

Curriculum Vitae

(Including publication list)

for

Charles Edquist

April 14, 2012

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1. Summary of CV for Charles Edquist

I am the Holder of the Ruben Rausing Chair in Innovation Research at CIRCLE, Lund University, Sweden. I have published many books and numerous articles on innovation processes, innovation systems and innovation policy. This includes the edited volumes entitled “Systems of Innovation: Technologies, Institutions and Organizations” (1997) and “Small Country Innovation Systems: Globalization, Change and Policy in Asia and Europe” (2008). They constitute major contributions to the development of the so-called Systems of Innovation Approach. So does the chapter in the *Oxford Handbook of Innovation*, entitled “Systems of Innovation: Perspectives and Challenges” (2005). I have also made many contributions to the field of innovation policy and governance of innovation systems, the latest ones being the articles in *Industrial and Corporate Change* (2011) and *Research Policy* (2012). The impact of the research is indicated by the fact that I am among the 50 (or so) most cited innovation researchers (out of the 6 – 7 000) in the world.

I have comprehensive international experiences. This includes longer stays at different universities, a large number of invitations as keynote speaker and sejours as a consultant in many countries. Many of the conferences have involved public policy-makers and firm representatives as well as academics. I have been involved in evaluation and consultancy tasks over decades and in almost all continents. This includes collaboration with numerous international organizations (such as OECD, UNIDO, EU, UNCTAD, ILO, UNDP, UNESCO) but also with Swedish organizations (such as the Ministry of Industries, NUTEK, VINNOVA) and firms (such as Astra-Zeneca, SAAB Aerospace, Volvo Trucks). Among the evaluations, I could mention an evaluation of a “technology bridging” organization (in Linköping, Sweden) and the comprehensive evaluation of the Finnish National Innovation System for the Finnish Government. Currently I am a consultant to Sweco Eurofutures (Stockholm) in three different evaluation projects.

Among my experiences in research management, I was one of the founders of CIRCLE (Centre for Innovation, Research and Competence in the Learning Economy) at Lund University in 2004 - www.circle.lu.se - as well as its director during the first seven years (2004 - 2011), during which time the research staff increased from zero to 40 persons (representing 12 nationalities and 15 disciplines). By 2011, CIRCLE had established itself as a leading international centre for research and advice on R&D, innovation, knowledge creation, entrepreneurship and economic dynamics and one of the largest innovation research centra in Europe.

Currently I work mainly on issues related to innovation policy as a writer and as an advisor to governments and firms. One project is called the Rausing Project on Innovation Processes and Innovation Policies. It addresses theoretical, empirical and policy-oriented aspects of innovation processes in innovation systems. It includes analyses of the *determinants* (‘ten activities’, including entrepreneurship and demand-side instruments, such as innovation procurement) and *consequences* of innovations, as well as their *measurement* (innovation indicators). On this basis, the foundations of policies are focused, i.e. theory, rationales, objectives, instruments and practices related to *innovation policies*.

All the above is reported in detail in the pages following in this CV of April 14, 2012.

1. Personal Details

Office address: Centre for Innovation Research and Competence in the Learning Economy (CIRCLE)
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Home address: Knut den stores gata 7, 222 21 Lund, Sweden; Tel: +46-(0)46-13 63 13

Nationality: Swedish

2. Degrees

Docent (Habilitation): Economic History, Umeå University, Sweden, 1985

Ph.D. Degree (fil.dr.): Economic History, University of Lund, Sweden, 1981

Master of Arts Degree: Economics, University of California, Berkeley, USA, 1974

Bachelor of Arts Degree: Statistics, Economics and Economic History, University of Lund, (Fil. Kand.) 1971

3. University Positions

February 2003 -	Holder of The Ruben Rausing Chair in Innovation, Centre for Innovation Research and Competence in the Learning Economy (CIRCLE), Lund University, Sweden
July 2004 – Sept 2011	Director, Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE), Lund University, Sweden
January 2000 – June 2002	Head, Dept of Technology and Social Change, Linköping University, Sweden
Sept. 1992 – Aug. 1994	Head, Dept of Technology and Social Change, Linköping University, Sweden
Nov. 1986 – Jan. 2003	Full Professor (Chair), Department of Technology and Social Change, Linköping University, Sweden
July 1977 – March 1987:	Researcher, Assistant Professor, Associate Professor, Acting Professor and Acting Director, Research Policy Institute, Lund University, Sweden (Partial overlap with above because of part-time appointments)
Oct. 1976 – June 1977:	Researcher at the Centre for Interdisciplinary Studies, University of Gothenburg, Sweden
Jan. 1976 – Sept. 1976:	Lecturer at Roskilde University, Denmark
Jan. 1971 – Aug. 1976:	Lecturer in Economics, International Economics, Development Studies and in the field of Science-Technology-Society at Lund University, Sweden

My degree work and positions have included the following extended visits abroad:

1973-74:	Student at the Department of Economics, University of California, Berkeley, USA
Aug. 1991 – June 1992:	Sabbatical leave and guest researcher at the Centre for Research in Management, Haas School of Business, University of California at Berkeley, USA
Sept 2002 – Dec 2002	Guest Researcher at: <ul style="list-style-type: none">- Science Policy Research Unit (SPRU), Sussex University, Brighton, UK- Centre for Research on Innovation and Competition (CRIC), Manchester University, UK, and- Institute for Research on the Portuguese Economy (ISEG), Technical University of Lisbon, Portugal
Oct 2011 – May 2012	Guest Professor at Institut Francilien Recherche Innovation Société (IFRIS), Paris, France

4. Languages

Swedish: Mother tongue

English: Excellent

German, Spanish and French: Basic to fair

5. Publications (1986 to the present)

A complete list of publications is available upon request. The accumulated number of citations to my publications was the following at the times indicated:

	Google Scholar	Social Science Citation Index
August 2005	1 031	409
April 2006	1 413	523
February 2007	2 027	606
January 2008	2 875	660
January 2009	3 006	894
January 2010	5 663	1045
January 2011	5 848	1156
January 2012	7 807	1572

The Method used for the citation analysis is described in Appendix 1.

5.1. Books, Booklets, Reports, and CD-ROMs (monographs and edited volumes)

Edquist, C. and L. Hommen, eds. 2011. *Small Country Innovation Systems: Globalization, change, and policy in Asia and Europe* (Edward Elgar 2009) has been published in Chinese by Science Press (Beijing), 544 pp.

Borrás, S., J. Fagerberg and C. Edquist, eds. 2011. Special issue on Learning, innovation systems and policy: in honour of Bengt-Åke Lundvall's 70th birthday. *Science and Public Policy* 38 (9)

Edquist, Charles and Hommen, Leif (ed.) *'Small Country Innovation Systems: Globalisation, Change and Policy in Asia and Europe'*, Edward Elgar Publishing, 2008 (published in paperback 2009), 544 pp.

Arvidsson, G.; Bergström, H.; Edquist, C.; Högberg, D. and Jönsson, B. *Medicin för Sverige – Nytt liv i en framtidsbransch (Medicine for Sweden – New life into a sector of the future)*, SNS publishers (May 2007), Stockholm, 205 pp.

Fulton, O., Santiago, P., Edquist, C., El-Khawas, E., and Hackl, E. *Thematic Review of Tertiary Education: Poland*, Organization for Economic Co-operation and Development, Directorate for Education, Education and Training Policy Division (September 2007), Paris, 152 pp.

Edquist, C., Gillespie, I., Rosenmöller, M., Sauer, F., Tijssen, R., The *Innovative Medicines Initiative - Assessment of Economical and Societal Impact*, European Commission, Research Directorate-General - Directorate F (2007), Brussels.

Edquist, C. and Hommen, Leif; in collaboration with Fedorovich, D., and Siriachenko., N. *Evaluation of Forum Scientium Postgraduate Research School, Linköping University*, an evaluation carried out for the Foundation for Strategic Research, Stockholm, December 2007, 74 pp.

Edquist, Charles; Amanatidou, Effie; Belitz, Heike; Cruz, Laura; Edler, Jacob; Georghiou, Luke; Granstrand, Ove; Guinet, Jean; Leprince, Emmanuel; Orsenigo, Luigi; Rigby, John; Romanainen, Jari; Stampfer, Michael and van en Biesen, Jan. *'Improving the Effectiveness of Direct Public Support Measures to Stimulate Private Investment in Research – Study Report of the Working Group on Direct Measures for Directorate General Research'*, European Commission', Brussels, April 2003, 76 pp.

Edquist, Charles (ed.) *'The Internet and Mobile Telecommunications System of Innovation: Developments in Equipment, Access and Content'*, Edward Elgar Publishing, Cheltenham, UK, January 2003, 260 pp.

Edquist, Charles. *'Innovationspolitik för Sverige – mål, skäl, problem och åtgärder'*, ('Innovation Policy for Sweden – Objectives, Rationales, Problems and Measures' – written for the Swedish Ministry of Industry in Swedish and published by VINNOVA (The Swedish Agency for Innovation Systems), VINNOVA Forum (VFI 2002: 2), Stockholm, 2002, 69 pp.

Edquist, Charles, Leif Hommen and Maureen McKelvey. *Skapar innovationer jobb? Produktinnovationer och processinnovationer i den kunskapsbaserade ekonomin*, The book is a translation into Swedish of *Innovation and Employment: Process versus Product Innovation* (see below), Edward Elgar Publishing, Cheltenham, UK, June 2001. (The translation was financed by the Swedish Agency for Innovation Systems, VINNOVA.) SNS Publishers, May 2002, 264 pp.

Edquist, Charles and Hans Sjögren. 'Östergötland – en innovativ miljö?' ('East Gothia – An Innovative Environment?' – in Swedish), Report published by Centrum för kommunstrategiska studier, Linköping University, 2001, 35 pp.

Edquist, Charles; Leif Hommen and Maureen McKelvey. *Innovation and Employment: Process versus Product Innovation*, Edward Elgar Publishing, Cheltenham, UK, 2001, 214 pp.

Edquist, Charles; Gareth Rees; Kurt Larsen; Mark Lorenzen; and Stephane Vincent-Lancrin. *Cities and Regions in the New Learning Economy*, published by the Centre for Educational Research and Innovation (CERI) of the Organization for Economic Cooperation and Development (OECD), Paris, January 2001, 147 pp.

Edquist, Charles; Leif Hommen and Lena Tsipouri (eds.). *Public Technology Procurement and Innovation*, Kluwer Academic Publishers, Boston/Dordrecht/London, 2000, 311 pp. (includes six co-authored chapters).

Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 1086 pp (two volumes) (with an Introduction by the editors, and including another 4 authored or co-authored chapters).

Edquist, Charles. *Teknikbrostiftelsen i Linköping: En utvärdering av dess roll som offentlig såddfinansier i det regionala innovationssystemet* ('The Technology Bridge Foundation in Linköping: An Evaluation of its Role as a Public Provider of Seed Capital in the Regional System of Innovation'; written in Swedish), Linköping, February 1999, 60 pp.

Edquist, Charles (with Dieter Ernst, Jenny Holland and Raphael Kaplinsky). *The Science, Technology and Innovation Policy Review: Jamaica*, United Nations Conference on Trade and Development and The Commission on Science and Technology for Development, United Nations, New York and Geneva, 1999, 156 pp.

Edquist, Charles and Francois Texier (ed.). *Innovation Systems and European Integration (ISE)*, CD-ROM containing 33 research reports produced within ISE, EU-funded research project coordinated by Charles Edquist, August 1998, (ISBN: 91-7219-266-6).

Edquist, Charles; Leif Hommen; Björn Johnson; Tarmo Lemola; Franco Malerba; Thomas Reiss; and Keith Smith *The ISE Policy Statement: The Innovation Policy Implications of the 'Innovation Systems and European Integration' (ISE) Research Project*, Linköping, Sweden, May 1998 (also included in the CD-ROM mentioned above), 76 pp.

Edquist, Charles (ed.) *Systems of Innovation: Technologies, Institutions and Organizations*, London (Pinter Publishers/Cassell Academic), 1997, 432 pp. (This is one of the most cited publication at <http://scholar.google.com/>.)

Edquist, Charles. *Innovationspolitik för förnyelse av svensk industri* ('Innovation Policy for Renewal of Swedish Industry'; In Swedish), Tema T Rapport 33, 1993, University of Linköping, Department of Technology and Social Change, 90 pp.

Edquist, Charles and Staffan Jacobsson. *Flexible Automation - The Global Diffusion of New Technology in the Engineering Industry*, Oxford: Basil Blackwell, 1988, 227 pp.

Clark, Norman, Charles Edquist, Raphael Kaplinsky and David Pimentel. *Cyprus Technology Strategy*, Report of the UNDP/OPE Mission, Institute of Development Studies, Sussex University, June 1988, 213 pages.

5.2. Book Chapters and Journal Articles

Edquist, Charles and Zabala Jon Mikel ‘Public Procurement for Innovation as Mission-oriented Innovation Policy’, *Research Policy*, 2012 (accepted for publication and forthcoming 2012)

Edquist, C. 2011. Design of innovation policy through diagnostic analysis: Identification of systemic problems (or failures). *Industrial and Corporate Change* 20 (6), 1 – 29.

Edquist, C. 2011. Systems of Innovation: Perspectives and Challenges. *African Journal of Science, Technology, Innovation and Development (AJSTID)* 2 (3), 14 – 43.

Borrás, S., J. Fagerberg and C. Edquist. 2011. Introduction to a special issue on learning, innovation systems and policy in honour of Bengt-Åke Lundvall. *Science and Public Policy* 38 (9).

Edquist, C. and L. Hommen. 2011. Comparing National Systems of Innovation in Asia and Europe: Theory and Comparative Framework. In *Small Country Innovation Systems: Globalisation, Change and Policy in Asia and Europe*, C. Edquist and L. Hommen (Eds.). Edward Elgar, published in Chinese by Science Press (Beijing), 27 pp.

Edquist, C. and L. Hommen. 2011. Preface. In *Small Country Innovation Systems: Globalisation, Change and Policy in Asia and Europe*, C. Edquist and L. Hommen (Eds.). Edward Elgar, published in Chinese by Science Press (Beijing).

Bitard, P., C. Edquist, L. Hommen and A. Rickne. 2011. Reconsidering the Paradox of High R&D Input and Low Innovation: Sweden. In *Small Country Innovation Systems: Globalisation, Change and Policy in Asia and Europe*, C. Edquist and L. Hommen (Eds.). Edward Elgar, published in Chinese by Science Press (Beijing), 44 pp.

Edquist, C. and L. Hommen. 2011. Concluding Chapter: Globalisation and Innovation Policy. In *Small Country Innovation Systems: Globalisation, Change and Policy in Asia and Europe*, C. Edquist and L. Hommen (Eds.). Edward Elgar, published in Chinese by Science Press (Beijing), 43 pp.

Chaminade, C. and Edquist, C. 'Rationales for public policy intervention in the innovation process: A systems of innovation approach', in Kuhlman, S., Shapira, P, Smits, R., *Innovation Policy – Theory and Practice. An International Handbook*. Edward Elgar, 2010. (The book was published in Paperback in early 2012.)

Edquist, C., Luukkonen, T., and Sotarauta, M. 'Broad-Based Innovation Policy', sub-report (pp 11– 69) in *'Evaluation of the Finnish National Innovation System - Full Report'*, Helsinki, October 28, 2009. (The evaluation was carried out by a group of experts consisting of six international and twelve Finnish researchers, led by Pekka Ylä-Anttila and Petri Rouvinen, ETLA. Six sub-reports and a policy report were published; see www.evaluation.fi, where all sub-reports are available.)

Borrás, S.; Chaminade, C.; Edquist, C. 'The Challenges of Globalization: Strategic Choices for Innovation Policy', in G. Marklund, N. Vonortas and C Wessner, *The Innovation Imperative – Globalization and National Competitiveness*, Edward Elgar Publishers, London, 2009.

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Meeus, M. and Edquist, C. (2006) Introduction to Part I: Product and Process Innovation, in Hage, J., and Meeus, M. (eds.), *Innovation, Science and Institutional Change. A Research Handbook*, Oxford University Press, pp. 23-37.

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Edquist, Charles. 'Systems of Innovation: Perspectives and Challenges', in Fagerberg, Jan, Mowery, David, and Nelson, Richard (ed.) *Oxford Handbook of Innovation*, Oxford University Press, Oxford, November 2005, pp. 181-208.

Edquist, Charles 'Final Remarks: reflections on the Systems of Innovation Approach' in *Science and Public Policy*, December 2004, vol. 36, no 6, pp 485-489.

Edquist, Charles, Doloreux, David and Hommen Leif, 'Nordic Regional Innovation Systems: An Analysis of the Region of East Gothia, Sweden' in *Canadian Journal of Regional Science*, 2004, vol. 27, no 4, pp 431 - 457.

Edquist, Charles 'Systems of Innovation: Perspectives and Challenges', Fagerberg, Jan, Mowery, David and Nelson, Richard R. (ed.) *Oxford Handbook of Innovation*, Oxford University Press, Oxford, 2004, pp. 181-208.

Edquist, Charles. 'The Fixed Internet and Mobile Telecommunications Sectoral System of Innovation: Equipment Production, Access Provision and Content Provision', in Malerba, Franco (ed.) *Sectoral Systems of Innovation in Europe – Concepts, Issues and Analyses of Six Major Sectors in Europe*, Cambridge University Press, Cambridge, UK, September 2004, pp 155 - 192.

Edquist, Charles; Malerba, Franco; Metcalfe, Stan; Montobbio, Fabio; and Steinmueller, Ed. 'Sectoral Systems: Implications for European Innovation Policy' in Malerba, Franco (ed.) *Sectoral Systems of Innovation in Europe – Concepts, Issues and Analyses of Six Major Sectors in Europe*, Cambridge University Press, Cambridge, UK, September 2004, pp 427 – 461.

Edquist, Charles, 'Innovationssystem och Innovationspolitik' ('Innovation Systems and Innovation Policy' – in Swedish), in Berg, P-O, Bonnier, T. and Öhrvall Rönnbäck, Anna (eds.) *Svensk innovationskraft – Visionen måste vara starkare än motståndet* ('Swedish Innovation Force – The vision must be stronger than the resistance' – in Swedish) Forum for Innovation Management, Stockholm, 2004, 7 pp.

Edquist, Charles. 'The Fixed Internet and Mobile Telecommunications Sectoral System of Innovation: Equipment, Access and Content', in Edquist, Charles (ed.) *The Internet and Mobile Telecommunications System of Innovation: Developments in Equipment, Access and Content*, Edward Elgar Publishing, 2003, 39 pp.

Edquist, Charles 'Policy Implications for the Future of the Sectoral System', in Edquist, Charles (ed.) *The Internet and Mobile Telecommunications System of Innovation: Developments in Equipment, Access and Content*, Edward Elgar Publishers, 2003, 8 pp.

Edquist, Charles och Rees Gareth. 'Individuellt och organisatoriskt lärande i den kunskapsbaserade ekonomin' ('Individual and Organizational Learning in the Knowledge-based Economy' - in Swedish) in Abrahamsson, Kenneth; Abrahamsson, Lena; Björkman, Torsten; Ellström, Per-Erik och Johansson, Jan (eds.) *Utbildning, kompetens och arbete* (*Education, Competence and Work – in Swedish*), Studentlitteratur, Lund, 2002, pp. 411-427.

Edquist, Charles, Marie-Louise Eriksson and Hans Sjögren. 'Characteristics of Collaboration in Product Innovation in the Regional System of Innovation of East Gothia', in *European Planning Studies*, Vol 10, No 5, 2002, pp 563-581.

Edquist, Charles. 'Innovationspolitik och innovationssystem' ('Innovation Policy and Innovation Systems' – in Swedish), in Stuesson, Lennart, Svante Beckman, Kajsa Ellegård and Jane Summerton (eds.) *Spänningsfält: Tekniken – politiken- framtiden* ('Area of Tension: Technology – Politics – Future' – in Swedish), Stockholm: Carlsson Bokförlag, 2002, pp. 243-262.

Edquist, Charles. 'Innovation Policy in the Systems of Innovation Approach: Some Basic Principles', in Fischer, M.M. and J. Fröhlich (eds.). *Knowledge Complexity and Innovation Systems*, Springer Verlag, Berlin, 2001, 14 pp.

Edquist, Charles. 'Innovationssystemansatser – utveckling och kännetecken' ('Systems of Innovation Approaches – Their Emergence and Characteristics'; translated into Swedish), in Bo Carlsson, Charles Edquist, Gunnar Eliasson, Staffan Jacobsson and Åsa Lindholm-Dahlstrand, *Innovationssystem, kluster och kompetensblock: fyra essäer om innovationer, tillväxt och sysselsättning* ('Innovation Systems, Clusters and Competence Blocks: Four Essays on Innovations, Growth and Employment'; in Swedish), Rådet för Arbetslivsforskning (RALF) and The Public Agency for Innovation Systems (VINNOVA), 2001, 35 pp.

Edquist, Charles. 'Innovation Policy – A Systemic Approach', in Lundvall, Bengt-Åke and Daniele Archibugi (Eds.) *Major Socio-Economic Trends and European Innovation Policy*, Oxford University Press, Oxford, UK, 2001, 25 pp.

Edquist, Charles; Marie-Louise Eriksson and Hans Sjögren. 'Collaboration in Product Innovation in the East Gothia Regional System of Innovation', in *Enterprise & Innovation Management Studies*, vol. 1, No. 1, 2000, pp. 37-56.

Edquist, Charles and Maureen McKelvey. 'Introduction', in Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 12 pp.

Edquist, Charles. 'Systems of Innovation', invited contribution to Michie, Jonathan (ed.) *Reader's Guide in the Social Sciences*, Cambridge University Press, Cambridge, UK, 2000, 3 pp.

Edquist, Charles. 'Systems of Innovation Approaches – Their Emergence and Characteristics', in Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 38 pp.

Edquist, Charles; Per Hammarqvist and Leif Hommen. 'Public Technology Procurement in Sweden. The X2000 High Speed Trains', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (Eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 45 pages.

Edquist, Charles and Leif Hommen. 'Public Technology Procurement and Innovation Theory', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 65 pp.

Edquist, Charles; Leif Hommen; Björn Johnson; Tarmo Lemola; Franco Malerba; Thomas Reiss and Keith Smith. 'The Systems of Innovation Approach and its General Policy Implications' and 'Specific Policy Implications of ISE and its Sub-projects', in Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 28 pp.

Edquist, Charles; Leif Hommen and Maureen McKelvey. 'Product Versus Process Innovation: Implications for Employment', in Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 27 pp.

Edquist, Charles; Leif Hommen and Lena Tsipouri. 'Introduction', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 5 pp.

Edquist, Charles; Leif Hommen and Lena Tsipouri. 'Overview of Case Studies', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 7 pp.

Edquist, Charles; Leif Hommen and Lena Tsipouri. 'Analysis, Findings and Conclusions', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 25 pp.

Edquist, Charles; Leif Hommen and Lena Tsipouri. 'Policy Implications', in Edquist, Charles; Leif Hommen; and Lena Tsipouri (eds.) *Public Technology Procurement and Innovation*, Kluwer Academic Publishers Boston/Dordrecht/London, 2000, 11 pp.

Edquist Charles and Björn Johnson. 'Institutions and Organisations in Systems of Innovation', in Edquist, Charles and Maureen McKelvey (eds.). *Systems of Innovation: Growth, Competitiveness and Employment*, An Elgar Reference Collection, Edward Elgar Publishing, Cheltenham, UK, 2000, 23 pp.

Edquist, Charles and W. Craig Riddell. 'The Role of Knowledge and Innovation for Economic Growth and Employment in the Information and Communication Technology (ICT) Era', in Rubenson, Kjell and Hans G. Schuetze (eds.) *Transition to the Knowledge Society: Policies and Strategies for Individual Participation and Learning*, Institute for European Studies, University of British Columbia, Vancouver, Canada, 2000, 29 pp.

Edquist, Charles and Leif Hommen. 'Systems of Innovation: Theory and Policy for the Demand Side', in *Technology in Society*, 21,1999, pp 63-79.

Edquist, Charles and Hans Sjögren. 'Inget samband mellan investeringar och lönsamhet i svensk industri? En studie av industriell dynamik 1975-1995' ('No Correlation between Investments and Profitability in Swedish Industry? A Study of Industrial Dynamics 1975-1995'; in Swedish), in *Ekonomiska Samfundets Tidskrift*, nr 2, Helsinki 1998, 13 pp.

Edquist, Charles and Maureen McKelvey. 'High R&D Intensity Without High Tech Products: A Swedish Paradox?', in Nielsen Klaus, and Johnson, Björn (eds.) *Institutions and Economic*

Change: New Perspectives on Markets, Firms and Technology, Edward Elgar Publishing Ltd, Cheltenham UK, 1998, 18 pp.

Edquist, Charles. "Product *versus* Process Innovation: A Conceptual Framework for Assessing Employment Impacts", Paper presented at 'Conference on Creativity, Innovation and Job Creation', Organized by the OECD and the Norwegian Government, Oslo 11-12 January 1996. Published in *Creativity, Innovation and Job Creation*, OECD, Paris, March 1997, 17 pp.

Edquist Charles. 'Preface' in Edquist, Charles (ed.) *Systems of Innovation - Technologies, Institutions and Organizations*, London: Pinter Publishers/Cassell Academic, 1997, 2 pp.

Edquist, Charles 'Systems of Innovation Approaches - Their Emergence and Characteristics', in Edquist, Charles. (ed.) *Systems of Innovation - Technologies, Institutions and Organizations*, Pinter Publishers/Cassell Academic, London, 1997, 35 pp.

Edquist, Charles and Anders Flodström. 'Den tredje uppgiften: Universitet och samhälle i samverkan' ('The Third Mission: University and Society in Co-operation'; written in Swedish), in Sonja Dahl (ed.) *Kunskap så det räcker? - 18 debattinlägg om utbildning och forskning*, SACO, Stockholm, 1997, 12 pp.

Edquist, Charles; Leif Hommen; and Maureen McKelvey. 'Product vs. Process Innovation, Productivity Growth and Employment', in Angelo Reati and Jonathan Michie (eds.) *Work, Employment and Need: Theory and Evidence*, Edward Elgar Publishers, London, 1997, 40 pp.

Edquist, Charles and Björn Johnson. 'Institutions and Organizations in Systems of Innovation', in Edquist, Charles. (ed.) *Systems of Innovation - Technologies, Institutions and Organizations*, Pinter Publishers/Cassell Academic, London, 1997, 28 pp.

Edquist, Charles and Francois Texier. 'The Growth Pattern of Swedish Industry 1975-1991', in Osmo Kuusi (ed.) *Innovation Systems and Competitiveness*, Taloustieto Oy in collaboration with ETLA (The Research Institute of the Finnish Economy) and VATT (The Government Institute for Economic Research), Helsinki 1996, 17 pp.

Edquist, Charles. 'Government Technology Procurement as an Instrument of Technology Policy', in Morris Teubal, Dominique Foray, Morse Justman and Ehud Zuscovitch (Eds.) *Technological Infrastructure Policy (TIP): An International Perspective*, Kluwer Academic Publishers, Boston/Dordrecht/London 1995, 29 pp.

Edquist, Charles. 'Technology Policy - The Interaction between Governments and Markets' in Georg Aichholzer and Gerd Schienstock (Eds.) *Technology Policy - Towards an Integration of Social and Ecological Concerns*, Walter de Gruyter, Berlin, 1994, 33 pp.

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Edquist, Charles. *The Diffusion of New Technologies and New Organizational Forms in Production*, Paper presented at the 'European Workshop on Research and Development Strategies in the Field of Work and Technology', Dortmund, Germany, 23-25 October, 1990, 12 pp.

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and Social change, University of Linköping), Room Document No. 2, at the conference 'Technological Change as a Social Process - Society, Enterprises and the Individual', Helsinki, 11-13 December, 1989. The report was prepared for the Directorate for Social Affairs, Manpower and Education (SME) at the OECD and constitutes part of the SME/OECD follow-up work after their presentation of the so-called Sundquist Report. Simultaneously it is an element within the Technology/Economy Programme (TEP) of the OECD. October 1989, 63 pp.

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Edquist, Charles. *Difusion de las Tecnologias de Automatizacion Flexible en la Industria de Bienes de Capital de los Paises Industrializados: Repercusiones para los Paises en Desarrollo y sus Posibles Reacciones*, in *Microelectronica en las Industrias de Bienes de Capital de los Paises del Grupo Andino*, Informe Final de la Reunion del Grupo Tecnico ONUDI/JUNAC, Paipa y Bogota (Colombia), Organizacion de las Naciones Unidas Para el Desarrollo Industrial (UNIDO), Subdivision de Estudios de Trabajo Sectoriales, Division de Estudios e Investigaciones, PPD. Vienna, 27 Mayo 1987.

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5.4. Articles in the Popular Press

Edquist, Charles and Jan Hederén. ‘Staten bör gifta ihop digital-tv med bredband’ (‘The State Should Marry Digital TV with Broadband’; written in Swedish), article published in the Swedish business daily newspaper *Dagens Industri*, March 18, 2003.

Edquist, Charles. ‘Så kan industrin skapa 125 000 jobb’ (‘In This Way Industry Can Create 125 000 Jobs’; written in Swedish) article published in the Swedish daily newspaper *Expressen*, March 11, 1996.

Edquist, Charles. ‘Svensk industri tar inga ‘onödiga’ risker - Sverige ligger efter när det gäller framtidsbranscher’ (‘Swedish Industry Takes no ‘Unnecessary’ Risks – Sweden is Behind with Regard to Future-Oriented Sectors’; written in Swedish), article published in the Swedish daily newspaper *Svenska Dagbladet*, September 3, 1995.

Edquist, Charles. ‘Produktiviteten i skymundan’ (‘Productivity in the Background’; written in Swedish), article published in the Swedish daily newspaper *Dagens Nyheter*, April 8, 1993.

Edquist, Charles. ‘Audacious Manufacturing but Simple Products’ in *Forskning och Framsteg*, December 1990. (This article was in 1990 awarded a prize as the best popular science article in the field of humanities and social sciences by the Bank of Sweden Tercentenary Foundation.)

6. Selected Recent Conferences, Seminars and Lectures

I have participated in about 250 international scientific conferences, I have been an invited lecturer and keynote speaker at many, the general rapporteur at a few and the organiser of some. Many of the conferences have involved policy-makers and firm representatives as well as academics. Below follow a few selected examples of my conference participation – only from the last decade, with an emphasis on the latest couple of years:

Gave a lecture entitled “The Design of Innovation Policy: A challenge for the Future” at the Seminário Internacional Sobre Pequenos Negócios (International Conference on Small Business), organised by Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE), 18 – 20 Abril de 2012, Hotel Grand Hyatt, Sao Paulo, Brasil.

Presented a paper entitled “Public Procurement for Innovation (PPI) as Mission-oriented Innovation Policy (with Jon Mikel Zabala) at the conference “Demand, Innovation and Policy Underpinning Policy Trends with Academic Analysis”, organized by the research project ‘Understanding Public Procurement of Innovation’, Manchester, March 22 – 23, 2012.

Participated in the conference “The New Geography of Innovation and the Impact of the Economic Crisis: A Paris Policy symposium, OECD, Paris, January 19-20, 2012.

Gave an internal seminar entitled “Public Procurement for Innovation as Mission-oriented Innovation Policy” at the Department of Science, Technology and Industry, OECD, Paris, 13 February, 2012.

Participated in a workshop organized by the “Projet de Politique Scientifique Indir: Innovation, Dynamique Industrielle et Regulation: enjeux Contemporains de Politiques Publiques”, Université Paris 1 Panthéon-Sorbonne, Vendredi 9 decembre 2011.

“Economic Crisis and Innovation Policy”, Key-note presentation at the *Annual Meeting of the Japanese Association of Evolutionary Economics*, Nagoya, Japan, March 19, 2011.

“Public Procurement and Innovation Policy”, Presentation at *OECD Conference on Innovation Policy for Growth*, Paris, France, March 30, 2011.

“Innovation Systems and Innovation Policy”, Presentation at the *CIRCLE Policy Advisory board*, May 4, 2011.

“Welcome Address”, 2nd *International Conference on Sustainability Transitions (IST 2011)*, organized by LUCSUS, STRN and CIRCLE at Lund University, June 13-15, 2011.

Participated in the European Conference on “Public Procurement of Innovation – Facing societal Challenges Delivering Better Public Services & Supporting SMEs To Innovate”, Turin, Italy 27-28 June 2011

“Public procurement for Innovation (PPI) as Mission-oriented Innovation Policy”. Draft paper discussed at June 16-17 Lausanne Workshop discussion of contributions to the *Research Policy* special issue on Grand Policy Challenges. (Co-authored with J.M. Zabala).

Presentation at the “2010 Sweden-China Innovation Forum – 60 Years of Diplomatic Relations” on “The Role of the State in Stimulating Innovations”, Beijing, May 21, 2010.

Key-Note speaker at the Fourth National Conference on Science, Technology and Innovation, organized by the Brazilian Ministry of Science and Technology with a paper entitled “Design of Innovation Policy: How to Create an Innovative Society in a Globalized World”, Brasilia, May 26-28, 2010.

Panelist at the seminar “Six years of Innovation Research – what have we learnt?” organized at The Swedish Agency for Innovation Systems (VINNOVA), Stockholm March 4, 2010.

Presentation entitled “Design of Innovation Policy through Diagnostic Analysis: Identification of systemic Problems (or Failures), at the Department of Political Science, Gothenburg, April 19, 2010.

Speaker and commentator on the 16th SPRU DPhil Day, Freeman Centre, Brighton, UK, May 28, 2010.

Presentation entitled “Reflections on Innovation Policy” for VINNOVA leaders at The Swedish Agency for Innovation Systems, September 24, 2010.

Edquist, C., Zabala., J.M. (2010) A Conceptual Framework for Analyzing the Relations between Demand and Public Procurement for Innovation and between Knowledge-intensive Entrepreneurship and Innovation. DIME-AEGIS Conference, Athens, 29-30 April 2010.

Edquist, C., Zabala., J.M. (2010) Knowledge-intensive entrepreneurship, national systems of innovation and European varieties of capitalism: A conceptual framework. DIME-AEGIS Conference, Athens, 29-30 April 2010.

Explore Workshop on Innovation Studies, Entrepreneurship Studies and STS, CIRCLE, 6-8 December, 2010.

Edquist, C. presented '*Design of Innovation Policy through Diagnostic Analysis: Identification of Systemic Problems (or failures)*' at the Conference "Building National Innovation Systems: Linking theory and public policy for innovation, Montreal, May 8-9, 2009.

Edquist, C. presented '*Public Procurement for Innovation (PPI) – a Pilot Study*', at the Conference "Public Procurement for Innovation – the art of buying the products of the future already now", organized by AstraZeneca, AB Volvo (trucks), and SAAB AB (aerospace), Almedalen, Visby, Sweden, June 29, 2009.

Edquist, C. Presented '*The Swedish Paradox*' at the IVA ('Royal Swedish Academy of Engineering Sciences) Annual RTF Conference Stockholm, October 22, 2009.

Edquist, C. and Jon Mikel Zaballa presented "Outputs of Innovation Systems: A European Perspective" at the Globelics 7th International Conference, Dakar Senegal, 6-8 October 2009.

Edquist, C. participated in a workshop (with two presentations) of the AEGIS FP 7 project (see under 'Academic Assignments', section 4 below), Athens, December 3-4, 2009.

Edquist, C. gave a lecture on Innovation Systems and Innovation policy at the International Training Programme on Innovation Systems organised by VINNOVA (The Swedish Agency for Innovation Systems and financed by SIDA (The Swedish International Development Agency), Stockholm, September 8, 2009.

Edquist, C. lectured on "How to Create a Successful Innovation System at a course on innovations systems organized by Innovasjon Norge and SIVA, Lillehammer Norway, January 27, 2009.

Edquist, C. lectured on innovation processes at the University of Lillehammer, Lillehammer, Norway, January 27, 2009.

Edquist, C. lectured on innovations in the public sector at the University of Lillehammer, Lillehammer, Norway, September 23, 2009.

Edquist, C. gave a presentation on "National and Sectoral Systems of Innovation" at the 'Expert Group Meeting on Innovation Systems in Practice, The Relevance for Industry in Developing Countries', United Nations Industrial Development Organisation (UNIDO), Vienna 24-25 October, 2007.

Edquist, C. Key-note speech entitled *The Role of Universities in Innovations Systems* at UNESCO Forum on Higher Education, Research and Knowledge: Colloquium on Research and Higher Education Policy – Universities as Centres of Research and Knowledge Creation: An Endangered Species?, UNESCO, Paris, December 2006.

Hommen, L. and Edquist, C. (2006) *Comparing NSIs in Asia and Europe: Growth, globalisation, change, and policy*, paper presented at Globelics Conference, Trivandrum, India, October 2006.

Hommen, L. and Edquist, C. (2006) *Comparing NSIs in Asia and Europe: Growth, globalisation, change, and policy*, paper presented at SPRU 40th Anniversary Conference, University of Sussex, Brighton, September 2006.

Edquist, C. Key-note presentation on Activities in Innovation Systems and Firms Strategies, at BASF Plant Science research strategy conference in Helsingborg, Sweden, May 2006.

Edquist, C. Key-note speech on “Innovation Processes in ten Small Countries in Asia and Europe” at the ‘Contact’ Conference with Industry organised by Lund University School of Economics and Management, May 2006.

Edquist, C. *Globalization and Policy Changes for Small Countries* at ‘The Innovations Imperative – Globalization and National Competitiveness’ organized by VINNOVA (Swedish Governmental Agency for Innovation Systems), April, 2006.

Edquist, Charles, made a key-note presentation on ‘Firm Innovation Strategies’ at an *Innovation Executive Seminar* organised by Deloitte Consulting, Stockholm, March 17, 2006.

Edquist, C. Key-note speech on ‘Industrial Policy from a Systems of Innovation Perspective’ at The 2006 EIB Conference on Economics and Finance which was organised on the theme of ‘An Industrial Policy for Europe’, European Investment Bank (EIB), January 19, 2006.

Edquist, Charles talked on ‘The Systemic Nature of Innovation – Causes and Implications’ at the conference ‘Research, Innovation and Economic Performance – What do we Know and Where are We Heading?’ organised by the European Commission, the Centre for Technology, Innovation and Culture of the University of Oslo, and Oxford University Press to mark the launch of the *Oxford Handbook of Innovation*, Brussels October 8, 2004.

Edquist, Charles organised ‘The Fourth Workshop of the Project Comparing the National Systems of Innovation in Ten Small Countries in Europe and Asia’ in Lund on September 15 – 17, 2004.

Edquist, Charles gave a lecture on ‘Innovation Management and Systems’ at Tetra Pak Inc. in Lund on April 28, 2004.

Edquist, Charles gave a seminar entitled “Systems of Innovation – A Critical Review of the State of the Art” at the International Institute for Industrial Environmental Economics at Lund University, Lund, December 15, 2003.

Edquist, Charles gave a lecture on “Innovation Systems, National, Regional and Sectoral” at the European Science, Society and Technology (ESST) masters program at The Centre for Technology, Innovation and Culture, University of Oslo, December 8, 2003.

Edquist, Charles gave a lunch presentation on “Innovation Systems – What Use for the Economy?” at the Lund Foundation for Entrepreneurship, Lund, December 4, 2003.

Edquist, Charles gave a presentation on ‘The State of the Art in Innovation Systems Research’ at the annual board meeting of The Institute of Management of Innovation and Technology (IMIT), Lund, December 1, 2003.

Edquist, Charles was invited to give the key-note speech on “The Research Frontier of Innovation System Research” at ‘The International Innovation and Knowledge Management Conference’ at the Graduate Institute of Technology and Innovation Management (TIM), National Chengchi University, Taipei, Taiwan, November 29, 2003.

Edquist, Charles participated in the First Globelics Conference on ‘Innovations Systems and Development Strategies for the Third Millennium’ in Rio de Janeiro, November 3 – 6, 2003, where he participated in the presentation of a paper by Johnson, Björn, Edquist, Charles and Lundvall, Bengt-Åke entitled ‘Economic Development and the National System of Innovation Approach.

Edquist, Charles participated in a panel discussion on “Innovation Systems and Clusters – the Paths to Sustainable Growth”, At ‘The Quality Fair’ (‘Kvalitetsmässan’), Gothenburg October 8, 2003.

Edquist, Charles gave a presentation on “Activities and Policy in Systems of Innovation” for the personnel of The Swedish Agency for Innovation Systems (VINNOVA), Stockholm, October 7, 2003.

Edquist, Charles gave a presentation entitled “Innovation Systems: The State of the Art” at the inaugural seminar of the regional project “Innovations in the Borderland”, Idéon, Lund, September 23rd, 2003.

Edquist, Charles participated in a press conference on September 22, 2003, where members of ‘Innovation Forum’ presented “LU Innovation”. ‘Innovation Forum’ is a collaboration effort between main actors in the regional innovation system where Lund University is located. It includes heads of Lund University, the regional administration of ‘Region Skåne’, the science park ‘Idéon’, the Technology Bridging Foundation and firms. ‘LU Innovation’ includes activities within research, education and relations between the university and the surrounding society at Lund University.

Edquist, Charles was a keynote speaker and presented a paper entitled “Functions, Components and Relations in Systems of Innovation and Learning” at the conference “Innoiversity – Innovation and Diversity” at the European Academy, Berlin, September 18-20, 2003. The conference was organised by FG Techniksoziologie at Technische Universität Berlin.

Edquist, Charles lectured, as the holder of the Ruben Rausing Chair in Innovation, on 'Innovations and Entrepreneurship' to the current and previous board members of the Ruben Rausing Foundation for Research on Innovation and Entrepreneurship, September 16, 2003.

Edquist, Charles presented a paper on "The role of Policy in Stimulating Product and Process Innovation" at a conference organised by Division of Basic Sciences, Department of Energy (Washington D.C.), in Utrecht, the Netherlands on September 9-12, 2003

Edquist, Charles was a member of the grading committee at the Ph. D. thesis defence by Jan-U. Sandal at the Department of Economic History, Lund University, September 6, 2003. The title of the thesis was (in translation) 'The Hunt for the Entrepreneur. Can Joseph A. Schumpeter's Theory be Used to Identify and Differentiate Entrepreneurs in the 21st Century?'

Edquist presented a paper entitled "Systems of Innovation – A Critical Review of the State of the Art" at a conference organised by the EU-funded TEARI ('Towards a European Area of Research and Innovation') project in Roermond, the Netherlands, June 5-8, 2003.

Edquist, Charles participated in a conference on 'National Innovation Systems, Innovative Performance and Policy Options' organised by the Labour, Organisation and Competence in National Innovation Systems (LocNis) Project', Paris, May 22-23, 2003

Edquist, Charles was an invited speaker and gave the key-note speech entitled "Innovation Systems and Innovation Policies" at the Policy Forum on 'Economic Growth: the Contribution of Competition, Entrepreneurship and Innovation', organised by the Ministry of Economic Development, Wellington, New Zealand, May 15th, 2003.

Edquist, Charles presented the project comparing the national systems of innovation of ten small countries in Europe and Asia at a conference arranged by the Institute for Growth Policy Studies (ITPS), Stockholm, May 8, 2003.

Edquist, Charles was a member of the grading committee at the Ph. D. thesis defence of Christopher Palmberg at the Institute of Industrial Economics at the Royal Institute of Technology, Stockholm, May 4th, 2003. The title of the thesis was 'Turning Opportunities into Innovations'.

Edquist, Charles gave a seminar organised by FSF ('Forum för småföretagsforskning'; 'Swedish Foundation for Small Business Research') entitled 'How does innovation and innovation policy create growth and employment' at the Swedish Ministry of Industries on April 15, 2003

Edquist, Charles gave a seminar at the Stockholm School of Entrepreneurship (SSES) on 'Innovations, Growth and Employment Creation' on April 15, 2003.

Edquist, Charles gave a presentation on 'Innovation Policy for Sweden' at the Royal Swedish Academy of Engineering Sciences on April 15, 2003.

Edquist, Charles participated in a conference on "Improving the effectiveness of direct support measures to stimulate private investment in research" at Directorate K, Research Directorate, European Commission, Brussels on April 11, 2003.

Edquist, Charles gave a presentation on ‘Knowledge and Economic Growth’ at a conference celebrating the 20th anniversary of the science park Idéon in Lund on March 24, 2003.

Edquist, Charles presented a paper entitled ‘Systems of Innovation – An Account of the State of the Art’ (to be published in Fagerberg, Jan (ed.) ‘*Understanding Innovation*’, Oxford University Press, Oxford, forthcoming 2003, 30 pp.), organised by ISEG, Universidade Technica de Lisboa and TIC, University of Oslo, Lisboa, November 13-17, 2002.

Edquist, Charles participated in ‘Globelics – The First Meeting in the Global Network on Learning, Innovation and Competence Building Systems’, Rebuild Conference Centre, Aalborg, Denmark, November 4-5, 2002.

Edquist, Charles was 1st Keynote Speaker and presented a paper entitled ‘*Setting the Scene; Frameworks on Innovation and Learning to Date*’ at the ‘*Learning Cities and Regions Conference*’ organised by the Organisation for Economic Cooperation and Development (OECD), the Victorian State Government, RMIT University and the City of Melbourne, Sheraton Towers, Melbourne, Australia, 14–15, October 2002.

Edquist, Charles participated in a conference on ‘An Innovation Policy for Sweden’ organised by the Swedish Ministries of Industry and Education’ in Kungsängen, Stockholm, March 26-27, 2002.

Edquist, Charles presented a paper entitled ‘Can Research about Innovation Systems Provide Policy Relevant Conclusions?’ at the conference ‘Which new Knowledge do we need about Innovation Systems?’ organised by the Swedish Agency for Innovation Systems (VINNOVA), Uppsala, October 25, 2001.

Edquist, Charles participated in a panel discussion and presented a paper entitled ‘The Systems of Innovation Approach and Innovation Policy’ at ‘The Nelson and Winter Conference’ organised by Danish Research Unit for Industrial Dynamics (DRUID), Aalborg, Denmark, June 12-15, 2001.

Edquist, Charles presented work on the sectoral system of innovation in telecommunications (especially mobile telecom and the Internet), at a conference organised by the EU-funded project ESSY (Sectoral Systems in Europe – Innovation, Competitiveness and Growth) and hosted by the Science Policy Research Unit (SPRU), Brighton, March 22-24, 2001.

Edquist, Charles presented a paper entitled ‘Benchmarking in Innovation Systems’, at a Conference on ‘Socio-economic Research on Benchmarking of RTD Policies’, organised by DG XII, European Commission, Brussels, March 15-16, 2001.

Charles Edquist was the keynote speaker with the presentation ‘Innovation Policy in the Systems of Innovation Approach’ at the conference ‘Sustainable Local Development and the Role of Incubators in Local Systems of Innovation’, organised by the regional government of Pernambuco, Recife, Brasil, November 16 – 17, 2000.

Edquist, Charles was key-note speaker at an International High-Level Seminar on Technological Innovation, co-organised by The Ministry of Science and Technology of China (MOST) and The United Nations University. He presented a paper entitled ‘Innovation Policy in the OECD Systems of Innovation’, Beijing, China, September 5 – 7, 2000.

Edquist Charles was a key-note speaker with a presentation entitled ‘Public Technology Procurement as Policy Instrument for Sustainable Product Development‘ at the International Summer Academy on Technology Studies, organised by the Interuniversitäres Forschungszentrum für Technik, Arbeit und Kultur, Deutschlandsberg, Austria, July 9 – 15, 2000.

Edquist, Charles was the key-note speaker at a conference on ‘Knowledge, Complexity and Innovation Systems’ organised by Austrian Research Centres and Wirtschaftsuniversität, Wien where he gave a presentation entitled ‘Knowledge, Learning and Regional Innovation Systems: A Conceptual Framework’, Vienna, Austria July 1-4, 2000.

Edquist, Charles presented ‘Forms of Learning and Categories of Innovation in a Regional Context’, Key-note speech given at the Conference ‘Regional Innovation Systems’, organised by the network of European Centres in Science and Technology Studies (NECSTS) and the Spanish network of Science-Technology-Economy-Society Research (RICTES), San Sebastian, Spain, 30 September – 2 October, 1999.

7. Research Management, Academic Leadership and Assignments

I have initiated and led several research groups, often with a strong international orientation and involvement. This has involved raising large amounts of external research funding. Some examples are given below.

- At the **Research Policy Institute**, Lund University (until 1987) I initiated and co-ordinated a research programme entitled ‘*Technology and Development*’, which included about 10 researchers. It was focussed upon the role of technology and the role of science and technology policies in developing countries, in the context of their relationships with the developed countries.
- Soon after my appointment to a Chair in the **Department of Technology and Social Change** at Linköping University (1986), I launched an interdisciplinary research programme, which in 1994 was renamed as the ‘*Systems of Innovation Research Programme*’ (SIRP). SIRP was directed towards problems of the socio-economic roles of science, technology and innovation in industrialised countries. The research programme had three specific *purposes*:
 - 1) Through *comparative empirical analyses* the programme aimed to increase knowledge about innovation processes (in the production of goods as well as services), their determinants and their socio-economic consequences. These analyses were often comparative between countries, regions, firms, sectors, etc.
 - 2) It sought to develop *theories* about determinants and consequences of innovation processes.
 - 3) On this empirical and theoretical basis it aimed to develop insights and specific proposals with regard to *public innovation policies* and *firm innovation strategies* for

long-term and sustainable economic growth and increased employment - in goods as well as service production.

The programme work was carried out in the form of theory-based empirical sub-projects in the following fields:

- Innovations, Productivity Growth and Employment,
- Firm Strategies for Innovation,
- Financing of Innovations
- Public Innovation Policy.

Among the determinants of innovation processes, public innovation policies, R&D policies and firms' innovation strategies were emphasised. The research also emphasised the consequences of innovations, primarily with regard to productivity, employment and organization in firms, countries and regions. In this work we tried to integrate economics perspectives – including 'untraditional' ones, such as institutional and evolutionary theories – with approaches from other social science disciplines, e.g. political science, business administration, economic history, sociology and economic geography. All these disciplines were represented in the research group. Over the years, three members of the programme have acquired the competence of 'docent', one has been upgraded to professor, and one has been appointed to a Chair through competition.

- During 1992-95 I initiated and co-ordinated the **Systems of Innovation Research Network**, which involved 25 internationally leading researchers from 15 countries. The objective of the network was to provide a conceptual and theoretical basis for the study of systems of innovation that would be both clear and sophisticated – thereby facilitating theory-based empirical studies of specific innovation systems and policy-oriented work. Three conferences were held, resulting in an edited book on Systems of Innovation, which has been much cited (see Edquist (ed.) 1997 in section 5.1).
- In April 1995 I took the initiative to forming a European research project entitled **Innovation Systems and European Integration (ISE)**. It involved research groups in nine countries and included about 35 researchers. An application was submitted to the Targeted Socio-Economic Research (TSER) Programme of the European Commission (DGXII) in June 1995. Almost 1 million EURO was granted to the project, which formally started in April 1996 and which I was subsequently responsible for co-ordinating. Five workshops were held within ISE and the project was completed in April 1998. The result of the project was published on a CD-ROM, which includes 33 research Reports (Edquist and Texier 1998 – see section 5.1). Later on the project has also resulted in a large number of articles and several books. Among these are 'The ISE Final Report' which summarises the scientific findings and 'The ISE Policy Statement' which draws out the public policy and firm strategy implications of the project as a whole.
- I have participated in several other EU-funded research projects, where I was co-ordinating the activities of SIRP together with Leif Hommen. They were entitled: **Sectoral systems of Innovation in Europe: Innovation, Competitiveness and Growth (ESSY)**, (co-ordinated by Professor Franco Malerba, Milan), and **Assessing the Impact of Technology and Globalization: The Effects on Growth and Employment (AITEG)**, (co-ordinated by Mario Pianta, Rome and Urbino).

- I have also, during 1998-2001, co-ordinated a research project entitled **The East Gothia Regional System of Innovation Study**. It investigated the innovation processes in the region of East Gothia (Östergötland in Sweden) and included a survey sent to all manufacturing firms in Östergötland. The survey was focussed upon collaboration patterns between firms and other organisations in processes of product innovation. The project also included studies of patenting activities, of the financing of innovations, and a bibliometric study of scientific publishing in the region. As well, it investigated diversification processes and the establishment of new firms as processes of structural change in the direction of more high-tech production activities.
- On February 1st 2003, I was the first employee at the **Division of Innovation**, the Department of Design Sciences, Lund Institute of Technology when I took up the Ruben Rausing Chair in Innovation. I designed and started a Ph.D. programme in innovation studies and employed colleagues to help running it. During the spring and summer of that year, two associate professors, 7 PhD students, two post-docs and one secretary were employed. This means that after six months the Division of Innovation was up and running with 13 employees and an operating Ph.D programme. In September 2003 the Division of Innovation also started undergraduate teaching at the programme of Technology Management, which is run jointly by the Lund Institute of Technology and the Lund University School of Economics and Management. In 2005 several additional undergraduate courses in the fields of innovation and entrepreneurship were started to be offered by the Division of Innovation to students at the Lund Institute of Technology.
- During the spring 2003, The Swedish Agency for Innovation Systems (VINNOVA) announced a call for the establishment of centres of excellence in innovation studies. Six professors formed a consortium and submitted a proposal to VINNOVA entitled **The Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE)**. In the international evaluation CIRCLE was ranked first. CIRCLE was established on July 1st, 2004 as a multidisciplinary research centre at Lund University, founded by departments within the Lund Institute of Technology, Faculty of Social Sciences, Lund University School of Economics and Management (all at Lund University) and the Centre for Territorial Development Planning at Blekinge Institute of Technology. I was appointed to be the first Director of CIRCLE. In June 2004 twelve new positions as associate professor, post-doc (forskarassistent) and PhD student were announced. By January 2005 all these positions had been filled.

For more information about CIRCLE please see: <http://www.circle.lu.se>

- In July 2006, CIRCLE was awarded a so-called **Linnaeus Grant** from the Swedish Research Council. The title of the research programme for which the grant was awarded is: *“Innovation, Entrepreneurship and Knowledge Creation: Dynamics in Globalizing Learning Economies”*. The aim of the Linnaeus Grants is to enhance support for internationally competitive research of the highest quality. More than 100 research groups in all fields of research were nominated by all Swedish universities to apply for these grants. International reviewers selected 20 environments to receive ongoing financial support for the next ten years. Four of them were in the social sciences and the humanities. Of these, CIRCLE obtained the only Linnaeus grant for Swedish research in the field of innovation, entrepreneurship and growth. The award amounts to 50 million Swedish Crowns, to be paid out over a period of ten years, and is accompanied by a matching contribution of ten million Swedish Crowns from Lund

University. Six positions as professor, associate professor, assistant professor funded by the Linnaeus grant were announced in January 2007. By September 2007 they had all been filled. I have coordinated the work with the Linnaeus proposal and also the research work.

- On the basis of the Linnaeus grant awarded to CIRCLE by the Swedish Research Council, **six (or more) positions** as researchers in the area of “Innovation, Entrepreneurship and Knowledge Creation” were advertised in mid December 2006. Three (or more) positions are post doctoral research fellows (2+2 years) and three (or more) positions are lecturers. The former are limited term appointments, and the latter are tenured positions. There have been 60 applicants for the positions, and the process of selecting the eventual holders of these is under way in the first half of 2007.
- In 2006, CIRCLE was expanded through the addition of another research unit, **SPIRE** (Strategic and Policy-oriented Innovation Research & Education). SPIRE was initially established in 2003 as the Division of Innovation (DI) at the Lund Institute of Technology (LTH). DI/SPIRE was founded on the basis of a grant from the Ruben Rausing Foundation for Innovation and Entrepreneurship which was used to create the Ruben Rausing Chair in Innovation Studies. As of April 2006, SPIRE was integrated into CIRCLE.
- In October 2010, CIRCLE invited applications for the positions of Full Professor/Associate Professor and Assistant Professor in Innovation Studies. The final outcome was that CIRCLE appointed nine new position holders. Three were full professors, of which two were new recruitments and one was a promotion, three were associate professors of which one was a new recruitment and three were assistant professors of which one was a new recruitment. CIRCLE now has five full time professors, seven part time full professors, five full time associate professors, seven assistant professors and eight PhD students. Section one of this report presents CIRCLE staff with expert keywords and contact data. It also introduces and provides a brief academic history and research interests of new CIRCLE members of staff.
- CIRCLE added eight new projects to its portfolio of external financing in 2011, amounting to approximately 44 million SEK over a three to four-year period. Financers are the Riksbankens Jubileumsfond, the Swedish Research Council (VR), The Rausing Foundation, European Science Foundation (ESF), the Swedish Research Council Formas, the Swedish Energy Agency, Nordic Energy Research and a Swedish-Korean joint project. The projects involve a majority of the CIRCLE staff, i.e. they are highly integrated, and cover most of the priority areas described below in the research section.
- In order to make CIRCLE’s research efforts even more relevant for the wider society, CIRCLE formed a Policy Advisory Board for providing input on strategic issues concerning CIRCLE’s research and third mission agenda. The Board consists of professionals with competence in various fields relevant to innovation and economic development in international, national and regional contexts. The Board members hold leading positions in organizations like the OECD, VINNOVA, regional and national governments, firms and technology transfer organizations. It had two meetings in

2011. More information about the CIRCLE Policy Advisory Board can be found at the website: <http://www.circle.lu.se/about-circle/policy-advisory-board>.

- In September 2011 I chose to step down from the directorship in order to spend more time on research and to perform third task activities in relation to the surrounding society. I will do so in the capacity of the holder of the Ruben Rausing Chair in Innovation Studies at CIRCLE.
- During my period as Director of CIRCLE (July 2004 – Sept 2011), the number of employees increased from zero to about 40. By then CIRCLE had established itself as a leading national and international centre for research on R&D, innovation, knowledge creation, entrepreneurship and economic dynamics. The staff represents 12 nationalities and 15 disciplines.

I have been extensively involved in peer review processes of various research institutes and for various research councils abroad and in Sweden for many years. For example, I was, during 2004, a part of an international team that evaluated the research at the Copernicus Institute for Sustainable Development and Innovation at the University of Utrecht, the Netherlands. I have been a member of committees evaluating applications for research funding in two research-funding bodies in Sweden and in The European Union Framework Programs. I have also served on committees for appointments to professorships and other positions.

Through the various academic leadership positions described above, I have gained extensive experience in supervising and motivating staff at very different professional levels. This experience includes co-ordination of work across research programmes and other units as well as stimulating teamwork, resolving conflicts and developing consensus within departments as well as in relation to other units and organisations within and outside the university.

Some other Leadership tasks and Academic Assignments

By the Swedish government, I was, in September 2011 appointed to be a member of The Research Policy Advisory Committee to the Swedish Government ('Forskningsberedningen') 2011 and 2012.

Advisor to the University of Lillehammer, Lillehammer, Norway in their efforts to develop a PhD programme in Innovation Studies during 2009- 2012. The PhD programme was granted in December 2011.

Coordinator of CIRCLE's participation in the EU FP7 project 'Advancing knowledge-intensive Entrepreneurship & Innovation for Economic Growth and Social Well-being in Europe (AEGIS), coordinated by Franco Malerba (Milan) and Yannis Caloghirou (Athens).

Reviewer/Evaluator for the appointment of a Professorship in Service Innovation at Centre for Innovation in Services (CIS), University of Lillehammer, Norway.

Member of the Scientific Committee for Globelics 2011 - 2012.

Member of the Board of the “Joint Centre of Innovation and Entrepreneurship (JCIE) –

Member of several review panels for various research programmes of the European Commission during 1995-2007.

Member of Appointment Committee (‘Tjänsteförslagsnämnd’), Faculty of Arts and Sciences, Linköping University 1997-99.

Member of the Board of the ‘Technology and Society’ programme of FRN1997-99

Evaluated a research programme on innovation studies at The Institute of Business Studies, University of Aalborg, Denmark 1997-99.

Served as a member of the Board of the research programme for industrial and innovation policy (KUNI) of the Research Council in Norway 2001-2004.

Served on a committee (2002) investigating future teaching and research in the fields outside engineering proper at KTH (Royal Institute of Technology), Stockholm, e.g. fields such as innovation, entrepreneurship, economics, psychology, working life, etc.

Member of the Research Committee of the KK foundation (KK-stiftelsen), Stockholm 2004-2006. (KK stands for Knowledge and Competence.)

Member of the board of the research collaboration between Zhejiang University and Lund University“ during 2011-2012.

Editorial Board: Science and Public Policy, Innovation and Development, African Journal of Science, Technology, Innovation and Development (AJSTID)

Member of the ‘Scientific Forum’ of ‘Forum för Småföretagsforskning’ (FSF; ‘Swedish Foundation for Small Business Research’).

Member of a High Level Advisory Group (HLAG) for a study on “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes” carried out for DG Research, European Commission by Intrasoft International S.A., Luxembourg 2009-2011.

8. Teaching and Thesis Supervision

My employment at the University of Lund (1971 – 1986) involved extensive teaching at an undergraduate level. This also involved initiation, planning and development of courses, examination, evaluation, etc. The forms of teaching included both lectures, seminars and supervision (individually and in groups). Examinations were written tests, oral examinations and written papers (essays and reports). The subject areas included economics, subjects related to socio-economic aspects of research and innovation (including innovation policy and management of innovation), technology and working life issues, Third World issues, dependency and dominance in the global socio-economic system, etc. I have also been a teacher outside the university, e.g. at high schools.

At Linköping University (1986- 2003), I taught in undergraduate, MA and Ph.D. courses. Together with colleagues I initiated, designed and regularly lectured in courses entitled *Technology Management* and *The Comparative Political Economy of Innovation*. These were undergraduate courses where both Swedish and foreign students were welcome. I was also a guest teacher in various other undergraduate courses at various Departments at Linköping University. During 2000, I initiated and contributed to the development of an international MA programme in *Science, Technology and Society*, in which I also thought (Much responsibility for these courses was gradually taken over by others.)

I was also in charge of the innovation economics oriented courses in the department's Ph.D. programme. I designed these courses, taught and organised the examinations. I also served as a supervisor for Ph.D. students. I was the first supervisor for Martin Börjesson who took a Licentiate degree in 1992. I have been the main or primary supervisor for the Ph.D. dissertations written by (their opponents at the thesis defence are also mentioned):

- Mark Elam (Opponent: William Lazonick, INSEAD), 1993.
- Maureen McKelvey (who received the prestigious 'Schumpeter Prize' for her thesis), (Opponent Richard R. Nelson, Columbia University). McKelvey has been appointed a full professor at the Department of Industrial Dynamics, Chalmers University of Technology, 1994.
- Patrik Hedefjäll (Opponent Franco Malerba, Bocconi University), 1997.
- Francois Texier (Opponent: David Mowery, UC Berkeley), 2000.
- Esa Manninen (Opponent: Mario Pianta, Urbino University), 2003.
- Per Högselius (Opponent: Slavo Radosevic, London, 2005)
- Devrim Göktepe (Opponent: David Mowery, Berkeley, 2008)

I was the second supervisor for Marcus Zackrisson who took his PhD in December 2003.

9. Interaction with Policy Makers and the Civil Society, including Consultancy Work

A considerable part of my research is of direct relevance to different socio-economic and political actors. Many publications listed in section 5 have that character and include several evaluations and many consultancy reports. During 1996-98 I was a member of a committee

responsible for reorganising the various units within Linköping University that interact directly with the surrounding society (chaired by Vice-chancellor Anders Flodström).

I have evaluated 'TeknibroStiftelsen in Linköping' - which deals with seed funding of new technology based firms that are both entrepreneurial and innovative. I have also evaluated part of the activities within the 'Third Mission' at Lund University. During 1998-2000 I also worked part-time in Paris for the OECD on a project entitled 'Learning Regions' which addressed education (at various levels), R&D and innovation as means to enhance economic performance (economic growth, employment creation, etc) at a regional level. Prior to this assignment, I had also carried out numerous consultancies, often with international organisations (UNIDO (six times), UNCTAD, ILO, UNDP, UNFSTD, UNESCO, IDRC, OECD (six times), and The European Commission (five times), but also with, for example, the Swedish Ministry of Industries and the Swedish Board for Industrial and Technical Development (NUTEK). All these external activities have directly concerned work related to innovation policy and economics and management of innovation (see list of publications, especially section 5.3.) An example is Edquist 2002 in section 5.1, which is an analysis of objectives, rationales, problems and measures related to Swedish innovation policy. It was written at the request of the Swedish Ministry of Industry and published by The Swedish Agency for Innovation Systems (VINNOVA).

I was also, during 2002 and part of 2003, a member of an expert group entitled 'Improving the effectiveness of direct public support measures to stimulate private investment in research', DG General Research, European Commission, Brussels. This expert group met six times in Brussels and produced a report listed in section 5.1.

During 2004 - 2006, I was an advisor to The Department of Science Policy Studies, National Institute for Science and Technology Policy and Strategy Studies, Hanoi, Vietnam regarding a research programme entitled "The Market Institutions for Technology Transfer to Agricultural Small and Medium Enterprises in Vietnam".

I am a member of the 'Scientific Forum' of 'Forum för Småföretagsforskning' (FSF; 'Swedish Foundation for Small Business Research'. FSF is a network organization for the generation and transfer of knowledge relevant to policy in the field of entrepreneurship and small enterprise development.

Since 2002, I have been a member of Studieförbundet Näringsliv och Samhälle, SNS (The Center for Business and Policy Studies). SNS is an independent network of leading decision makers from the private and public sectors that share a commitment to social and economic development in Sweden. Its aim is to improve the basis for rational decisions on major social and economic issues, by promoting social science research and stimulating public debate.

During 2003 - 2007, I was a member of 'Innovation Forum'. 'Innovation Forum' is a collaboration initiative involving the main actors in the regional innovation system where Lund University is located. It includes the heads of Lund University, the regional administration of 'Region Skåne', the science park 'Idéon', the Innovation Bridge South, and firms.

Since 2003, I have been an 'IMIT fellow', i.e. fellow of The Institute for the Management of Innovation and Technology (IMIT), Stockholm, Sweden. **IMIT is a scientific institute.** Its aim is to pursue and promote research and development in technical and industrial renewal and

administration, as well as participating in training in this sphere. Research is primarily concerned with how the benefits of technical development can be improved by providing knowledge of industrial management and economics. IMIT acts as a creative link between the development of scientific knowledge in institutes and actual industrial renewal work. This is reflected through IMIT's faculty of about 35 senior researchers and over 185 ongoing projects, through IMIT's publication of research results, and through seminars and courses.

During 2003 - 2006, I served on the jury for an innovation prize awarded by the Development Company of Lund University (LUAB) together with Öhrlings PricewaterhouseCoopers. (During 2003 – January 2006, I also served on the jury for another innovation prize: Venture Cup Syd.)

During 2004 – September 2005, I was a member of the Board of the Investment Committee of The Development Company of Lund University (LUAB). It had the role of evaluating proposals to LUAB from new innovative firms that need seed capital funding.

From September 2006 to June 2007 I was a member of a reference group for the project “Innovativa små och medelstora företag – Sveriges framtid” (“Innovative small and medium-sized enterprises – the future of Sweden” VINNOVA (Swedish Governmental Agency for Innovation Systems), Stockholm.

During 2006 – 2007, I participated as an expert in the “OECD Thematic Review of Tertiary Education in Poland”, where my specific responsibility was innovation processes related to tertiary education.

During 2006 - 2007, I was also a participant in an Expert Group to make an Impact Assessment of The Innovative Medicines Initiative (IMI), which is one of the planned Joint Technology Initiatives planned by DG Research of the European Commission.

I am also a frequent lecturer outside the university. Some examples are:

- In April 2004, I was lecturing on ‘University-Industry Relations of Importance for Innovation Processes’ at Astra-Zeneca Inc., Lund
- In September 2004, I talked on ‘Innovation Management and Systems at Tetra Pak Inc., Lund Headquarters,
- In March 2006, I made a key-note presentation on ‘Firm Innovation Strategies’ at an *Innovation Executive Seminar* organised by Deloitte Consulting, Stockholm.

I gave a talk on the Swedish Innovation System and Innovation Policy to the Minister of Education and Research, Lars Leijonborg, during his visit to Lund University, June 25, 2007, and a similar presentation to the Board on Lund University on September 21, 2007.

Edquist, C. participated, during 2009, in a very comprehensive international evaluation of the *Finnish National Innovation System* for the Finnish Ministry of Employment and the Economy and organized by ETLA (The Research Institute of the Finnish Economy) – see www.evaluation.fi. I was responsible for one of six parts that focused upon the development of a holistic innovation policy for Finland.

Edquist, C. wrote, during 2009, a report entitled ‘*Public Procurement for Innovation (PPI) – a Pilot Study*’ for AstraZeneca, AB Volvo (trucks), and SAAB AB (aerospace). In July 2009, the report was presented at a seminar in Almedalen, Visby.

Edquist, C. participated as a panelist at the Conference “Innovation in Mind”, Lund, September 16 – 17, 2009.

Edquist, C. gave a presentation on “The Swedish Paradox” at the Swedish Parliament (Rifo and SPN), Stockholm, September 23, 2009.

Edquist, C. participated in a High Level Advisory Group (HLAG) Meeting for a study on “Analysing and Evaluating the Impact on Innovation of Publicly Funded Research Programmes” carried out for DG Research, European Commission by Intrasoft International S.A., Luxembourg, Brussels, January 22, 2009.

Edquist, C. gave a presentation on “The Swedish National Innovation System” at the International Conference during the Czech Presidency of the Council of the European Union, entitled “Role of Basic Research in the Process of Structuring the European Research Area”, Prague, and April 16–18, 2009.

Edquist, C. gave a presentation on “Innovation Systems and Innovation Policy” at the Swedish Competence Research Centre Day, organized by VINNOVA, Lund, September 15, 2009.

Edquist, C. has, since 2003, been a member of Uppfinnarkollegiet (‘The Inventor’s College’) in Stockholm, which involves close interactions with representatives from industry and other parts of society.

Edquist, C. served, during 2009, as an advisor for Copenhagen Economics in their task of preparing a report entitled ‘*Can Public Procurement Spur Innovations in Health Care*’ for the Swedish Agency for Innovation Systems (VINNOVA).

Edquist, C. gave a presentation about the evaluation of the Finnish National Innovation System (report under section 2.1. above) at the IVA (‘Royal Swedish Academy of Engineering Sciences), Stockholm, and December 15, 2009

Gave a presentation entitled “Public Procurement as Innovation Policy – Lessons learned and future prospects”, Joint OECD CIIE Workshop on *Fostering New Sources of Growth – Is there a role for Industrial Policy in the 21st Century*, Committee on Industry, Innovation and Entrepreneurship, OECD, Paris, 30 March 2011.

Member of the Scientific Forum of “Swedish Entrepreneurship Forum” (former ”Forum för Småföretagsforskning”, FSF).

Advisor to Sweco Eurofutures in a project for Region Skåne on the strategic foundations of ESS and MAX IV. For the same company, I was a consultant in a project evaluation the major environmental research organization MISTRA during 2011-2012. Similarly I was working for Swedo Eurofutures in a project evaluating the Swedish participation in the international research and innovation collaboration EUREKA

Presented a paper entitled “The Swedish Paradox – Unexploited Opportunities!” at a seminar on “Innovation Driven Growth”, organized by Innovationsbron at Almedalen, Visby, July 6 2010.

Participated in a panel discussion organized by Lund University, at Almedalen, Visby, July 6, 2010.

Gave a presentation entitled “Innovationer – Vad mer än FoU krävs?”, at a seminar organized by Svenskt Näringsliv, January 19, 2010.

Presentation on “How to Create an Innovative Society: Innovation Policy and Innovation Research”, The EXPO 2010, World Fair, Shanghai, October 21, 2010.

Presentation on “CIRCLE at Lund University” organized at The Swedish Pavilion, Shanghai World Fair, October 21, 2010.

Gave a presentation in the course “The ABC of Innovation Journalism”, Ideon, Lund, January 18, 2010.

Gave a presentation entitled “Is Sweden a strong Innovation Country?” organized by CONNECT Skåne, Lund, November 26, 2010.

Presentation of Cycle de Conférences de Charles Edquist sur les politiques de l’innovation at CNAM, rue Conte, 75003 PARIS:

- “The History and Design of Innovation Policy”, 6 March, 2012. Discutant: Philippe Laredo, Université Paris-Est/University of Manchester
- “Public Procurement for Innovation as Mission-oriented Innovation Policy, 20 March, 2012. Discutant: Benjamin Coriat, CEPN, Université Paris 13
- “the Knowledge Basis of the Innovation Process”, 3 April, 2012. Discutant: Pascal Petit, CEPN, Université Paris 13.

Participant at a meeting with *Forskningsberedningen* (The Research Policy Advisory committee to the Swedish Government), Rosenbad, Stockholm, November 14, 2011 and gave a Presentation on “The Swedish Paradox”.

Participated at a meeting with *Forskningsberedningen*, Rosenbad, Stockholm, March 30, 2012.

As indicated in section 5.4, I have written some popular scientific articles. I have also lectured extensively on popular scientific topics outside the university. I have also been interviewed in various newspapers and journals, such as the following:

- Interview “Sweden best in innovation – or?” in the popular magazine *METROTEKNIK*, 09-15 February, 2011.
- Was interviewed by the innovation Internet newsletter Rapidus, November 9, 2010.
- Was interviewed to in the daily newspaper Kvällsposten, January 20, 2010.
- Interview entitled “Strong Demand for Knowledge about Innovations” in Lund University Magazine (LUM) Nr 10, 2010.

- Interview entitled “Innovations Producing Growth” in the Magazine INBLICK, June 2010.
- Interview entitled “CIRCLE Attracts Foreign Talent” in the magazine ENTRÉ, 4, 2010.

Appendix 1: Method used for the citation analysis

The citation analysis of 2011 concerns publications of CIRCLE staff until and including 2011, although most publications in 2011 have not been out long enough to be cited. The analysis does not cover work by PhD students or by administrative staff at CIRCLE either. Two sets of data are recorded from a) Social Science Citation Index (SSCI) published by Thomson Reuters as part of their Web of Science products and b) citations at Google scholar. The analysis has been carried out by Lina Ahlin.

Methodology for the citation analysis

The citation analysis has been carried out for CIRCLE since 2005. Over time there have been slight changes in methodology, with little impact on comparability.

The citation analysis shows citations to works published by the authors named. Citations refer to all citations made to the author in question. We search the citation sources Google scholar (<http://scholar.google.com>) and the Social Science Citation Index (<http://www.isiknowledge.com/WOS>) for the author’s name. *Harzing’s Publish or Perish* (<http://www.harzing.com>) is now used to implement the Google scholar analysis. This software not only yields the same citations as using Google scholar online, but also greatly improves the speed of searches. However, it appears that Google Scholar is more capricious than SSCI as the version used may affect the number of citations found.

The analysis is done within a short time frame. Google Scholar has the advantage that it provides links to the cited work, which makes it easy to double-check that it is a correct citation. Generally the last name is used for the searches, but the initial of the first name is also included in cases when the last name generates unmanageably many hits. In the process we check for misspelt names such as Edqvist (referring in general to Edquist), and add such citations. All hits are individually checked against the author’s CV to find the original work that was cited.

Changes in methodology over time

The methodology follows what has been done and described in previous methodological notes for the Annual Report, except that now all publications are counted.¹ Also, before doing the citation analysis in 2007, the button “finish” was pressed for SSCI, but it was later discovered that this reduced the number of citations. For the present version of SSCI, conference proceedings are also included, which may increase the number of citations somewhat.

¹ Before the 2007 version, conference papers and working papers were excluded from the list of works referred to.

The procedure for Google scholar

1. Start at <http://scholar.google.com/>. In *Publish or Perish*: start the software.
2. Click on “Advanced Scholar Search”. In *Publish or Perish*: “Author impact analysis”.
3. Enter the last name and initial of first name under ‘Return articles written by’ (In *Publish or Perish*: ‘Author’s name’). Note that people who cite erroneously could use the wrong spelling, in which case such citations may be added later by additional searches (the “Edqvist C” example, above). Quotation marks are not necessary. Press the ‘Search Scholar’ button. (In *Publish or Perish*: ‘Lookup’)
4. A list of publications by the searched author appears including the number of citations to this work (cited by ###). Check all publications that are not ‘proper’ publications; to reduce the workload we have included all contributions by the authors (i.e. including e.g. working, conference & discussion papers) in the search. This may often require checking against the person’s CV. It is also necessary to make sure that it is the right person that is referred to, as it will most likely be problematic if one searches for “Johansson B”. (In *Publish or Perish*: check the boxes where correct works by the author are referred to.