2010 was a notable year in many respects for Information Services with a mixture of new initiatives and building on the many developments already underway.

Integration of the teams of the previously separate departments of IT Services and Library commenced, with a consolidation and clarification of the Information Services’ portfolio of services. An external review of our IT services was undertaken, which resulted in a report containing twenty-three recommendations. Extensive consultation with faculty and central administration staff on the business case for the Business Investment Programme was completed and $45 million funding secured over three years to improve core IT infrastructure.

The UWA Research Repository was launched and was utilised for the University’s ERA 2010 submission. The move from print to electronic information resources increased a pace with the e-books on demand pilot and increased use of off-site storage for little utilised print material.

The IT Infrastructure Library (ITIL) framework was adopted to embed best practice in our IT service processes; and new services included the roll-out of a staff Email and Calendaring Service (ECS) and a sophisticated, replacement wireless network (Unifi).

The CRINCS (Communication and Research Skills in the New Course Structure 2012) was a great example of Information Services staff working collaboratively with staff in Student Services, CATL and the Business School to produce an online unit with multiple modules to embed research and communication skills into the new 2012 undergraduate degree structure.

Planning commenced to introduce a new 24/7 collaborative area in the Reid Library by the start of 2012, in response to student requirements, and to refurbish and update the EDFAA Library, which was damaged by flood during storms in March 2010.

Finally, increased collaborative efforts were initiated with our local and Go8 partners. Discussions are underway with the State Library concerning shared exhibitions, staff development and storage; UWA joined a Go8 last copy retention strategy for infrequently used materials; and collaboration has commenced with the University of Melbourne in the areas of e-research and digitisation. Benchmarking with Go8 partners and the comparative costing of our services are key priorities for 2012.

Dr Mary Davies
University Librarian and Director (Information Management)
Highlights
Teaching and Learning

- A Student IT Needs Study was undertaken to look at students’ learning-related information technology needs at UWA.
- Online Libguides received more than two million visits.
- The CRINCS (Communication and Research Skills in the New Course Structure 2012) project was initiated.
- ACQ (Answering Clinical Questions) was developed by the Medical and Dental Library working collaboratively with the Faculty of Medicine, Dentistry, and Health Sciences.
- ipoint and UWA services were brought together under the askUWA name.
- A team from Information Services in collaboration with staff from the Centre for the Advancement of Teaching and Learning CATL provided technical input to the LMS review, the subsequent decision to outsource and the final product selection.

Research and Research Training

- User driven acquisition of electronic books was implemented.
- More than 35 major digital collections/archives/databases of books and journals were made available online.
- The Scholars’ Centre took on responsibility for managing the UWA Node of the Australian Social Science Data Archive (ASSDA), which was formerly housed in the School of Social and Cultural Studies.
- Library on your Mobile was developed to support a mobile version of the Library catalogue.
- Reader Services, covering all the Subject Libraries, was re-named Research and Learning Support.
- A bid for ANDS (Australian National Data Service) research support was developed and submitted.
- The UWA Research Repository, an online platform providing open access to UWA research outputs, was launched in November 2010.
- A total of 538 research outputs were sourced and published in the ERA repository for the University’s ERA 2010 submission.

- Research and Learning Support (RLS) librarians and managers participated in ‘Improving engagement with academic staff – developing effective liaison and outreach skills’, a two day workshop designed to increase outreach effectiveness through developing relationships with a wide range of teaching and research staff.

External Relations

- Information Services began to connect with a wide range of users on Facebook and Twitter.
- The Friends of the UWA Library hosted a popular lecture programme and donated a rare, hand-coloured map, produced in 1776 highlighting the first voyage of Captain James Cook.
- Special Collections received a number of donations including a comprehensive collection of approximately 600 Western Australian poetry books donated by William Grono.
- Meetings were held with staff from the State Library of WA to discuss potential areas of collaboration including shared exhibitions, staff development and storage.
- Information Services became a partner in the Last Copy Retention Strategy for infrequently used materials, developed by the Go8 Librarians Group.
- Discussions with staff at the University of Melbourne considered various areas of collaboration with a focus on e-research and digitisation.
People and Resources

- Information Technology Services underwent an internal review, as part of the University’s 7 year cycle of administrative units review process – resulting in 23 recommendations.
- The Business Investment Programme for Information Technology was initiated in partial response to the ITS review.
- The EDFAA Library sustained serious flood damage during the March 22nd hailstorm.
- Commercial off-site storage was found for approximately 1500 linear metres of materials (print journal backsets and low use monographs) freeing up space for student use.
- The UniWi Wireless Network replaced the aging SNAP.
- An audit was done of the University’s data centres and server rooms against data centre standards.
- Roll out began on a new all staff Email and Calendaring Service (ECS).
- Student access to Internet services was improved with the implementation of automatic registration for Internet access, linked to a student’s activation of their Pheme account.
- A new Services Management Framework using IT Infrastructure Library (ITIL) framework was adopted to improve IT services.
- Application systems that were developed for UWA business units included a Complaints Handling System for the Office of the University Secretary, a new Student Housing Database for Student Services, a Risk Management system for the Office of Finance and Resources, and a Scholarships Database for the Scholarships Office.
- The Lectopia infrastructure was upgraded to deliver improved performance and a significant decrease in delivery time resulting in most lectures available within the hour and many within 15 minutes.
- The Reid Arts and Business Library was formed from an integration of the Business and Humanities and Social Sciences Libraries.
- Another 23 Things Web 2.0 staff development programme was undertaken. Staff from outside Information Services were invited to fill available spaces in the series of workshops.
- The annual WOW staff award, acknowledging outstanding contributions by an individual, was awarded to Anne Lim, “a supportive colleague and fantastic mentor who constantly thinks of ways to improve current practices”.
- The Science Library was opened officially by the Governor of Western Australia Dr Ken Michael, and Nobel Laureate Professor Barry Marshall on Wednesday 24th February 2010.
Teaching and Learning
Student IT Needs Study
A Student IT Needs Study was undertaken to look at students’ learning-related information technology needs at UWA. Data gathered from a variety of sources revealed that UWA students want:
- wireless internet access available anywhere, anytime
- 24/7 access to any computer lab on campus
- greater provision of up-to-date equipment
- online and face-to-face technical advice provided in a clear, courteous manner
- video recordings available for all university lectures (for review and/or back-up)
- easy access to online resources (single sign-on) from anywhere.

These results contributed to the direction of the Business Investment Programme.

New Courses 2012 – CRINCS
The CRINCS (Communication and Research Skills in the New Course Structure 2012) project made great progress in developing a response to the University’s expressed intention of embedding research and communication skills into the new undergraduate degree structure to be implemented in 2012. A collaborative project was implemented with staff from Information Services, Student Services, CATL and the Business School working on an online “unit” incorporating the following modules:
- Starting your assignment
- Finding the best evidence
- Writing your assignment
- Delivering your oral presentation
- Working in groups.

ipoint/askUWA
During 2010, the ipoint and UWA services were brought together under the askUWA name. Allowing users to access the service without authenticating, produced a threefold increase in inquiries received. Library FAQs continue to be well used and the most frequently asked FAQs are now placed on the Library home page in a widget dynamically linked to FAQ views. As new information services became available FAQs and answers were added to the FAQ knowledge base.
Research and Research Training
E-Books on Demand
In 2010 a pilot was established for E-Book Library (EBL) User Driven Selection. This new method of monograph acquisition enables users to select e-books for the collection via the EBL platform. Over 110,000 EBL titles were added to the catalogue at the beginning of Semester 1 for use by UWA staff and students. The pilot proved very popular with over 8,000 titles being loaned and more than 700 titles auto purchased. With 6,635 individuals using the service it was evident that demand driven acquisition is an effective and efficient method of collection development. A review of the pilot resulted in the implementation of demand driven acquisition via the EBL platform on an ongoing basis.

Digital Collections
Among the major digital collections which were added during the year were:
- Acumen (database of architectural information)
- AustRoads database
- Bibliography of British and Irish History Online (BBIH)
- BMJ Best practice
- Books@Ovid psychiatry ebook collection
- BrainNavigator
- Brill’s Jacoby online
- CAB reviews archive
- China Academic Journals Full-text database (CAJ)
- Company360
- Conference Board Research online collection
- Early English Books Online (EEBO)
- Eighteenth century parliamentary papers collection
- Electronic enlightenment
- EOLSS Online
- Ethnographic video online
- Government finance statistics
- Hazmat navigator
- Informaworld journal archives: Business, Management and Economics, and Environment and Agriculture
- Institute of Physics journal collection
- Knovel eBooks
- Lancet archive
- Landgate SLIP database
- Master Techniques in Orthopaedic Surgery
- McGraw-Hill’s AccessEngineering
- McGraw-Hill’s AccessPharmacy
- MD Consult general dentistry collection
- Medieval family life
- Naxos Jazz Library
- New England Journal of Medicine Journal Archive
- Oxford scholarship online law collection
- Patai’s Chemistry of Functional Groups
- Periodicals archive online
- Science Direct ebook collections: Chemistry, Immunology and Microbiology, Neuroscience, Physics and Astronomy, and Psychology
- Springer ebook collections in Behavioural Sciences, Biomedical and Life Sciences, Chemistry and Material Sciences, Computer Science, Engineering, Mathematics and Science, and Physics and Astronomy
- Synthesis Digital Library of Engineering and Computer Science
- Thesaurus Linguae Graecae.

Information Resources
A total of 11,861 orders were placed for new monographs in 2010, compared with 8,994 in the previous year. As approximately 70% of our expenditure is in USD, the exchange rate for this currency delivered a significant increase in our purchasing power. With the exchange rates fixed as shown, we anticipated a projected price decrease of 8% for serials and 10% for monographs.

<table>
<thead>
<tr>
<th>Year</th>
<th>USD</th>
<th>STG</th>
<th>EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>.86</td>
<td>.54</td>
<td>.62</td>
</tr>
<tr>
<td>2009</td>
<td>.71</td>
<td>.49</td>
<td>.51</td>
</tr>
</tbody>
</table>

Blackwell’s Transition
Following the takeover of Blackwell Publishing by Baker & Taylor’s Yankee Book Peddler (YBP) subsidiary in December 2009, a project team was formed to evaluate new online selection and ordering tools, and to review workflows. A decision to use YBP’s online selection and ordering tool (GOBI) was made by the project team in August and all use of Blackwell’s Collection Manager Tool ceased in September. Research Learning and Support Staff were trained in selection using the GOBI system and monograph ordering resumed in November.
External Relations
Donations
There were many generous donations to library collections during 2010.

Notable acquisitions to the collections in the Scholars’ Centre included:

- A further donation of archival and manuscript material from Professor Dennis Haskell
- A further donation of drawings by David Hutchison
- The final instalment of the Access Press archives, acquired from the former owners of the Press, John Harper-Nelson and Helen Weller
- The donation of the Leslie Marchant Collection (previously held on indefinite loan), as well as a second collection associated with the Marchant family – the East Asia periodicals collection.

A uniquely comprehensive collection of Western Australian poetry publications, amounting to about 600 volumes, was donated by William Grono, formerly of Edith Cowan University. Used by Mr Grono as the basis for his many publications relating to the history of Western Australian poetry, this collection complements our extensive holdings in Australian literature.

The Friends of the UWA Library donated a rare, hand-coloured map, published in Venice in 1776 by Antonio Zatta with the title: Nuove scoperte fatte nel 1765, 67, e 69 nel Mare del Sud (“New discoveries made in 1765, 1767 and 1769 in the Southern Ocean”). It was the first decorative map to show the route of Captain James Cook across the Pacific in his first voyage.

Professors Dennis Haskell, Lara O’Sullivan, and John Melville-Jones each donated a number of books in their respective fields of interest. Dr Gale MacLachlan made a large donation of French Studies resources.

Thanks are recorded to all those who donated library materials.

Friends of the Library Committee 2010
President
E/ Prof David Tunley
Vice Presidents
Mr Malcolm Hood
Mrs Alison Kennedy
Secretary/Treasurer
Ms Liz Tait
Committee
Dr Robin Adamson
Dr Toby Burrows
E/Prof Jim Everett
Mrs. Gillian Flecker
Dr Des Gurry
Ms Barbara Hale
Prof Margaret Seares
E/Prof Phil Silberstein
Ex Officio: Dr Mary Davies
People and Resources
The Programme has identified nine key project areas, and in order of priority are:

1. **Network Upgrade** | upgrade the current out of date network technology that is limiting our current network speed and capacity.

2. **Directory Consolidation** | consolidate over 30 active directories in use across UWA to reduce complexity and provide support for a single identity.

3. **Identity and Access Management** | implement a single authoritative source which will improve accuracy of identity information, improve user provisioning, and provide support for single sign-on.

4. **Data Centre Consolidation/Student and Staff Storage/Student Printing** | reduce the risk associated with data stored across some 46 server rooms, and improve the student experience of cross-faculty mobility through central data storage and ability to print to the nearest printer.

5. **Managed Operating Environment** | improve user experience through greater desktop consistency across campus, reduction in the duplication of effort in desktop management and improve supportability and effectiveness through standardisation.

6. **Hardware Procurement** | leverage the University’s purchasing power through strategic procurement initiatives.
Subsequent project phases will increase Unifi capacity in the most popular areas, expand Unifi wireless coverage to increasingly broader areas across UWA campus locations, and simplify provision of access to University guests and conference facilities.

**ECS – Email and Calendar Services**

In April 2010, Information Services began the roll out of the new all staff Email and Calendaring Service (ECS). This service, designed to replace the old Cyllene email server, the central Administration email system, and some 20-plus other email solutions that had been established across faculties and schools, will improve UWA staff collaboration with all staff working from the one calendar service.

There is an enormous efficiency benefit in the ability to see free and busy time across staff calendars, making the coordination and booking of meetings and functions a much easier task. ECS also alleviates the duplication of investment and IT support effort for Faculties and Schools managing email services within their own business units. The service provides greater security to University information through spam and virus filtering, and ensuring that email data is regularly backed up.

**Flooding of the Education, Fine Arts and Architecture (EDFAA) Library**

The EDFAA Library was damaged extensively by flood during storms on the 22nd March 2010. Approximately 15-20% of the collection (including more than 11,700 books and 2,726 journal volumes) was lost. The undamaged portions of the monograph, periodical, curriculum, reference and audiovisual collections were moved by Library staff and external contractors to the ground floor of the Reid Library which had been recently vacated when the map and geology collections were moved to the Science Library. Some materials with limited water splatter and/or dampness were aired and the salvaged collection was opened to library users within three weeks of the flood.
Lending

The total number of loans in 2010 decreased by 14% compared with 2009 figures; reserve loans decreased by 7% and non-reserve loans by 18%. Of significance is the 31% decrease in loans from the Education, Fine Arts and Architecture (EDFAA) Library, most likely due to the relocation of the collection to Reid Library after the flood. EDFAA lending services were offered in the Reid Library. A daily collection of returns from the EDFAA overnight book return (which was undamaged) has been maintained.

Service Improvement Programme

Information Services accepted a commitment to implement a Service Management framework as a means to improve the overall quality, effectiveness and responsiveness of services delivered in relation to our Information Technology services. The IT Infrastructure Library (ITIL) framework was adopted in line with world-recognised ‘good practices’. Service-Now, our University wide service desk tool, is a fully ITIL compliant system, and will support our implementation of ITIL processes into our service operations. In April 2010, IS undertook a baseline assessment of internal processes and related capabilities, comparing existing policies, procedures, tools and working practices against those defined by the IT Infrastructure Library (ITIL) framework.

The baseline assessment identified considerable gaps and inefficiencies, and a lack of effectiveness in the provision of core IT services to the University. The costs and risks associated with this are not insignificant and pose a real threat to the ongoing cost-effective sustainability of these IT related services.

To address these concerns, which were also reinforced and highlighted by Recommendation 18 of the ITS review, Information Services embarked upon a Service Improvement Programme that will leverage the good practices within ITIL in context of the University’s operations through an integrated set of process improvement projects.

Immediate priorities were identified:

- Review and overhaul our Incident Management process, (to improve efficiencies and effectiveness in responding to reported faults and requests for service)
- Implement Problem Management (to identify and resolve the underlying issues impacting service delivery)
- Implement Change Management which will provide much better controls around changes to our IT infrastructure to limit the impact such changes will have on ongoing IT service operations.

It is critical that Change Management processes are successfully implemented prior to the many infrastructure changes that will result from project deliverables from the Business Investment Programme in 2011, such as major network upgrades and student printing services.
### Key Statistics and Recurrent Expenditure

#### Key Statistics

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total collection – books (print)</td>
<td>945,179</td>
<td>942,875</td>
</tr>
<tr>
<td>Total collection – books (online)</td>
<td>30,713</td>
<td>106,399</td>
</tr>
<tr>
<td>Current serial titles (print)</td>
<td>5,861</td>
<td>5,852</td>
</tr>
<tr>
<td>Current serial titles (online)</td>
<td>102,684</td>
<td>106,593</td>
</tr>
<tr>
<td>Items supplied to other libraries</td>
<td>5,781</td>
<td>5,460</td>
</tr>
<tr>
<td>Items borrowed from other libraries</td>
<td>13,896</td>
<td>12,107</td>
</tr>
<tr>
<td>Information skills sessions</td>
<td>478</td>
<td>494</td>
</tr>
<tr>
<td>Attendance at training sessions</td>
<td>14,826</td>
<td>13,931</td>
</tr>
<tr>
<td>Loans (non-reserve)</td>
<td>198,642</td>
<td>173,491</td>
</tr>
<tr>
<td>Loans (reserve)</td>
<td>123,591</td>
<td>115,300</td>
</tr>
<tr>
<td>Staff computers managed</td>
<td>2,056</td>
<td>1869</td>
</tr>
<tr>
<td>Staff printers and MFDs managed</td>
<td>378</td>
<td>476</td>
</tr>
<tr>
<td>Student computers managed</td>
<td>538</td>
<td>549</td>
</tr>
<tr>
<td>Student printers managed</td>
<td>26</td>
<td>56</td>
</tr>
<tr>
<td>Network ports managed</td>
<td>12,500</td>
<td>13,000</td>
</tr>
<tr>
<td>Wireless access points</td>
<td>220</td>
<td>330</td>
</tr>
<tr>
<td>Internet total traffic (received)</td>
<td>120.9 TB</td>
<td>228.3 TB</td>
</tr>
<tr>
<td>AV enabled lecture theatres and seminar rooms</td>
<td>191</td>
<td>224</td>
</tr>
<tr>
<td>Total storage capacity</td>
<td>230TB</td>
<td>330TB</td>
</tr>
<tr>
<td>Applications supported e.g. Trim, Alesco, Callista, etc</td>
<td>104</td>
<td>121</td>
</tr>
</tbody>
</table>

#### Recurrent Expenditure

<table>
<thead>
<tr>
<th></th>
<th>2009 SA</th>
<th>2010 SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Books and journal backsets</td>
<td>1,772,334</td>
<td>2,651,311</td>
</tr>
<tr>
<td>Current Journals</td>
<td>7,828,229</td>
<td>6,735,016</td>
</tr>
<tr>
<td>Document delivery</td>
<td>285,417</td>
<td>210,976</td>
</tr>
<tr>
<td>Salaries</td>
<td>15,924,401</td>
<td>10,238,580</td>
</tr>
<tr>
<td>Operating costs</td>
<td>4,194,873</td>
<td>4,163,854</td>
</tr>
<tr>
<td>Total recurrent expenditure</td>
<td>30,005,254</td>
<td>23,989,737</td>
</tr>
</tbody>
</table>
Senior Staff and Professional Activities

Senior Staff as at 31 December 2009

University Librarian and Director (Information Management)
Mary Davies BA (Hons) Wales, MSc Salford, DipLib. Wales, PhD UCL, MCLIP, MBCS

Manager, Humanities and Social Sciences Library
Jill Benn, BA (Hons) ECU, Grad Dip Inf & Lib Stud Curtin, AALIA

Manager, Information Resources Access Management (Acting)
Scott Nicholls, BA Curtin, Grad Dip Inf & Lib Stud Curtin

Manager, Information Technology
John Creaven, BSc (Hons) GalwayMIT, MSc DublinCU

Manager, Medical and Dental Library
Catherine Clark BA Murdoch, Grad Dip Inf & Lib Stud Curtin, MIM Curtin, AALIA

Manager, Music Library
Jenny Wildy, BA WAust, AALIA

Manager, Network & Communications
John Ludovico, BBus Curtin, MBA WAust, MACS, All

Manager, Science Libraries
Carmel O’Sullivan BA Qld, PG Dip Arts Qld, LLB Qld, Grad Dip LIS QUT

Manager, Servers
Daniel Foster, BEnvDes WAust

Manager, Service Desk & Desktop Support
Marie Corrigan, BSc Maths Surrey

Manager, Teaching Infrastructure Services
Terry Coe

Principal Librarian, Scholars’ Centre
Toby Burrows, BA(Hons) WAust, MA Lond, PhD WAust, Grad Dip Lib WAIT

Special Projects Librarian
Erin Fraser, BAppSc WAIT, BA WAIT, MPhil Wales

Professional Activities

Davies, M.
Council of Australian University Librarians: Member
Council of Australian University Directors of IT: Member
WAGUL: Member
WAUDIT: Member

Benn, J.
ALIAWest: Committee Member
Curtin University Library and Information Studies Alumni: Committee Member

Bramanis, D.
Western Australian Regional Network Organisation (WARNO): Committee Member

Burrows, T.
Acta Sanctorum: Editorial Board
Archives and Manuscripts: Editorial Board
AustLit: the Resource for Australian Literature: Advisory Board
Bibliographical Society of Australia and New Zealand: Council Education for Information: Editorial Board
Literature Online: Advisory Board
OCLC systems and services: Editorial Board
Parergon: Journal of the Australian and New Zealand Association of Medieval and Early Modern Studies: Editorial Board and Reviews Editor
The University of Western Australia, School of Humanities: Honorary Research Fellow

Croker, K.
ALIA Academic and Research Libraries (WA): Committee Member

Newton-Smith, C.
ALIA Governance Standing Committee: Member

Wildy, J.
International Association of Music Libraries, Australian Branch: Treasurer
Balfour, H. and Driscoll, K.  
‘Docdel is Dead! Long Live ILL!’  
August 2010 for the ALIA Access  
conference held in Brisbane Australia  
1-3 September, 2010.

Burrows, T.  
‘Archiving humanities data for  
e-research: Conceptual and technical  
issues’. Presented at eResearch  
Australasia 2010, Gold Coast, Qld.,  
8-12 November 2010.

Burrows, T.  
‘Terra Australis Cognita: Mapping  
the history of Australian speculative  
fiction in AustLit’. Presented at 68th  
World Science Fiction Convention  
(AussieCon 4), Academic Track,  
Melbourne, Vic., 2-6 September 2010.

Burrows, T.  
‘Building a digital research  
community in Medieval and Early  
Modern Studies: The Australian  
Network for Early European  
Research’. Presented at 3rd  
International MARGOT Conference:

Balfour, H. and Driscoll, K.  
The Digital Middle Ages for Teaching  
and Research, Columbia University,  
New York, 16-17 June 2010.

Burrows, T.  
‘Social networks and networked  
data: A view from the humanities’.  
Presented at IASSIST 2010: Social  
Data and Social Networking:  
Connecting Social Science  
Communities Across the Globe,  
Cornell University, Ithaca NY, 1-4  
June 2010.

Burrows, T.  
‘Building and supporting digital  
research communities: The ARC  
Network for Early European  
Research’. Presented at Renaissance  
Society of America Annual Meeting,  
Venice, Italy, 8-10 April 2010.

Ritchie, A. Hallam, G. Hamill, C.  
Lewis, S. Foti, M. O’Connor, P.  
Clark, C.  
‘Collaborative research to develop  
a specialist, post-graduate  
competency-based education  
curriculum and continuing  
professional development structure  
for health librarians in Australia.’  
Presented at Cooperation and  
Collaboration in Teaching and  
Research: Trends in Library and  
Information Studies Education :  
IFLA-ALISE-EUCLID Satellite Meeting,  
University of Borås, Borås, Sweden,  
8-9 August 2010

Hallam, G, Ritchie, A. Hamill, C.  
Lewis, S. Newton-Smith, C et al.  
‘Australia’s health libraries: A  
research-directed future’, Library  

Madan, R. and Rayney F.  
‘Inventory and catalogue data  
management after Education, Fine  
Arts and Architecture Library Flood’.  
Presented at Australian Innovative  
Users Group Conference 2010,  
Perth, Western Australia, 18-19  
November 2010.