

CRIC

ESRC Centre for Research on Innovation & Competition

Annual Report

2001



THE UNIVERSITY
of MANCHESTER



CENTRE FOR RESEARCH ON INNOVATION AND COMPETITION

UNIVERSITY OF MANCHESTER AND UMIST

ANNUAL REPORT TO ESRC: October 2000 to September 2001

Preface

This annual report is shorter than in previous years and follows a different format. CRIC went through a Mid Term Review process in the period September 2000 to Spring 2001. Significant documentation was produced for this process, including not only the main submission in September 2000, but also further iterations on the forward research plan in Spring 2001, culminating in a new contract for the centre in Summer 2001. Along with other ESRC centres which were reviewed at the same time, CRIC proposed to ESRC that, in view of this documentation so recently produced, a shorter format for the 2001 annual report was appropriate. ESRC considered this request and agreed that the format of the report for this year only should be shorter. In accordance with this agreement, what follows is predominantly a set of performance indicators for CRIC for the period in question, set out under the normal headings. This is preceded by a short report which summarises the main developments during the year and identifies some highlights and issues which may be of interest to the Research Priorities Board.

MAJOR DEVELOPMENTS 2000/2001

1. Research

1.1 Public Output

CRIC's research activity and output flourished during the year. The centre's staff were involved in the publication of 6 books; 34 chapters in books; 15 refereed journal papers, and a variety of other publications including some significant policy-oriented reports for the UK government and for the European Commission.

Some major themes are evident in this list of publications. Much of the output naturally reflects work carried out in the previous 2 or three years, and so it is not surprising that a large proportion (around 40%) of the publications consolidate CRIC's reputation for conceptual and empirical work on **innovation in services**, which was a major thrust of CRIC's work at that time. The two edited books produced on this topic, together with journal articles, summarise a contribution to this literature which embraces:

- Re-definition of the characteristics and interfaces between 'services' and 'manufacturing', and their patterns of innovation
- Mapping the nature of services innovation using CIS and other data sets
- Investigation of the role of 'knowledge-intensive services'
- Use of labour-market and skills data to track knowledge flows between services and other sectors

CRIC's focus on service innovation will not diminish in future work, but it is worth recording that 2001 was a benchmark year in the impact on the academic and policy communities of our work thus far.

A second theme which is evident in the publications is the continuing long term intellectual project to use an evolutionary economics framework as a context in which to develop the CRIC perspective on **distributed innovation systems** and to explore its implications for competition, structural change, and growth. A third strand of the publications content to note is the emergence of work on **consumption** and its relationship to CRIC's distinctive agenda of innovation research. This reflects the new appointments made in 1999 and 2000 which increased the prominence of this part of our work. We expect the scale of these two strands of our output to increase in future years.

In addition to published books and articles, the performance indicators show a healthy level of presentations at conferences and workshops, memberships of networks, editorial boards, and committees, and consulting work with a variety of organisations at high level. All of these activities have contributed to raising the visibility of CRIC's staff and their work amongst a variety of audiences.

Another activity which has a similar effect, but is not so visible in the performance indicators, is the CRIC web site. The centre has invested a significant amount of effort in the site, and has used it in particular to disseminate CRIC Discussion Papers, (which are mainly early versions of papers which are eventually published in revised form through conventional printed outlets). Over 8000 CRIC papers have been downloaded from the site, testifying to the power of this medium for early dissemination. A sample survey of those who have used the site in this way was conducted by email, and it confirms the effectiveness of the mechanism. Of the 300 respondents to the survey, 96% said the papers they downloaded met or exceeded their expectations; 70% said they had found the papers very useful for furthering academic research and 40% said they found the papers useful in policy discussions. On average, the person who downloaded the papers showed them to 5 to 6 other people. A majority of respondents reported that as a result of downloading CRIC papers, they were more likely to cite CRIC work and to monitor CRIC work in the future.

1.2 Research Developments During the Year

During the last 12 months, the Mid Term Review process was largely handled by the Directors and the centre administrator. CRIC researchers were involved only in the site visit in December 2000, and in the revisions of the research plan in spring 2001. Therefore the researchers have been able to focus on academic work and divided their time between four major activities during the year:

1. Writing articles derived from work already completed
2. Beginning work on projects set out in the research plan submitted at the time of the mid term review
3. Responding to requests for small pieces of research and consultancy.
4. Bidding for additional research projects to complement the core programme.

The third of these categories comprises what we now call in CRIC 'surprise projects'. These typically arise from requests from various government bodies to carry out pieces of work for them. We do not always say yes – our criteria is that the work must be capable of adding to or leveraging our core intellectual programme. Amongst the things we said yes to during 2001 were the following:

- Instrument design and data analysis for the 2000CBI Innovation survey
- A study of the UK's R&D capacity in the broad area of ICTs, electronics and IT related multi media, for the DTI
- A study and a workshop on bioinformatics for the DTI
- Participation in a DTI funded study of Nanotechnology together with NPL
- Development of a 'future genomics scenario' for ESRC

All of these activities were well received by users and were very useful to CRIC

In category 4, new funding for conventional research projects includes the following things secured or applied for:

- A one year ESRC project on bioinformatics linked to our core programme, but separately funded. (The funding is rolled into the new core contract) We have recently appointed Ms Sally Gee as the RA on this project.
- A response mode grant from ESRC on 'Trust in Food'
- An EU grant for further empirical work on innovation in service firms across Europe and north America and the development of new metrics for measuring services innovation.
- A collaboration with the Institute for Development Policy and Management (Manchester University) arising from their receipt of a large Government grant. CRIC will receive funds equivalent to half a research post and will carry out collaborative work on innovation and economic development issues.
- An application which has been shortlisted for the ESRC programme on Innovative Health technologies. If secured, this grant will expand our work on DIPS and Competition in the field of medical devices.

These activities will lead to a further 3 or 4 research fellow appointments in 2002.

There is a small change to the long term research plan of CRIC (as originally agreed through the review process) which arises from two of the developments cited above. The work on Bioinformatics for the DTI, and the closely related ESRC funded project in this field funded through the genomics initiative, have caused us to revise our plans for project 4 in our original plan. Project 4 contains 4 sub-projects, and projects 4.1 and 4.3 will remain as previously described. Project 4.2 (on 'Bt' crop modification) will now be replaced by a project on 'Economies of Knowledge in Bioinformatics' which will elaborate and build on the one year project separately funded by ESRC. Project 5 is also being restructured along two broader themes with 5.1 now including an additional geographical dimension relating to the spatial division of knowledge labour. 5.2 now includes the former 5.3.

2. Developments in the Institutional Setting of the Centre

2.1 Accommodation

At the end of March 2001, CRIC moved from its previous location to temporary accommodation, which we will use until autumn 2002, when the JIF funded refurbished building becomes available. There was a considerable amount of work involved in locating a suitable set of temporary offices, getting the University to refurbish them, and then moving the whole Centre. The centre administrator Sharon Hammond carried most of this burden. There was inevitably some disruption to CRIC's work for a short time, but normal service was quickly resumed. The new accommodation is adequate for CRIC staff but does not give us as much flexibility as before for on-site meetings, and restricts our

capacity for academic visitors. But this is a price worth paying for the new space we will acquire next year.

2.1 Collaboration with PREST and CROMTEC

Our Mid Term Review documentation (September 2000) explained that CRIC was a partner with PREST and CROMTEC in a larger bid by the University of Manchester and UMIST to the JIF fund. The resulting HEFCE award of £5.7M is being used to create the refurbished building mentioned above. During 2001, the directors of the three collaborating centres have begun to hold regular meetings to discuss both the academic and administrative arrangements for the running of our combined activities when we occupy the new building in September 2002. As part of this process we held an awayday for the 45 staff of the three centres earlier this year, and a series of joint internal academic workshops are planned for early 2002. These discussions focus in particular on the research topics which were put forward in our original JIF bid. This research agenda overlaps to a considerable degree with CRIC's core programme, but there are aspects of it which fall outside CRIC's agenda, and similarly there are parts of CRIC's work which are not part of the JIF research agenda.

The directors of CRIC are very mindful of the need to both deliver against a clear and distinct CRIC research agenda, *and* to maximise the leverage of CRIC's work which can be secured through the joint JIF programme. This matter has been discussed with the centre's advisory committee, and will be kept under regular review.

Meanwhile, other developments in the parent Universities and the relevant departments and faculties are increasing the trend towards collaboration in CRIC's immediate institutional environment. We are optimistic that this will eventually reduce remaining administrative and financial obstacles to the smooth running of a centre which, although physically located in one place, draws on staff with affiliations to a wide range of other parts of the two universities.

2.3 Staffing

Following the mid term review the two universities have agreed that CRIC core-funded research staff can move to a new set of contractual arrangements which permit rolling contracts after 3 years' service and continuous contracts after 6 year's service. These new contracts are now in place for those staff involved. These arrangements are in line with the 'Concordat' on research careers, and have been well-received by CRIC staff.

There have been no personnel changes amongst the core-funded staff since the mid term review, but there have been some promotions. Most notably, Dr. Jeremy Howells, who is 50% CRIC and 50% PREST, has been promoted to the rank of Professor by the University of Manchester, and has been made a co-director of CRIC.

As noted above, we have appointed Sally Gee to a one year post associated with the bioinformatics project, and other posts will arise in the near future from new grants.

2.4 Management of CRIC

During 2001 it was agreed with Sir Robin Nicholson, Chair of the Advisory Committee, that the membership of the committee be refreshed by allowing some members of the committee to stand down, and inviting some new members to join. The details of these changes were agreed with ESRC at the time. As part of these changes, Sir Robin himself stood down after 5 years of service. CRIC would like to record its gratitude to him for his outstanding guidance and support over that time. The incoming Chairman of the committee is Professor Ron Amman and we look forward to working with him in the future.

Professor Rod Coombs will finish a 3-year period as Executive Director at the end of 2001, and Professor Stan Metcalfe will take over that role from the beginning of 2002. This was already signalled in the mid term review process.

Performance Indicators

October 2000 – September 2001

Indicator Group A: Publications & Dissemination

A1: Books

Abercrombie, N & Warde, A (eds)

'The Contemporary British Society Reader', Polity Press, 2001

Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J (eds)

'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000

Coombs, R, Green, K, Richards, A & Walsh, V, (eds)

'Technology and the Market: Demand, Users and Innovation', Edward Elgar, 2001

Gronow, J, Warde, A (eds)

'Ordinary Consumption', Routledge, 2001

Metcalfe, J S, Foster, J

'Frontiers of Evolutionary Economics', Edward Elgar, 2001

Miles, I, Boden, M (eds)

'Services, Innovation and the Knowledge Economy', Cassel, 2000

A2: Book Chapters

Andersen, B, Howells, J

'Intellectual Property Rights Shaping Innovation in Services', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 229 - 247

Boden, M, Miles, I

'Conclusions: Beyond the Service Economy', in Miles, I, Boden, M (eds), 'Services, Innovation and the Knowledge Economy', Cassel, 2000 pp 247 - 264

Constantine, S, Warde, A

'Challenge and Change in the New Century', in White, A (ed), 'The History of Lancaster (2nd edition), Edinburgh University Press, 2001 pp 229 - 275

Flanagan, K, Miles, I, Windrum, P

'Web Services: Knowledge of the New', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 68 - 88

Howells, J

'Understanding the New Service Economy', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 267 - 276

Howells, J

'Global Knowledge and Innovation in the New Service Economy', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 248 - 266

Howells, J

'Services and Systems of Innovation, in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 215 - 228

Howells, J

'Computer Services: The Dynamics of a Knowledge Intensive Sector', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 121 - 141

Howells, J

'Outsourcing Novelty: The Externalisation of Innovative Activity', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000 pp 196 - 214

James, A & Howells, J

'Global Companies and Local Markets: The Internationalisation of Product Design and Development activities', in Little, S, Thorp, R (eds), Global Change: The Impact of Asian in the 21st Century, London, Palgrave, 2001 pp 175 - 198

McMeekin, A

'Shaping the Selection Environment: Chlorine in the Dock', in Coombs, R, Green, K, Richards, A & Walsh, V, 'Technology and the Market: Demand, Users and Innovation', Edward Elgar, 2001 pp 112 - 135

Metcalf, J S, Calderini, M

'Chance, Necessity and Competitive Dynamics in the Italian Steel Industry', in Cantner, U, Hanusch, H, Klepper, S (eds), Economic Evolution, Learning and Complexity, Physica-Verlag, Berlin, 2000, pp 139 - 157

Metcalf, J S, Coombs, R

'Organisation for Innovation: Co-ordinating Distributed Innovation Capabilities', in Foss, N & Mahnke, V (eds), Competence, Governance and Entrepreneurship: Advances in Economic Strategy Research, Oxford University Press, 2000

- Metcalfe, J S
 ‘Distributed Capabilities and the Governance of the Firm’, in Foss, N, Mahnke, V (eds),
‘Competence, Governance and Entrepreneurship’, Oxford University Press, 2000
- Metcalfe, J S
 ‘Evolutionary Approaches to Population Thinking and the Problem of Growth and
 Development’, in Dopfer, K (ed) ‘Evolutionary Economics: Program and Scope’, Kluwer,
 Dordrecht, 200, pp 141 - 164
- Metcalfe, J S, Foster, J
 ‘Modern Evolutionary Economic Perspectives: An Overview’, in Foster, J, Metcalfe, J S
 (ed), ‘Frontiers of Evolutionary Economics’, Edward Elgar, 2001
- Miles, I (2001)
 “Taking the Pulse of the Knowledge-Driven Economy: the role of KIBS”
 in Marja Toivonen (ed) Growth and Significance of Knowledge based Services Helsinki,
 Finland, Uusimaa TE Centre Publications 3, pp 1 - 25
- Miles, I & Tomlinson, M, 2000
 “Intangible Assets and Service Sectors: The challenges of service industries” in Buigues,
 P, Jacquemin, A & Marchipont, J-F (eds) Competitiveness And The Value of Intangible
 Assets Aldersht, Edward Elgar pp154-186
- Miles, I, Bolisani, E, Boden, M
 ‘E-commerce: Servicing the New Economy’, in Andersen, B, Howells, J, Hull, R, Miles,
 I, Roberts, J, (eds), ‘Knowledge and Innovation in the New Service Economy’, Edward
 Elgar, 2000 pp 89 - 102
- Miles, I
 ‘Environmental Services: Sustaining Knowledge’ in Andersen, B, Howells, J, Hull, R,
 Miles, I, Roberts, J, (eds), ‘Knowledge and Innovation in the New Service Economy’,
 Edward Elgar, 2000 pp 103 - 120
- Miles, I
 ‘Services, Knowledge and Intellectual Property’, in Andersen, B, Howells, J, Hull, R,
 Miles, I, Roberts, J, (eds), ‘Knowledge and Innovation in the New Service Economy’,
 Edward Elgar, 2000 pp 159 - 177
- Miles, I, Boden, M
 ‘Introduction: Are Services Special?’, in Miles, I, Boden, M (eds),
Services, Innovation and the Knowledge Economy, Cassel, 2000 pp 1 - 20
- Roberts, J, Miles, I, Hull, R, Howells, J, Andersen, B
 ‘Introducing the New Service Economy’, in Andersen, B, Howells, J, Hull, R, Miles, I,
 Roberts, J, (eds), ‘Knowledge and Innovation in the New Service Economy’, Edward
 Elgar, 2000 pp 1 - 9

Roberts, J, Andersen, B, Hull, R
'The New Service Economy: Evidence and Issues', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar: Cheltenham. (2000) pp 10 - 35

Southerton, D
'Ordinary and Distinctive Consumption; or a Kitchen is a Kitchen is a Kitchen', in Gronow, J and Warde, A, (eds) 'Ordinary Consumption', Routledge, 2001 pp 159 - 177

Tether, B, Hipp, C
'Competition and Innovation Amongst Knowledge Intensive and Other Service Firms: Evidence from Germany, in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, 2000

Lundvall, B-Å. and Tomlinson, M
'Learning-by-comparing – reflections on the use and abuse of international benchmarking', In Sweeney, G. (ed.), Innovation, Economic Progress and the Quality of Life. London: Edward Elgar, (2001)

Tomlinson, M
'Employment growth, social capability and human mobility', in Innovative People: Mobility of Skilled Personnel in National Innovation Systems, OECD: Paris, (2001)

Tomlinson, M
'The supply and demand of high technology skills in the UK', in Innovative People: Mobility of Skilled Personnel in National Innovation Systems, OECD: Paris, (2001)

Tomlinson, M
'A New Role for Business Services in Economic Growth', in Archibugi, D & Lundvall, B-A, 'The Globalising Learning Economy: Major Socio-Economic Trends and European Innovation Policy', Oxford University Press

Tomlinson M
'Information and Technology Flows from the Service Sector: A UK-Japan Comparison', in Miles, I, Boden, M (eds), 'Services in the Knowledge-Based Economy', London: Continuum, (2000).

Tomlinson, M
'The Contribution of Services to Manufacturing Industry', in Andersen, B, Howells, J, Hull, R, Miles, I, Roberts, J, (eds), 'Knowledge and Innovation in the New Service Economy', Edward Elgar, (2000) pp 209 - 221

Tomlinson, M, McMeekin, A
'The Role of Routine Behaviour', in McMeekin, A, Green, K, Tomlinson, M & Walsh, V (eds), 'Innovation by Demand: Interdisciplinary Approaches to the Study of Demand and its Role in Innovation', Manchester University Press, (2001)

Warde, A
'Eating Globally: Cultural Flows and the Spread of Ethnic Restaurants', in Kalb, D, van der land, M, Staring, R, van Steenberg, B, Wilterdink, N (eds), 'The Ends of Globalization: Bringing Society Back In', Rowman & Litterfield, Boulder Colorado, revised edition, (2000), pp 243-58

A3: Refereed Journal Papers

Coombs R, Hull R and Peltu M: Knowledge Management Practices for Innovation: An Audit Tool for Improvement' International Journal of Technology Management, Vol 20, No 5, (2000), pp 633 - 657

Fontes, M and Coombs, R; Contribution of new technology-based firms to the strengthening of technological capabilities in intermediate economies, Research Policy, (2001), Volume 30, No 1 pp 79 - 97

Hipp, C, Tether, B, Miles, I
'The Incidence and Effects of Innovation in Services: Evidence from Germany, International Journal of Innovation Management, December (2000) pp 417 - 453

James, A & Macdonald, S
'A Dynamic View of Technology Acquisition', International Journal of Manufacturing Technology & Management, vol 3 (1/2), pp 120-141, (2001)

Metcalf, J S
'Consumption, Preferences and the Evolutionary Agenda', Journal of Evolutionary Economics, vol 11, pp37-58, (2001)

Miles, I, Andersen, B, Boden, M & Howells, J,
Services Processes and Property
International Journal of Technology Management vol 20 nos 1-2, pp 95-115

Reprinted in International Journal of Services Technology and Management vol 1 no 1 pp 37-57, (2000)

Miles, I
'Services Innovation: Coming of Age in the Knowledge-Based Economy, International Journal of Innovation Management, December 2000 pp 371 - 389

Rutter, J
'From the Sociology of Trust Towards a Sociology of E-Trust', International Journal of New Product Development & Innovation Management, 2(4) 2001, pp 385-399

Rutter J
'Rhetoric in Stand Up Comedy: Exploring Performer–Audience Interaction' Stylistyka X, pp 307-325

Shove, E and Southerton, D
'Defrosting the Freezer: from novelty to convenience' Journal of Material Culture 5 (3) 2001, pp 301 – 319

Southerton, D, Deem, R, Shove, E, Warde, A
'The Social Worlds of Caravanning: Objects, Scripts and Practices', Journal of Sociological Research Online, 6(2), 2001 (E-Journal)

Southerton, D
'Consuming Kitchens: Taste, Context and Identity Formation', Journal of Consumer Culture, 1(2), 2001 pp 179 - 203

Southerton, D
'Boundaries of Us and Them: Class, Mobility and identification in a New Town', Sociology Vol.36 (1), 2002

Tether, B, Hipp, C, Miles, I
'Standardisation and Particularisation in Services; Evidence from Germany', Research Policy, 30.7, 1115-1138.

Tomlinson, M
'Lifestyle and Social Class', European Sociological Review

A4: Non-Refereed Journal Papers

Rutter, J. & Southerton, D. 'E-Commerce - the benefits for consumers?' Consumer Policy Review, 10(4), pp 139-144, 2000

A5: Other Publications

Keenan, M, Miles, I, Fahri, F and Lecoq, D, 2001, 'Creating Vision in the Regions: a framework for organising Regional Foresight' IPTS Report pp 6 – 12 (2001)

Clark, K. and Tomlinson, M.
'The determinants of work effort: Evidence from the Employment in Britain Survey', School of Economic Studies Discussion Paper Series No. 0113, University of Manchester.

Coombs, R and Tether, B. S (CRIC) and Cambridge Econometrics (2000) 'Information Communication Technology – A Scenario for Success in 2005', Report submitted to Dr. John Taylor, Director General of UK Research Councils, April. Published by the ESRC.

Coombs, R, Harvey, M, Tether, B. S (2001), 'Analysing Distributed Innovation Processes' – submitted to Industrial and Corporate Change, CRIC Discussion Paper 43.

Harvey, M, McMeekin, A, Randles, S, Southerton, D, Tether B. S and Warde A (2001) 'Demand, Consumption and Innovation: A CRIC Position Paper', ESRC Centre for Research on Innovation and Competition, University of Manchester and UMIST, Manchester, UK

Howells, J, Tether, B. S, Cox, D, Glynn, S and Rigby, J (2001) 'UK R&D Strengths in IT, Electronics and Communications (ITEC) and Creative Content Industries', Final Report for the Information Age Partnership, CRIC and PREST, University of Manchester.

James, A & Howells, J (2001)
'Corporate Decision-Making on the Sourcing of technological Knowledge, PREST Discussion paper 01-01, University of Manchester.

Miles, I (2001)
'Services Innovation: A Reconfiguration of Innovation Studies'
University of Manchester: PREST Discussion Paper DP01-05

Mile, I (2001) "Information technology: A continuing revolution" Background paper for the World Employment Report 2001: Life at Work in the Information Economy, published in the CD-ROM version Geneva, ILO 2001

Miles, I, (2001), "Futurology" and "Standard of Living"
in Outhwaite, W (ed) The Blackwell Dictionary of Modern Social Thought Oxford, Blackwells F,S

Miles, I (2000) "Employment" Rapporteur's comments EUR 19627, pp 152-155
The IPTS Futures Project Conference Proceedings Seville: IPTS, Futures Report series 17

Shove, E, Warde, A (2001) 'Using Users', report to ESRC.
Lundvall, B.-Å. and Tomlinson, M. (2000) 'Benchmarking national systems of innovation', Report for the European Council, commissioned by the Portuguese Presidency of the European Union.

Tether, B. S, Miles, I, Blind, K, Hipp, C, de Liso N and Cainelli G (2001), 'Innovation in Services – An Analysis of CIS-2 data on Innovation in the Service Sector', A report for the European Commission (under CIS Contract 98/184).

Tether B. S. and Metcalfe J. S (2001) 'Horndal at Heathrow? Co-production, Learning and Innovation – Investigating the Processes of Runway Capacity Creation at Europe's Most Congested Airports', An ESSY Working Paper (for Research Project 1 – Systems and Services) CRIC Discussion Paper 46, CRIC, University of Manchester and UMIST, Manchester, UK.

Tomlinson, M. and Lundvall, B.-Å. (2001) 'Policy learning through benchmarking national systems of competence building and innovation - learning by comparing', Report for the 'Advanced Benchmarking Concepts' (ABC) Project, European Commission.

Ekeland, A. and Tomlinson, M., 'The Supply and Demand of High-Technology Skills in the UK, Netherlands and Norway', Report for ESTO (European Science and Technology Observatory).

Tomlinson M (2000)
'Innovation surveys: A researcher's perspective'. DRUID Working Paper No. 00-9, DRUID, University of Aalborg, Denmark.

Warde, A., Tomlinson, M. and McMeekin, A. (2000), 'Expanding Tastes? Cultural Omnivorousness and Social Change in the UK', CRIC Discussion Paper No.37, University of Manchester and UMIST.

Book Reviews

Miles, I (2000), "Jim Northcott, Britain's Future: Issues and Choices"
Futuribles Novembre, 258 pp 91-093 (in French)

Southerton, D (2001)
Review of Gottdeiner, M (ed), 'New Forms of Consumption', Journal of Consumer Culture, 1(2)

Warde, A (2000)
Review of Campbell, C, 'The Myth of Social Action', Sociological Research Online

Warde, A (2001)
Review of Coveney, J, 'Food Morals and Meaning: The Pleasure and Anxiety of Eating', Sociology of Health and Illness, 23(1)

A7: Software

Tomlinson, M (2001)
Netdraw 1.0, A windows programme for drawing network diagrams and social network analysis.

Tomlinson, M. (2001)

Perceptron 1.0, A windows programme for simulating artificial neural networks using the perceptron architecture.

Indicator Group B: External Relationships

B1: Membership of Committees

Coombs R

Member of Strategy Advisory Committee for Research Council Programme on 'Basic Technologies'

Coombs R

Member of EPSRC panel to fund 11 new Engineering Research Centres

Coombs R

Member of EPSRC funding panel on 'Learning Across Business Sectors'

Metcalf, J S

Fellow, Royal society of Arts, 2000 -

Metcalf, J S

Honorary Visiting Professor, Department of Economics, University of Queensland, 1998-2003

Miles I

Member of scientific panel for RESER conference, Oct 2001

Miles I

Member of EC "Benchmarking" panel for RTD policy 2001

Miles I

Reviewer and Discussant of Project on Technology Assessment, presented at ESTO workshop in Brussels, May 2001.

Southerton, D

European Science Foundation Winter Workshop 'Infrastructures of Consumption', co-award holder and organising committee, Wageningen University, November 2000

Southerton, D

Convenor of British Sociological Association Study Group for Consumption, 1998-2001

Warde, A

Sociology Department Representative on Committee for International Business and Finance Degree, 1999 -

Warde, A

Sociology Department Representative for the Hallsworth Fellowship Committee 2000

Warde, A
Member of FRC2 Promotions Committee, 2000-2002

Warde, A
Representative of Social Sciences to Faculty of Arts FRC2, January 2001

B2: Memberships/Networking

Coombs R
Editorial Board: International Journal of Innovation Management

Harvey, M
Editorial Board 'International Journal of Supply Chain Management'

Harvey, M
Referee for 'Cambridge Journal of Economics'

Harvey, M
Referee for 'Gender, Work and Organisation'

Harvey, M
Referee for 'Supply Chain Management'

Metcalfe, J S
Editorial Board 'Manchester School'

Metcalfe, J S
Editorial Board 'International Journal of Technology Management'

Metcalfe, J S
Editorial Board 'Information Economics & Policy'

Metcalfe, J S
Editorial Board 'Structural Change and Economic Development'

Metcalfe, J S
Editorial Board 'Journal of Evolutionary Economics'

Metcalfe, J S
Editorial Board 'British Journal of Management'

Metcalfe, J S
Editorial Board 'Metroeconomica'

Metcalfe, J S
Editorial Board 'Industrial and Corporate Change'

Miles I
Editorial board of Foresight, International Journal of Services Technology Management

Miles Ian
Edited special issue Journal of Innovation Management

Rutter J
Member of International Society for Humour Studies

Rutter J
Member of International Society for the Study of Symbolic Interaction

Rutter J
Member of Popular Culture Association

Rutter J
Academic Liaison with Fisher Price Toys, Gameplay and Oncus

Southerton, D
Euro Science Foundation Summer School, 'Consumption, Everyday Life and Sustainability' Steering Group Committee, Lancaster University, July 2001

Southerton, D
Member of British Sociological Association

Southerton, D
Member of European Sociological Association

Southerton, D
Member of International Sociological Association

Tomlinson, M.,
Member of ENMOB. European Network for the Study of Mobility, funded by the EC.

Tomlinson, M.,
Member of OECD National Innovation Systems focus group on human mobility.

Warde, A
Core participant in ESRC seminar series 'Social Networks and Social Exclusion: Conceptual and Public Policy Issues, 1999-2001

Warde, A
Series Editor 'Sociology and Social Change', Open University Press

Warde, A
Editorial Board Member, 'Journal of Consumer Culture', 2000-

Warde, A
Editorial Board member, 'The Sociology Press', 2000-

Warde, A
Member of British Sociological Association

Warde, A
Member of European Sociological Association

Warde, A
Member of International Sociological Association

B5 Advice and Consultancy (Formally constituted bodies)

Coombs R
Smith and Nephew

Coombs R
Consultant to Irish Government on funding a Research Centre

Coombs R
Consultant to Belgian Government on funding a Research Centre

Coombs R
Consultant to Delta Electrical on technology exploitation.

Coombs R
Consultant to HMGCC on R & D organisation

Miles I
Consultant to NPL 'Nanotechnology project' for DTI / DGRC. developed benchmarking, and scenario methodology, conducted scenario workshop in London.

Tomlinson, M
CBI - Collaboration and culture survey 2000
Designed a survey on collaboration in UK firms for the CBI which was analysed by CRIC (with Rod Coombs).

Tomlinson, M
EU - ESTO (European Science and Technology Observatory) 2000-2001. Co-ordinator of a 3 country project on 'Supply and Demand of Skills in High Technology Sectors'.

Tomlinson, M

Worked with Bengt-Åke Lundvall on a report on international benchmarking commissioned by the Portuguese Presidency for the European Council and with special reference to the Lisbon Summit meeting in March 2000.

Tomlinson M

The Advanced Benchmarking Concepts Project (ABC). Worked with Bengt-Åke Lundvall on a report on international benchmarking for the European Commission.

B6 Conference Papers (National /International)

Bryce J, Rutter J

'Computer Gamers and the Routine Pursuit of Excellence' Leisure Studies Association – Journeys in Leisure: Current and Future Alliances, University of Luton, 2001

Bryce J, Rutter J

'In the Game Flow: Presence in Public Computer Gaming' Computer Games and Digital Textualities, IT, University of Copenhagen 2001

Metcalf J S

"Kimura's Theorem and the Optimality of the Competitive Process", Complexity in Evolution workshop, University of Queensland, Australia, 2001

Metcalf J S

"Business Cycles: Long and Short, Old and New", University of Queensland, Australia, 2001

Metcalf J S

"Innovation Systems and Innovation Policy", Department of Industry and the Innovation Council of Queensland, Australia, 2001

Metcalf J S

"Growth and Knowledge and Knowledge and Growth", Curtin University, Australia, 2001

Metcalf J S

"Restless Capitalism and Endogenous Growth", University of Western Australia, 2001

Metcalf J S, Ramlogan R

June 22-23, 2001. Living with Limits to Knowledge Workshop, Central European University Budapest,. 'Limits to the Economy of Knowledge and Knowledge of the Economy'

Rutter J

'Performing Laughter: Audience Performer Interaction in Stand Up Comedy' Orders of Ordinary Action, The International Institute of Ethnomethodology and Conversation Analysis, Manchester Metropolitan University 2001

Tether B

2001 Sept. 20th – 23rd: Eindhoven Centre for Innovation Studies ‘Future of Innovation Studies’ Conference’, Eindhoven, the Netherlands. Paper accepted for presentation on ‘Innovation in Services – Coming of Age or Still Overlooked and Misunderstood?’

Tether B

2001 August 31st August – Sept. 1st: 5th European Business History Association Conference on ‘Business and Knowledge’. Paper accepted for presentation on ‘Horndal at Heathrow? Co-operation, Learning and Innovation: Investigating the Processes of Runway Capacity Creation at Congested European Airports’

Tether B

DRUID’s Nelson and Winter Conference. Aalborg, Denmark. Paper (written with Stan Metcalfe) ‘Horndal at Heathrow? Co-operation, Learning and Innovation: Investigating the Processes of Runway Capacity Creation at Congested European Airports’ 2001 June 12th – 15th

Tether B Manchester High Technology Small Firms

Conference, Manchester Business School, Manchester, UK. Presentation ‘Innovation in Services: Lessons from the European Community Innovation Surveys’ 2001 May 31st– June 1st

Tether B European Sectoral Systems of Innovation Project

Meeting, Lewes, Sussex. Papers (written with Stan Metcalfe) ‘Services and Systems’ and ‘Horndal at Heathrow? Co-operation, Learning and Innovation: Investigating the Processes of Runway Capacity Creation at Congested European Airports’ 2001 March 23rd – 24th

Tether B

Manchester Science Technology and Innovation Seminar Series, Manchester, UK. Paper (with Stan Metcalfe) ‘Horndal at Heathrow? Co-operation, Learning and Innovation: Investigating the Processes of Runway Capacity Creation at Congested European Airports’ 2001 Feb. 19th

Tether B, DG Enterprise Conference on Innovation Indicators

and Innovation Policy, Sophia Antipolis, France. Paper (written with Ian Miles) on ‘Surveying Innovation in Services: Measurement and Policy Interpretation Issues’. 2000 Nov. 23rd – 24th

Clark, K. and Tomlinson, M. ‘Effort and earnings: Evidence from the Employment in Britain survey’, EEGG annual conference, Southampton, July. (2000)

Lundvall, B-Å. and Tomlinson, M ‘On the convergence and divergence of national systems of innovation’, Volkswagen Foundation workshop on innovation systems, Berlin, June. (2000)

Lundvall, B-Å and Tomlinson, M.
Benchmarking national systems of innovation. Paper presented at International Symposium on innovation policy, Roskilde University, Denmark, April. (2000)

Lundvall, B-Å and Tomlinson, M. 'International Benchmarking as a policy learning tool'. Paper presented to the European Council, Brussels, April. (2000)

Tomlinson, M.,
'Employment growth and social capability', paper presented at the OECD National Innovation Systems focus group on Human Mobility. Paris, November. (2000)

B9 Seminars /Conferences/ Workshops

Bryce J, Rutter J
'Computer Games and Films: Convergence of Technologies – Convergence of Attitudes?'
Invited Speaker Kino Film Festival, Manchester 2001

Bryce J, Rutter J
'Whose Game is This?' Issues in Exploring Children's Computer Gaming' First International Workshop on Children in the Digital World, IMEDIA, Norway 25th September 2001

Bryce J, Rutter J
'Playing in the Killing Fields: Exploring Computer Gaming as Sport' University of Central Lancashire 2001

Miles, I, presented paper, discussant of DPhil projects, at Postgraduate Summer School organised by Roskilde University, Denmark, on theme of Innovation in Services, May 3-5 2001

Miles, I, presentation on Scenario Analysis and Foresight to Hungarian technology Foresight programme conference, Budapest, May 2001.

Miles I
From Technology Foresight to Social Foresight
Invited lecture, European Foundation workshop "From Technology Foresights to European Social Foresight" Dublin, 27-28 November 2000

Miles I
Knowledge-intensive Business Services revisited
Invited lecture, Nijmegen Lectures on Innovation, Netherlands, Feb 2001

Miles I
Industrial and Solid foresight in the UK
Presented at UIFCO workshop Brussels November 2001.

Miles I, James A
Nano technology 'Success Scenario Workshop' DTI/DGRC London 2001

Ramlogan R, Randles S
October 2000 Progress Report to Nexus 'Sustainability, Sustainable Development and or
'wot'

Ramlogan R, Randles S
April 2001. Progress Report to Nexus 'Complexity Old, Complexity New'

Rutter J
'Joking and Laughter', invited speaker, SMILE, AGEE Erlangen/Nurnberg, Germany

Tether B
2001 Sept. 20th – 23rd: Eindhoven Centre for Innovation Studies 'Future of Innovation
Studies' Conference', Eindhoven, the Netherlands.

Tether B
2001 August 31st August – Sept. 1st: 5th European Business History Association
Conference on 'business and Knowledge', Oslo, Norway.

Tether B
2001 June 14th – 15th: Design Research Partnership Meeting, Mälardalen University,
Eskilstuna, Sweden

Tether B
2001 June 12th – 15th: DRUID's Nelson and Winter Conference. Aalborg, Denmark.

Tether B
2001 May 31st May – June 1st: Manchester High Technology Small Firms Conference,
Manchester Business School, Manchester, UK.

Tether B
2001 March 23rd – 24th: European Sectoral Systems of Innovation Project Meeting,
Lewes, Sussex.

Tether B
2001 March 9th: DTI's Community Innovation Survey Users Group – Inaugural
Meeting, DTI, London.

Tether B 2001 Feb. 19th: Manchester Science Technology and Innovation Seminar
Series, Manchester, UK.

Tether B
2000 Nov. 23rd – 24th: DG Enterprise Conference on Innovation Indicators and

Innovation Policy, Sophia Antipolis, France.

Tether B

2000 Sept. 11th: Workshop on ‘Collaborative Design and Learning – Competence Building for Innovation’ Portuguese Pavilion, EXPO2000, Hanover, Germany.

B10 International Collaborative Research Projects

Miles I

Rethinking Organisation in the Information Society
Invited lecture, SOWING Conference on “Regional Paths to the Information Society”,
Karlsruhe 2-3 November 2000

Miles I

‘Services Internationalisation and Human Resources’
Invited keynote lecture, Conference on “Services, Internationalisation and Competences”,
Copenhagen 31 October 2000

Miles I, FOREN – regional Foresight network (member of coordinating committee)

Miles I, Project leader for PREST “Ubiquitous Computing” project for ESTO.

Miles I, With Bruce Tether, CIS-2 “Innovation in Services” study for EC.

Miles I, Member of EC Benchmarking Group examining RTD Policy.

Miles I, CRIC team leader for project (coordinated by ISI in Karlsruhe) on “Services and Patents” for EC

Miles I, PREST team leader for FUTMAN study (industrial ecology) for EC.

Miles I, PREST team leader for “Innovation Policy and the Regulatory Restructuring”
project for EC.

Miles I

Services in the Knowledge Economy
Invited lecture, ASEC conference on Services in the New Economy”, Geneva 9-10
November 2000

Miles I

Knowledge-intensive Business Services: what do we know?
Invited keynote lecture, Conference on “Foresight Uusimaa” Helsinki, 8 November 2000
(revised version published as 5.86)

Tether B

From January 1999 - European Commission – TSER study on ‘Sectoral Systems in

Europe - Innovation, Competition and Growth – project involving a large number of partners and being led by CESPRI of Bocconi University, Milan, Italy.

Tether B

From early 2000 - Member of a international working group studying the changing role of design and design consultancies in the innovation process. Other members of the group include Professor Jim Utterback of the MIT (US), Professor Susan Sanderson of Rensselaer Polytechnic Institute (US), Professor Roberto Verganti of the Politecnico di Milano, (Italy) and Professors Sten Ekman and Bengt-Arne Vedin both of Mälardalen University (Sweden)

B11 Conferences Attended

Hammond S

Association of University Administrators Conference, University of Exeter, April 2001.

Ramlogan R

Association for Heterodox Economics 3rd Annual Conference. 7-8 July Open University Conference Centre, London

Rutter J

Immaterial Objects: A Contradiction in Terms, University of Salford, February 2001.

Rutter J

Macromedia Training Seminar (Web Site Development), Manchester February 2001.

Indicator Group C : Financial Resources

C1: Annual Grant from Centre's Board

£437293.00

C2: Other ESRC Funding

ESRC Bio Informatics and Economies of Knowledge in Europe and USA £45280.00
ESRC Knowledge Transfer (Alan Warde) £ 1590.00

C3: Other Funding from Host Institution

Salary Contributions from host institutions:
Professor R Coombs 80%
Professor J S Metcalfe 80%
Professor Ian Miles 30%
Professor A Warde 50%

C4: Other Research and Consultancy Funding

DTI Bio informatics Project £ 9850.00

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