readings and begin to apply these to cases and issues. Read through each session outline carefully to ensure that there are no mishaps.

<p>We assume that for every 1 hour that you spend in the classroom, 30 in all, you will need to spend approximately 4 additional hours in preparation. This includes reading, writing assignments and examinations.</p>
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## 8 Syndicates and Group Learning

An interactive and intensive learning methodology is utilised, which involves a combination of lectures, case studies, group and individual projects. Given that many participants are active in shaping the ICT sector, P&DM endorses the “syndicate method” of teaching, which requires that some of the learning will be done in groups. This approach is designed to enable course participants to contribute to the course, bringing in their own practical experience, knowledge and expertise together with those of their peers to create a rich learning environment.

Each participant will be assigned to a syndicate group. Syndicates and group work are a vital component of the learning process and attendance at all syndicate meetings is required and compulsory.

Syndicate meetings will be organised by the group members at a time and place suitable to them in accordance with the programme’s schedule. Although P&DM makes syndicate meeting rooms available, these meetings need not be held on campus. Syndicate meetings and interactions may also take place virtually, through the Ignite and via the mailing lists which will be made available for this purpose.

Problems within syndicate groups are to be reported timeously to the Course Convenor, so that steps may be taken to resolve them. Syndicates will only be able to change their syndicate group composition under exceptional circumstances, and at the sole discretion of the Course Convenor.

## 9 Course Assessment

There are several components to the assessment for this course, viz:

- |  |   |     |
|--|---|-----|
| • individual quiz on required readings         | - | 5%  |
| • group assignment                             | - | 20% |
| • individual writing exercises                 | - | 5%  |
| • individual examination-equivalent assignment | - | 70% |


The short quiz is designed to test your grasp of key concepts from the preparatory readings.

The group assignment, which is done in syndicate groups during the week, will be distributed on the first day of the course, and is due for completion and presentation on **Friday 29 January**. It comprises a group presentation on a topic related to the course content, and will count **20%** towards your final mark for the course.

The **Individual Exam-equivalent Assignment** will be distributed to you at the end of the week. It will count **70%** towards your final mark for the course, and is due on **22 March**.

***Should you for any reason need to apply for a deferred exam for the Individual Exam-equivalent Assignment, be aware that this will be granted only in the most exceptional of cases, and ensure that you follow precisely the requirements laid down in the 2009 P&DM Study Guide.***

## 10 Session Content

<b>Session 3 Overview of communications technologies: from semaphore to bluetooth</b>	
<b>Presenter</b>	<b>Charley Lewis</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe the evolution of the technologies underpinning communications services;</li> <li>• distinguish between digital and analogue technologies and services;</li> <li>• identify the principles of operation of key ICT technologies;</li> <li>• describe basic and advanced communications technologies and services.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Evolution of ICTs: telegraph, radio, telephone, TV, computer, PC, Internet</li> <li>• Typology of technologies: fixed, wireless, satellite, Internet;</li> <li>• Analogue vs digital technologies;</li> <li>• ICT services - PSTN, mobile, broadcasting, signal distribution, ISP, VANS, IT;</li> <li>• Next generation technologies: xDSL, broadband, CDMA, WiFi, Bluetooth</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Glass, S (1997) 'Telecommunications Systems: An Introductory Guide', Gilbert and Tobin, Sydney, last seen at <a href="http://www.gtlaw.com.au/pubs/telcosysintroguide.html">http://www.gtlaw.com.au/pubs/telcosysintroguide.html</a> [e-mail]</li> <li>• Infodev (2007) ICT Regulation Toolkit: Module 7: New Technologies and their Impacts on Regulation, Executive Summary, prepared by Technical University of Denmark, infoDev &amp; ITU, Washington DC &amp; Geneva, available online at <a href="http://icttoolkit.infodev.org/Mod7ExecSummary">http://icttoolkit.infodev.org/Mod7ExecSummary</a> [e-mail]</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Dodd, A (2005) <i>The Essential Guide to Telecommunications</i>, 4<sup>th</sup> Edition, Prentice Hall, New Jersey (3<sup>rd</sup> Edition available: TK 5105 DOD, Overnight Loan)</li> <li>• Jones, S, Kovac, R &amp; Groom, F (2008) <i>Introduction to Communications Technologies: A Guide for Non-Engineers</i>, 2<sup>nd</sup> Edition, Auerbach Publications, New York</li> <li>• Khumalo, L &amp; Sibanda, J (1998) <i>Telecommunications Made Easy</i>, Ravan Press, Randburg (TK 5105 KHU, Overnight Loan)</li> </ul>
<b>Activity</b>	<ul style="list-style-type: none"> <li>• Identify a key technology for the future and explain its likely impact on the future development of the ICT sector.</li> </ul>
<b>About your Lecturer</b>	<p>Charley Lewis is a senior lecturer, researcher and consultant at the LINK Centre of the School of Public and Development Management at the University of the Witwatersrand. His areas of interest include: labour, work and ICT; ICT sector policy and regulation; universal service and access; the Internet, and business process outsourcing. He has lectured and presented widely, on a number of ICT policy, regulation and development issues. He has undertaken research in a number of areas, including the Internet, call centres, e-learning and universal access and service. He holds the degree of Master of Commerce in the Management of Information Systems from the University of the Witwatersrand.</p> 

<b>Session 4: Globalisation, the information age &amp; the knowledge economy</b>	
<b>Presenter</b>	<b>Luci Abrahams</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• discuss the features of globalisation and the information age;</li> <li>• identify the social, political and economic impacts of globalisation and the information age;</li> <li>• articulate priorities and ideas for the development of a knowledge economy.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Globalisation: a perspective</li> <li>• Impact of globalisation on the state, society and the economy</li> <li>• Globalisation and the world system</li> <li>• The information revolution</li> <li>• Features of the information age</li> <li>• National strategies and global positioning</li> <li>• The global economic context from the perspective of the knowledge economy</li> <li>• The role of ICT in the knowledge economy</li> <li>• South African public policy in the emerging knowledge economy</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Castells, M (1999) <i>Information Technology, Globalization and Social Development</i>, United Nations Research Institute for Social Development, Discussion Paper No 114, September 1999, available online at <a href="http://www.unrisd.org/unrisd/website/document.nsf/ab82a6805797760f80256b4f005da1ab/f270e0c066f3de7780256b67005b728c/\$FILE/dp114.pdf">http://www.unrisd.org/unrisd/website/document.nsf/ab82a6805797760f80256b4f005da1ab/f270e0c066f3de7780256b67005b728c/\$FILE/dp114.pdf</a> [e-mail]</li> <li>• Houghton, J &amp; Sheehan, P (2000) <i>A Primer on the Knowledge Economy</i>, Centre for Strategic Economic Studies, Victoria University, available online at <a href="http://eprints.vu.edu.au/59/1/wp18_2000_houghton_sheehan.pdf">http://eprints.vu.edu.au/59/1/wp18_2000_houghton_sheehan.pdf</a> [e-mail]</li> <li>• ITU (2004) <i>Global Information Infrastructure, Internet Protocol Aspects and Next Generation Networks, General Overview of NGN</i>, ITU-T Recommendation Y.2001, International Telecommunication Union, Geneva, available online at <a href="http://www.itu.int/rec/T-REC-Y.2001-200412-1/en">www.itu.int/rec/T-REC-Y.2001-200412-1/en</a> [e-mail]</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Benkler, Yochai (2006) <i>The Wealth of Networks, How Social Production Transforms Markets and Freedom</i>, Yale University Press, New Haven and London, Chapter 1</li> <li>• Stiglitz, J (2003) 'Globalisation, Technology and Asian Development', <i>Asian Development Review</i>, Vol 20 No 2, 2003</li> <li>• Smith, K (2002) <i>What is the 'Knowledge Economy'? Knowledge Intensity and Distributed Knowledge Bases</i>, United Nations University, 2002</li> </ul>
<b>Activity</b>	Class exercise and discussion


**About  
your  
Lecturer**

Luci is a senior lecturer at Wits and Director of the LINK Centre. She was instrumental in the establishment of the ICT4D programme, precursor of the LINK Centre, in 1996. She serves as member of the National Advisory Council on Innovation (NACI), the advisory body to the Minister of Arts, Culture, Science and Technology on innovation matters. She was a Director of the Development Bank of Southern Africa from 1996 – 2005, the State Information Technology Agency (SITA) from 2002 – 2005, the National Research Foundation (NRF) from 2005 – 2008 and Advisor to the Premier of Gauteng from 2006 – 2008. She currently serves on the Council on Higher Education.




<b>Session 5: The telecommunications market: drivers, trends and indicators</b>	
<b>Presenter</b>	<b>Charley Lewis</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe significant past and present trends in the evolution of the telecommunications sector, in South Africa, Africa and globally;</li> <li>• identify key factors driving the development of the telecommunications market.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Fixed line services</li> <li>• Mobile services</li> <li>• Indicators</li> <li>• Drivers</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Esselaar, S, Gillwald, A &amp; Stork, C (2007) <i>South African Telecommunications Sector Performance Review 2006</i>, LINK Centre Public Policy Research Paper No 8, LINK Centre, Johannesburg, available online at <a href="http://link.wits.ac.za/papers/TSPR2007.pdf">http://link.wits.ac.za/papers/TSPR2007.pdf</a> [e-mail]</li> <li>• ITU (2009) <i>Measuring the Information Society: The ICT Development Index</i>, Chapters 1 - 4, International Telecommunication Union, Geneva</li> <li>• ITU (2008) <i>African Telecommunication/ICT Indicators 2008: At a Crossroads</i>, International Telecommunication Union, Geneva, 2008</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Esselaar, S, Gillwald, A &amp; Stork, C (2007) <i>Towards an African e-Index 2007: Telecommunications Sector Performance in 16 African Countries – a supply side analysis of policy outcomes</i>, LINK Centre, Johannesburg, available online at <a href="http://link.wits.ac.za/papers/Africa-SPR-2007.pdf">http://link.wits.ac.za/papers/Africa-SPR-2007.pdf</a></li> <li>• Gillwald, A &amp; Stork, C (2008) 'Towards Evidence-based ICT Policy and Regulation: ICT access and usage in Africa', Vol 1, Policy Paper 2, Research ICT Africa, Cape Town, available online at <a href="http://www.researchictafrica.net/new/images/uploads/ria-policy-paper_ict-access-and-usage-2008.pdf">http://www.researchictafrica.net/new/images/uploads/ria-policy-paper_ict-access-and-usage-2008.pdf</a></li> </ul>
<b>Activity</b>	
<b>About your Lecturer</b>	See above.

<b>Session 7: The broadcasting market: trends, drivers and indicators</b>	
<b>Presenter</b>	<b>Mlamli Boo</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>describe significant past and present trends in the evolution of the broadcasting sector;</li> <li>identify key factors driving the development of the broadcasting market.</li> <li>articulate the impact on policy and regulation of technological developments, convergence (technical, content, corporate), globalisation, market changes in the broadcasting sector</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>Broadcasting sectors – commercial, public and community</li> <li>Broadcasting &amp; convergence – technical, content and corporate convergence</li> <li>Broadcasting revenues – advertising/audiences, licence fees, government funding, local content production funds</li> <li>Broadcasting regulation – ownership and control restrictions, local content/music quotas, public service mandates, Universal Access, competition regulation</li> <li>Digital broadcasting – the drivers, the technologies, the difficulties/costs</li> <li>Global Broadcasting Trends – convergence, content re-purposing and fragmentation, declining/re-configuring public service broadcasters (PSBs)</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>Armstrong, C &amp; Collins, R (2004) 'Digital Dilemmas for South African TV', LINK Centre Public Policy Research Paper No. 6, LINK Centre, University of the Witwatersrand, Johannesburg, South Africa, available online at <a href="http://link.wits.ac.za/papers/ddtvcarc.pdf">http://link.wits.ac.za/papers/ddtvcarc.pdf</a> [e-mail]</li> <li>DoC (2009) PSB Discussion Paper, Department of Communications, Pretoria, 20 July 2009, available online at <a href="http://www.doc.gov.za/index.php?option=com_content&amp;task=view&amp;id=332&amp;Itemid=457">http://www.doc.gov.za/index.php?option=com_content&amp;task=view&amp;id=332&amp;Itemid=457</a> [e-mail]</li> <li>Koenderman, T (2009) 2009 South Africa &amp; SADC: Media Facts, OMD South Africa Johannesburg, <a href="http://www.omdmedia.co.za/samediafacts2009.pdf">http://www.omdmedia.co.za/samediafacts2009.pdf</a> [e-mail]</li> <li>Williams, D (2009) 'Advertising Media: The twain shall meet', AdFocus, Financial Mail, 27 November 2007, available online at <a href="http://www.adfocus.co.za/adfocus2009/stories/badf.htm">http://www.adfocus.co.za/adfocus2009/stories/badf.htm</a> [e-mail]</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>Article 19 (2006) Broadcasting Pluralism and Diversity: Training Manual for African Regulators, Chapters 2-5, <a href="http://www.article19.org/pdfs/tools/broadcasting-manual.pdf">http://www.article19.org/pdfs/tools/broadcasting-manual.pdf</a></li> <li>Berger, G (2007) Media Legislation in Africa: A Comparative Legal Survey, UNESCO and Rhodes University School of Journalism and Media Studies, Chapters 3-5, at <a href="http://unesdoc.unesco.org/images/0015/001570/157072e.pdf">http://unesdoc.unesco.org/images/0015/001570/157072e.pdf</a></li> <li>Berger, G (2008) 'Politics and broadcasting – which way Southern Africa?', keynote speech to "Public broadcasting in troubled times", Cape Town, 28 Sept – 1 Oct 2008, available online at <a href="http://guyberger.ru.ac.za/fulltext/Politics%20and%20broadcasting.ppt">http://guyberger.ru.ac.za/fulltext/Politics%20and%20broadcasting.ppt</a></li> <li>Hoskins, C, S McFadyen and A Finn (1997) Global Television and Film. Oxford. Clarendon. Chapters 4, 6, 8 and 11.</li> <li>ICASA (2007) <i>Commercial Sound Broadcasting Licences in Secondary Markets: Reasons for Decisions</i>, Independent Communications Authority of South Africa, Johannesburg, drafted March 2007, made public 25 April 2007, <a href="http://www.icasa.org.za/Manager/ClientFiles/Documents/1133753_reaso">http://www.icasa.org.za/Manager/ClientFiles/Documents/1133753_reaso</a></li> </ul>


	<p><a href="#">ns_040407.pdf</a></p> <ul style="list-style-type: none"> <li>• Kupe, T (ed) (2003) Broadcasting Policy and Practice in Africa, Article 19, London, available online at <a href="http://www.article19.org/pdfs/publications/africa-broadcasting-policy.pdf">http://www.article19.org/pdfs/publications/africa-broadcasting-policy.pdf</a>.</li> <li>• Lievrouw, L and S Livingstone eds (2006) The Handbook of New Media. Updated Student Edition. London. Sage. Chapters. 16, 18, 19, 20, 21, 22.</li> <li>• Lloyd, L, Duncan, J, Minnie, J &amp; Bussiek, H (2010) <i>Public Broadcasting in Africa: A Survey: South Africa Country Report</i>, Africa Governance Monitoring and Advocacy Project, Open Society Foundation for South Africa, &amp; Open Society Institute Media Program, Johannesburg, available online at <a href="http://www.mediamonitoringafrica.org/images/uploads/Annexure_D_-_Afrimap_Research.pdf">http://www.mediamonitoringafrica.org/images/uploads/Annexure D - Afrimap Research.pdf</a></li> <li>• Lowe, G F, and T Hujanen eds (2003) Broadcasting and Convergence. Goteborg. Nordicom. Chapters 2, 36, 7, 8, 9, 15.</li> <li>• Marsden, C ed (2000) Regulating the Global Information Society. London. Routledge. Chapters 2, 3, 5, 6, 7</li> </ul>
<p><b>About your Lecturer</b></p>	<p>Mlamli Boo, is the founder of Z-Coms, an ICT consulting firm. He Professional Electrical Engineer with more than 20 years experience in engineering, Policy, regulatory and management. He holds an MSc degree in Engineering from UCT and a postgraduate diploma in project management. He is a member of IoD of South Africa. Mlamli has a wealth of experience gained from numerous activities in which he was involved including the following: he advised the South African Government on telecommunication policy reform, DTI on BPO and call centre market, a JP Morgan on the telecommunications landscape and business model, developing a licensing policy and universal access policy for the SADC region, In 1997 he was appointed by President Nelson Mandela into the Independent Broadcasting Authority (IBA) Council, as one of the Councillors who adjudicated the first free to air television license in South Africa, was part of the team of councillors involved in licensing commercial and community radio stations. . Mlamli acted as a CEO to deal with restructuring of the IBA.</p> <p>He worked for Orbicom as a systems engineer and Technology manager, M-Net as a transmission engineer, Reutech Radar Systems as research and development engineer and project manager, Plessey as a research and development engineer, Telkom (previously Post and Telecommunications) as a network planning engineer, and for SAPREF (oil refinery) as a maintenance engineer.</p> <p>His research area include, electronic media policy, technology and markets. He has also tutored on an online Masters course on telecoms policy and technology at the University of the West Indies.</p> 

<b>Session 8: Global trends driving ICT sector reform: from monopoly provision to competition, liberalisation, privatisation, deregulation</b>	
<b>Presenter</b>	<b>Charley Lewis</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• demonstrate a basic understanding of the global trends relating to reform in the broad ICT sector;</li> <li>• articulate the drivers and components of ICT sector reform nationally and internationally;</li> <li>• discuss the need for and the role of regulation in the ICT sector;</li> <li>• describe the need for integrated regulatory approaches to converging technologies and sectors.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Drivers of ICT sector reform</li> <li>• Features of ICT sector reform</li> <li>• Global trends in ICT sector reform</li> <li>• Privatisation vs liberalisation</li> <li>• Deregulation and independent regulation</li> <li>• ICT sector reform in South Africa</li> <li>• Convergence</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Fink, C, Mattoo, A &amp; Rathindran, R (2003) 'An assessment of telecommunications reform in developing countries', <i>Information Economics and Policy</i> No 15, 2003</li> <li>• Smith, W (1997) 'What the Transformation of Telecom Markets Means for Regulation', Public Policy for the Private Sector Note No 121, World Bank, Washington, available online at <a href="http://rru.worldbank.org/documents/PublicPolicyJournal/121smith.pdf">http://rru.worldbank.org/documents/PublicPolicyJournal/121smith.pdf</a></li> <li>• Melody, W (1997) 'Policy Objectives and Models of Regulation', in Melody, W (ed) <i>Telecom Reform: Principles, Policies and Regulatory Practices</i>, Den Private Ingeniørfond, Technical University of Denmark, Lyngby, available online from <a href="http://irne.net/test/wp-content/uploads/2007/02/telecomreform.pdf">http://irne.net/test/wp-content/uploads/2007/02/telecomreform.pdf</a></li> <li>• ITU (2008) <i>Trends in Telecommunication Reform 2008: Six Degrees of Sharing</i>, Executive Summary, International Telecommunication Union, Geneva, available online at <a href="http://www.itu.int/dms_pub/itu-d/opb/reg/D-REG-TTR.10-2008-SUM-PDF-E.pdf">http://www.itu.int/dms_pub/itu-d/opb/reg/D-REG-TTR.10-2008-SUM-PDF-E.pdf</a></li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Beardsley, S, von Morgenstern, I, Enriquez, L &amp; Kipping, C (2002) 'Telecommunications Sector Reform - A Prerequisite for Networked Readiness', McKinsey &amp; Company, Inc., New York, available online at <a href="http://cyber.law.harvard.edu/itg/libpubs/gitrr2002_ch11.pdf">http://cyber.law.harvard.edu/itg/libpubs/gitrr2002_ch11.pdf</a></li> <li>• Gillwald, A (2003) 'Transforming Telecom Reform for Development', LINK Centre, University of the Witwatersrand, Johannesburg, available online at <a href="http://link.wits.ac.za/papers/ag20030920.pdf">http://link.wits.ac.za/papers/ag20030920.pdf</a></li> <li>• Hodge, J, Van Basten, C, Myburgh, A, Anderson, P &amp; Sheik, F (2008) 'A Regulatory Framework for Economic Regulation of Network Industries in South Africa', Prepared on behalf of the Office of the Presidency, Genesis Analytics, Johannesburg, available online at <a href="http://www.dpru.uct.ac.za/Conference2008/Conference2008_Papers/James%20Hodge%20(%20Regulatory%20Framework%20for%20economic%20...).pdf">http://www.dpru.uct.ac.za/Conference2008/Conference2008_Papers/James%20Hodge%20(%20Regulatory%20Framework%20for%20economic%20...).pdf</a></li> <li>• InfoDev (2006) 'ICT Regulation Toolkit Module 6: Legal and Institutional Aspects of Regulation, Executive Summary', prepared by Telecommunications Management Group, Inc, Infodev, Washington, available online at <a href="http://icttoolkit.infodev.org/Mod6ExecSummary">http://icttoolkit.infodev.org/Mod6ExecSummary</a></li> <li>• Intven, H, Oliver, J &amp; Sepúlveda, E (2000) 'Overview of Telecommunications</li> </ul>

	<p>Regulation', in , Intven, H (ed) (2001) <i>Telecommunications Regulation Handbook</i>, World Bank, Washington DC, available online at <a href="http://rru.worldbank.org/Documents/Toolkits/telecom_mod1.pdf">http://rru.worldbank.org/Documents/Toolkits/telecom_mod1.pdf</a></p> <ul style="list-style-type: none"> <li>• Melody, W (1999) 'Telecom Reform: Progress and Prospects', <i>Telecommunications Policy</i> Vol 23 Issue, February 1999</li> <li>• Parker, D &amp; Kirkpatrick, C (2005) 'Privatisation in Developing Countries: A Review of the Evidence and the Policy Lessons', <i>Journal of Development Studies</i>, 41: 4, 513 — 541</li> <li>• Smith, W (1997) 'Utility Regulators - The Independence Debate', Public Policy for the Private Sector Note No 127, World Bank, Washington, available online at <a href="http://rru.worldbank.org/documents/PublicPolicyJournal/127smith.pdf">http://rru.worldbank.org/documents/PublicPolicyJournal/127smith.pdf</a></li> <li>• Ure, J (2003) Telecommunications Privatization: evidence and some lessons, University of Hong Kong, available online at <a href="http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN024684.pdf">http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN024684.pdf</a></li> </ul>
<b>Activity</b>	Rapid-fire questions on Required readings
<b>About your Lecturer</b>	See above.


Session 10: The institutional environment of ICT regulation	
<b>Presenter</b>	<b>Nadia Bulbulia</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe the basic theory and justifications for telecommunications regulation;</li> <li>• identify the institutions of ICT regulation in South Africa;</li> <li>• understand the interaction between policy, law and regulation;</li> <li>• distinguish between regulatory instruments;</li> <li>• assess whether the regulatory model chosen for South Africa is optimal</li> <li>• debate current regulatory issues and challenges</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• The global context of ICT regulation</li> <li>• Policy, law and regulation</li> <li>• ICT regulatory institutions and instruments</li> <li>• ICT regulation in South Africa: issues and challenges for 2010</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Bergman L, Doyle C, Gual J, Hlutkrantz L, Neven D, Roller, L &amp; Waverman L (1998) 'Reregulation: Ten Conflicting Priorities', Chapter 4 in Bergman L, Doyle C, Gual J, Hlutkrantz L, Neven D, Roller, L &amp; Waverman L (1998) <i>Europe's Network Industries: Conflicting Priorities</i>, Telecommunications, Centre for Economic Policy Research, London</li> <li>• InfoDev (2006) ICT Regulation Toolkit Module 6: Legal and Institutional Aspects of Regulation: Executive Summary, InfoDev, Washington DC &amp; International Telecommunication Union, Geneva, available online at <a href="http://icttoolkit.infodev.org/Mod6ExecSummary">http://icttoolkit.infodev.org/Mod6ExecSummary</a></li> <li>• Melody, W (1997) 'Policy Objectives and Models of Regulation', in Melody, W (ed) <i>Telecom Reform: Principles, Policies and Regulatory Practices</i>, Den Private Ingeniørfond, Technical University of Denmark, Lyngby, available online at <a href="http://lrne.net/2003/resources/tr/chapter02.pdf">http://lrne.net/2003/resources/tr/chapter02.pdf</a></li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Intven, H, Oliver, J &amp; Sepúlveda, E (2000) Module 1: 'Overview of Telecommunications Regulation', in <i>Telecommunications Regulation Handbook</i>, Intven, H (ed), World Bank, Washington DC, available online at <a href="http://rru.worldbank.org/Documents/Toolkits/telecom_mod1.pdf">http://rru.worldbank.org/Documents/Toolkits/telecom_mod1.pdf</a></li> <li>• Lodge, M (2003) 'Keeping a Watchful Eye: Doctrines of accountability and transparency in the regulatory state', seminar paper, The Policy Institute, Trinity College, Dublin</li> <li>• Lodge, M &amp; Stirton, L (2001) 'Transparency Mechanisms: Building Publicness into Public Services', <i>Journal of Law and Society</i>, Vol 28, No 4, December 2001, Blackwell, Oxford</li> <li>• Posner, R (1984) 'Theories of Economic Regulation', <i>Bell Journal of Economics and Management Science</i>, Autumn, 1984</li> </ul>
<b>Activity</b>	
<b>About your Lecturer</b>	<p>Nadia Bulbulia (Executive Head, Regulatory, Cell C) is responsible for developing, overseeing and implementing Cell C's regulatory strategy and advises the company on sector-related matters. She holds an honours degree in dramatic art from the University of the Witwatersrand and an MA degree (with distinction), the subject of her thesis being public television policy for children. She also has two drama diplomas from Trinity College, London. Her experience in communications was developed as a councillor at both the Independent Communications Authority</p> 


	<p>of South Africa and its predecessor, the Independent Broadcasting Authority (IBA). During her time with the IBA her job as a policy researcher provided the grounding for her expertise in communications policy and regulation. Bulbulia has sat on several boards, including the controversial and recently disbanded board of the SABC, the Children's Broadcasting Forum for Africa and the Media Monitoring Project.</p>
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<b>Session 10: Policy formulation, implementation and monitoring: a theoretical introduction</b>	
<b>Presenter</b>	<b>Stephen Porter</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• Use policy-relevant concepts and terms appropriately;</li> <li>• Understand public policy processes;</li> <li>• Understand the nature and limitations of policy processes in developing country contexts;</li> <li>• Understand the peculiarities of the South African policy context and what impact this has on policy-making;</li> <li>• Describe the various actors and phases in the policy process;</li> <li>• Critically engage with issues related to decision-making, participation, and structure within the policy process.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Introduction to public policy concepts and terminology</li> <li>• Frameworks for understanding the policy process: cycles &amp; models</li> <li>• Policy implementation, monitoring and evaluation</li> <li>• Policy contexts: developing countries and South Africa</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• de Koning, C (2007) 'The Nature and Role of Public Policy' in Cloete, F, Wissink, H &amp; de Coning, C (eds) (2007) <i>Improving Public Policy: from Theory to Practice</i>, Van Schaik, Pretoria</li> <li>• Parsons, W (1995) <i>Public Policy: An Introduction to the Theory and Practice of Policy Analysis</i>, Edward Elgar, Cheltenham</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Patton, C &amp; Sawicki, D (1993) <i>Basic Methods of Policy Analysis and Planning</i>, Prentice-Hall, Englewood Cliffs</li> <li>• Hill, M (2005) <i>The Public Policy Process</i>, Longman, Harlow</li> <li>• Pollit, C &amp; Bouckaert, G (2000) <i>Public Management Reform: A Comparative Analysis</i>, Oxford University Press, Oxford</li> <li>• Lindblom, C (1959) 'The Science of Muddling Through', <i>Public Administration Review</i>, 19: 78-88, American Society for Public Administration, Washington DC</li> <li>• Dror, Y (1983) <i>Public Policy Making Re-examined</i>, Transaction, New Brunswick</li> <li>• Etzioni, A (1995) <i>The Spirit of Community: rights responsibilities and the communitarian agenda</i>, Fontana Press, London</li> </ul>
<b>Activity</b>	Discussion of the definition of public policy and exercise to develop evaluative thinking
<b>About your Lecturer</b>	<p>Stephen Porter is a lecturer in public policy and evaluation at P&amp;DM. He holds an MPhil Public Policy from UCT and is working on his PhD. Originally from the UK he has lived in South Africa for six years. His substantive practical experience comes from working as a monitoring and evaluation advisor for two International NGOs: VSO's - Regional AIDS Initiative for Southern Africa and the African and Medical Research Foundation (AMREF). In both of these roles he designed and developed monitoring and evaluation systems, while also developing internal evaluation capacity. He has advised the Western Cape government of rural road evaluation, worked with the Food and Agricultural Organisation of the UN on developing an M&amp;E system</p> 

	<p>and sits on the UNAIDS M&amp;E Working Group for East and Southern Africa. Academically he has published a number of working papers and articles on evaluation.</p>
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	<p>In relation to ICT he is working on an innovative mobile technology project, called Impilo!, that seeks to improve people's access to their right to health through community mobilisation and information sharing.</p>
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<b>Session 13: ICT Sector Governance: global, regional and national institutions and initiatives</b>	
<b>Presenter</b>	<b>Prof Andrew Barendse</b>
<b>Outcomes</b>	Participants will be able to: <ul style="list-style-type: none"> <li>• Explain the telecom reform model and the move towards market access;</li> <li>• Articulate the role of global institutions and processes such as the ITU, WTO, World Bank, InfoDev, WIPO, ICANN, GATS and WSIS;</li> <li>• Articulate the role of regional institutions and processes such as the AU, NEPAD, SADCC, ATU and CRASA.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• The shift from an international regime to a supranational regime</li> <li>• The structure of the ITU, WTO, WIPO and ICANN and the strengths and weaknesses of each institution</li> <li>• The regional response to global developments, beginning with Panafstel</li> <li>• The role of NEPAD and SATCC</li> <li>• The future of telecom governance models</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Ó Siochrú, S (2007) 'Institutional Overviews' in Esterhuysen, A &amp; Bissio, R (eds) (2007) <i>Global Information Society Watch</i>, Association for progressive Communications, Johannesburg, available online at <a href="http://www.giswatch.org/files/pdf/GISW_2007.pdf">http://www.giswatch.org/files/pdf/GISW_2007.pdf</a></li> <li>• Schneider, V (2002) 'The institutional transformation of telecommunications between Europeanization and globalization', in Jordana, J (ed) <i>Governing Telecommunications and the New Information Society in Europe</i>, Edward Elgar, Cheltenham, UK</li> <li>• WTO (1996) 'Telecommunications Services: Reference Paper', World Trade Organisation, Geneva, available online at <a href="http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm">http://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm</a></li> <li>• WTO (1999) <i>The General Agreement on Trade in Services, An Introduction</i>, World Trade Organisation, Geneva, available at <a href="http://www.wto.org/english/tratop_e/serv_e/gsintr_e.doc">http://www.wto.org/english/tratop_e/serv_e/gsintr_e.doc</a></li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Mueller, L &amp; McKnight, L (2004) 'The post-.COM internet: toward regular and objective procedures for internet governance', <i>Telecommunications Policy</i>, Elsevier, New York</li> </ul>
<b>Activity</b>	Identify three dramatic changes in your life or work that result from digitisation.
<b>About your Lecturer</b>	<p>Andrew Barendse (PhD) is Visiting Adjunct Professor in the Graduate School of Public and Development Management. Prior to his appointment at Wits he held the positions of Assistant Professor and Research Fellow at Delft University of Technology in the Netherlands. He has 20 years experience in the telecom sector. His research interests include various aspects of telecom regulation, corporate strategy and public values in network industries.</p> 

<b>Session 14: Digitised Information and Intellectual Property Rights</b>	
<b>Presenter</b>	Dr Tobias Schonwetter, UCT & Chetty Law
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• analyse digital content regulation;</li> <li>• assess the suitability of regulation to digital content;</li> <li>• contextualise the impact of copyright law on education and access to knowledge;</li> <li>• contextualise the corporate demand for greater IPR for digital content.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• IPR was conceived for the analogue world</li> <li>• Analogue rules are a misfit in the digital world</li> <li>• Digitisation means that every use of a work involves a copy</li> <li>• Is browsing violation, licensed use, fair use or free use?</li> <li>• Digital libraries, is lending the right paradigm?</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• Barlow, J (1994) 'The Economy of Ideas', Wired, Issue 2.03, March 1994, available online at <a href="http://www.wired.com/wired/archive/2.03/economy.ideas.html">http://www.wired.com/wired/archive/2.03/economy.ideas.html</a></li> <li>• Benkler, Y (2006) 'Conclusion: The Stakes of Information Law and Policy' in Benkler, Y (2006) <i>The Wealth of Networks: How Social Production Transforms Markets and Freedom</i>, Yale University Press, New Haven, available online at <a href="http://www.benkler.org/Benkler_Wealth_Of_Networks.pdf">http://www.benkler.org/Benkler_Wealth_Of_Networks.pdf</a></li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• Lessig, L (nd) 'Intellectual Property' in Lessig, L (nd) <i>Code and Other Law of Cyberspace</i>, available on-line at <a href="http://codebook.jot.com/Book/Chapter10/Ch10Part1">http://codebook.jot.com/Book/Chapter10/Ch10Part1</a></li> </ul>
<b>Activity</b>	See class handout.
<b>About your Lecturer</b>	<p>Tobias Schonwetter holds an LL.M. degree (with distinction) from the University of Cape Town (UCT), South Africa. He is a member of the UCT IP Research Unit, teaches on copyright law and supports the law faculty's digital repository 'lawspace'. In addition, he is a member of the Commonwealth of Learning's (COL) copyright expert group. Currently, Tobias is finalising his PhD dissertation at UCT on copyright related issues - with a special focus on copyright exceptions and limitations. He has been awarded with the prestigious UCT Research Fellowship Award for his doctoral studies in 2005, 2006 and 2007.</p>  <p>Tobias is significantly involved in a number of IP-related projects, including the Open Review of the South African Copyright Act 1978 project, co-funded by the Shuttleworth Foundation, the Open Society Institute and tralac, as well as the IDRC-funded African Copyright and Access To Knowledge (ACA2K) project. Tobias has written numerous articles on copyright law, e.g. in the Southern African Journal of Information and Communication (SAJIC) and for iCommons in his own monthly legal column. Furthermore, he has spoken at various national as well as international conferences.</p> <p>He joined Chetty Law in January 2008 as a Legal Advisor specialising in Intellectual Property matters.</p>

<b>Session 15: ICT futures in Africa: market trends and regulatory responses</b>	
<b>Presenter</b>	<b>Mark Williams</b>
<b>Outcomes</b>	<p>Participants will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the historical evolution of the telecommunications market in Africa and its underlying drivers;</li> <li>• Provide a view of where the market is moving and possible future developments in comparison to other regions of the world;</li> <li>• Understand the implications for market trends for ICT policy and regulation;</li> <li>• Articulate how political economy in Africa affects ICT regulatory policy and the implications for the market.</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>• Historical context – how did the ICT sector in Africa get to where it is today?</li> <li>• Current trends in the African ICT landscape, in a global context</li> <li>• The implications of market developments for ICT regulation</li> <li>• The political economy of ICT regulation in Africa</li> </ul>
<b>Required Readings</b>	<ul style="list-style-type: none"> <li>• World Bank (2009) <i>IC4D 2009: Extending Reach and Increasing Impact</i>, Chapters 1, 2 and 4, World Bank, Washington DC</li> <li>• Walden, I (2009) <i>Telecommunications Law and Regulation</i>, 3<sup>rd</sup> Edition, Chapters 16 &amp; 17, Oxford University Press, Oxford</li> </ul>
<b>Additional References</b>	<ul style="list-style-type: none"> <li>• World Bank (2000) "Telecommunications Regulation Toolkit" (<a href="http://www.ictregulationtoolkit.org/en/Index.html">http://www.ictregulationtoolkit.org/en/Index.html</a>)</li> <li>• OECD (2008) 'Broadband Growth and Policies in OECD Countries', Organisation for Economic Co-operation &amp; Development, Paris, available online at <a href="http://www.oecd.org/dataoecd/32/57/40629067.pdf">http://www.oecd.org/dataoecd/32/57/40629067.pdf</a></li> <li>• Minges, M, Williams, M, Mayer, R, Briceño-Garmendia, C &amp; Williams, H (2008) 'Information and Communication Technologies : A Boost for African Growth', Chapter 7 in Foster, V &amp; Briceño-Garmendia, C (2008) <i>Africa Infrastructure: A Time for Transformation</i>, World Bank, Washington DC, available online at <a href="http://www.infrastructureafrica.org/aicd/system/files/WB147_AIATT_CH07.pdf">http://www.infrastructureafrica.org/aicd/system/files/WB147_AIATT_CH07.pdf</a></li> </ul>
<b>Activity</b>	
<b>About your Lecturer</b>	<p>Mark Williams is a Senior Economist in the Global ICT group of the World Bank. He specializes in the economics and regulation of telecommunications networks and is currently focused on Africa. He was responsible for developing World Bank policy on backbone infrastructure and has been closely involved in the design and implementation of World Bank broadband investment projects and advises governments on policy and sector reform. He regularly publishes articles in journals and contributes to books on the subject.</p> 