Industry Canada/ITAC Whiteboard Session on Competitiveness Indicators Background Literature on Indicators of Competitiveness and Innovation

Literature focusing on Competitiveness:

IMD World Competitiveness Yearbook 2007

Link : http://www.imd.ch/research/publications/wcy/announcing.cfm (full report for fee)

The IMD World Competitiveness Yearbook 2007 (WCY) analyses and ranks the ability of nations to create and maintain an environment that sustains the competitiveness of enterprises. The WCY has been published without interruption since 1989 and ranks 55 national economies using 323 criteria. IMD defines competitiveness as "the ability of a country to create added value and thus increase national wealth by managing assets and processes, attractiveness and aggressiveness, globality and proximity, and by integrating these relationships into an economic and social model."

The Global Competitiveness Report 2007-2008, World Economic Forum

Link: <u>http://www.weforum.org/en/initiatives/gcp/index.htm</u> (full report for fee)

The Global Competitiveness report to be published on October 31st 2007 includes *The Global Competitiveness Index* featuring 12 pillars of competitiveness (9 pillars in 2007-2008; Institutions, Infrastructure, Macroeconomy, Health and primary education, Higher education and training, Market efficiency, Technological readiness, Business sophistication and Innovation). It also includes Professor Michael Porter's *Business Competitiveness Index*, which highlights in detail the microeconomic underpinnings of competitiveness, with its special emphasis on a range of company specific factors conducive to improved economic efficiency and productivity, and detailed country profiles and data tables covering more than 100 social and economic indicators. The rankings are drawn from a combination of publicly available hard data and the results of the Executive Opinion Survey, a comprehensive annual survey conducted by the World Economic Forum together with its network of Partner Institutes (leading research institutes and business organizations) in the countries covered by the Report. This year, over 11,000 business leaders were polled in a record 131 economies worldwide.

Competitiveness Index 2006: Where America Stands, Council on Competitiveness

Link: <u>http://www.compete.org/store/products.asp?cat=8</u> (for small fee)

This competitiveness index publication, chaired by Professor Michael E. Porter, explores the changing nature of competitiveness and benchmarks America's performance over time and against international trends. The 2001 edition tracked data ranging from productivity growth, household income, capital investment, national investment in R&D, to the introduction of new firms to the economy. In tracking and interpreting such data, the report showed the link between productivity, innovation and U.S. competitiveness. The 2006 edition benchmarks current U.S. competitiveness against twenty years of domestic and global economic data. The report is a wide-ranging assessment of how the changing global economy presents new challenges for the future. The council on competitiveness also publishes reports on innovation and

European Competitiveness Report 2004, European Commission

Link: http://ec.europa.eu/enterprise/library/lib-competitiveness/series_competitiveness.htm

The Commission's Report on European Competitiveness was first published in 1994. Each year contains a special theme. In the latest edition (2004), for example, the special them focused on the impact of public policies on economic performance. Competitiveness in this Report is understood to mean a sustained rise in the standards of living of a nation and as low a level of involuntary unemployment possible. This report reviews data concerning European countries, the United States and Japan.

Agenda for Canada's prosperity, Institute for Competitiveness & Prosperity

Link: http://www.competeprosper.ca/download.php?file=ICAP_CanadaReport4_140507.pdf

The Institute for Competitiveness & Prosperity publishes an annual report on Canada since 2004. Their latest report summarizes the findings and implications of their research into Canada's competitiveness and set out an agenda for achieving higher prosperity in the country. It mostly compares Canada and the United States and focuses on few indicators, mostly GDP and productivity and its drivers.

The means to compete: Benchmarking IT industry, Economist Intelligence Unit (EIU)

Link: http://www.bsa.org/~/media/12EB624EB30C486FBEA0A4B653DD5E89.ashx

The means to compete: Benchmarking IT industry competitiveness is an Economist Intelligence Unit white paper, sponsored by the Business Software Alliance. The report is divided in two parts. The "IT industry competitiveness index" compares 64 countries in all regions of the world on the extent to which they support the competitiveness of information technology (IT) firms. The index contains 6 sub-categories: overall business environment; IT infrastructure; human capital; legal environment; R&D environment; and support for IT industry development. The second part of the report consists of over 20 in-depth interviews with senior executives of IT firms and independent experts knowledgeable about the drivers of IT competitiveness.

Literature focusing on Innovation:

Annual Report on Innovation, Conference Board of Canada

Link: <u>http://www.conferenceboard.ca/documents.asp?rnext=1687</u> (free)

The Conference Board of Canada publishes an annual report on innovation. Each year, the report focuses on a different aspect of innovation. In 2006, the report focuses on collaborative projects between business and university or government researchers and identifies the practices that underlie successful collaborative projects as well as barriers to be overcome. The Conference Board interviewed 67 researchers, from business, universities and government research organizations, who had led collaborative research projects.

Innovation Benchmarking Report, Conference Board of Canada

Link: http://www.conferenceboard.ca/inn/abstracts/innov_benchmark.htm (free)

The report, *Exploring Canada's Innovation Character: Benchmarking Against Global Best*, prepared for Industry Canada, is a report card on Canada's innovation performance. It assesses Canada's performance against 10 other developed countries on 17 indicators of innovation. The benchmarking identifies elements of Canada's unique innovation character. For example, Canada scores well in the category of university-industry collaboration in R&D (second) and trails only the United States on investment in venture capital.

Council on Competitiveness' Publications on Innovation

Link: <u>http://www.compete.org/pdf/innovation.pdf</u> and http://www.compete.org/store/products.asp?cat=8

The Council's report, *The New Challenge to America's Prosperity: Findings from the Innovation Index* (1999), is an econometric study identifying the key factors driving international innovation output and benchmarking the innovation capabilities of the U.S. and 24 other countries. The 2004 Council on Competitiveness report *Innovate America: Thriving in a World of Challenge and Change* (for small fee) lays out an action agenda for a wide range of stakeholders to improve U.S. innovation capacity. The ground-breaking agenda includes more than 60 detailed recommendations grouped under three major platforms for action: Talent, Investment and Infrastructure.

Global Information Technology Report 2006, World Economic Forum (for fee) Link:

http://www.weforum.org/en/initiatives/gcp/Global%20Information%20Technology%20Report/in dex.htm

First launched in 2001, *The Global Information Technology Report* is a valuable and unique benchmarking tool to determine national ICT strengths and weaknesses, and to evaluate progress. It also highlights the continuing importance of ICT application and development for economic growth. The Report uses the *Networked Readiness Index* (NRI) to measure the degree of preparation of a nation or community to participate in and benefit from ICT developments. The NRI is composed of three component indexes which assess (i) environment for ICT offered by a country or community, (ii) readiness of the community's key stakeholders (individuals, business and governments) and (iii) usage of ICT among these stakeholders. The data used for the NRI are available for free at http://www.insead.edu/v1/gitr/wef/main/analysis/.

National Innovative Capacity Index, Institute for Strategy and Competitiveness (M. Porter) Link: <u>http://www.isc.hbs.edu/Innov_9211.pdf</u>

This paper first reviews a framework for understanding national differences in the intensity of innovation. Then it extends prior studies by drawing on new data and more nuanced measures available from the 2001 *Global Competitiveness Report* (GCR). These data are used to rank

countries in terms of national innovative capacity along four dimensions (proportion of scientists and engineers, innovation policy, cluster innovation environment and linkages). The findings reveal the striking degree to which the national environment matters for success in innovative activity, and they highlight sharp differences in the environment for innovation across both OECD and emerging economies.

Special Report on Innovation, The Economist magazine, October 11th 2007

Link : <u>http://www.economist.com/surveys/displaystory.cfm?story_id=9928154</u> (for subscribers)

This special report reviews the importance of innovation and its changing nature using international experiences at the country and firm level. Innovation, defined as "fresh thinking that creates value", is becoming global and has shifted from a slow and insular process to a more open process. "For ages innovation has been a technology-led affair, with most big breakthroughs coming out of giant and secretive research labs, like Xerox PARC and AT&T's Bell Laboratories. It was an era when big corporations in developed countries accounted for most R&D spending." "Now the centrally planned approach is giving way to the more democratic, even joyously anarchic, new model of innovation. Clever ideas have always been everywhere, of course, but companies were often too closed to pick them up. The move to an open approach to innovation is far more promising. An insight from a bright spark in a research lab in Bangalore or an avid mountain biker in Colorado now has a decent chance of being turned into a product and brought to market."