

CREATING AND NURTURING INNOVATION ECOSYSTEMS FOR HIGH-TECH INDUSTRIES

PRINCIPLES FOR POLICY-MAKERS

Prepared by the ICC Commission on Intellectual Property

Summary and highlights

- Build investor confidence
- Train skilled workers in a climate that promotes knowledge exchange
- Open markets to trade and investment
- Ensure adequate intellectual property systems to incentivise investment in innovation and promote technological collaboration

Creating and nurturing innovation ecosystems for high-tech industries: Principles for policy-makers

There is growing awareness among policymakers that innovation is a key driver of economic growth, and that it can help in the search for solutions to global challenges. The capacity to innovate and to bring innovation successfully to market is likely to be a crucial factor in economic competitiveness over coming years.

A supportive policy environment is necessary to create and nurture innovation ecosystems, and to build the confidence necessary for investments in innovative activity. Below are principles to guide policy-makers in creating policy frameworks that enable innovation, especially in high-technology industries.

1) Build investor confidence

- a) Sustained innovation requires a shared understanding between governments, research institutions and business of the elements necessary to drive investment in innovation. Establishing an open dialogue and soliciting input from stakeholders is key for building this understanding.
- b) It is critical to cultivate stable enabling environments with predictable, transparent and robust legal and regulatory regimes designed to encourage innovation and appreciate investment risk. Risk-taking should be fostered through policies that take into account incentives to invest, the cost of risk capital, the plurality of business models and funding sources, and investor requirements for an adequate return on investment.
- c) An attractive investment and innovation environment also requires a stable macroeconomic framework with good public governance, a fair and unbiased court system, the provision of enforceable property rights, predictable liability rules, a functioning financial system, an adequate higher education system, and adequate infrastructure.
- d) The market's rewards for entrepreneurial risk-taking is to a great extent defined by sector-specific regulation that can either limit or enable the proliferation of innovative technologies. Adequate reviews of out-dated sector-specific regulation and national strategies are two good approaches that can modernize policy frameworks to support innovators and to allow society to benefit from new innovations.

2) Train skilled workers in a climate that promotes knowledge exchange

- a) Innovation cannot flourish without people with the scientific, technological and other professional skills necessary to sustain it. The public and private sectors have a shared responsibility and interest to partner in developing the science base and relevant skills in the work force. Governments need to make long-term commitments to invest in educational infrastructures, through training of specialised skilled workers and support of academic and research institutes necessary to attract investment in innovation. The creation of innovation clusters that take advantage of unique local capabilities should be explored to further encourage knowledge spill-overs.

- b) Governments should fund and support public-private research programmes aimed at basic research and addressing today's most critical challenges, while encouraging business participation through policies that provide investment incentives.
- c) Collaboration is an effective means for bridging knowledge gaps and is key to advancing technology efficiently. Partnerships -- across sectors and firms, and between academic research and business -- should be encouraged to stimulate the necessary knowledge exchange and transfer. To fully realize the value from these alliances, innovators need the ability to share information with their partners. They will only have the confidence to do this in an environment that provides effective protection for confidential information and intellectual property rights. Such a framework is critical for ensuring that the fruits of research are disseminated by being applied, commercialized, adapted to local circumstances, scaled, and advanced.

3) Open markets to trade and investment

- a) Innovation is a global endeavour, transcending borders. Securing channels for the ideas and technology that will grow a local economy and address its most critical challenges requires open markets and fair competition. Market intervention should take into account dynamic efficiencies and favour this over static benefits; otherwise there is a risk that the most successful risk takers or innovators will be restricted. National trade and competition laws must not discriminate between domestic and foreign companies, nor must they 'pick winners'. Privileges or extraordinary rights should not be created to protect national incumbents or local actors. Similarly, national legislation and government procurement policies should not discriminate between products manufactured locally and those imported from elsewhere in the world.
- b) National systems aimed at attracting inward investment should conform to agreed international norms and take into account global competition to attract investment capital. Localization should not be compelled; incentives that will attract global business to invest and operate within the domestic market should be preferred instead. The ability to pursue the best commercial choices will lower the cost of advancing and deploying technology solutions, making it easier to invest and accelerate the dissemination of knowledge locally.

4) Ensure adequate intellectual property systems to incentivise investment in innovation and promote technological collaboration

- a) Effective and predictable intellectual property systems provide an important incentive for investing in innovation and enable innovative ideas to be commercialized and scaled. A stable intellectual property rights system provides the certainty necessary to build confidence for investments in the creation of fundamental technologies. Intellectual property rights also support technological partnerships by providing the legal framework necessary for collaborative innovation and the exchange of technology and knowledge.

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References to relevant ICC publications:

- ICC Green Economy Roadmap
www.iccwbo.org/Products-and-Services/Trade-facilitation/Green-Economy-Roadmap/
- ICC Innovation and Intellectual Property Research Series
www.iccwbo.org/Innovation-and-intellectual-property
- ICC Guidelines for International Investment 2012
www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2012/2012-ICC-Guidelines-for-International-Investment/
- Localization Barriers To Trade
www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2014/ICC-POLICY-STATEMENT-Localization-Barriers-to-Trade/

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www.iccwbo.org

INTERNATIONAL CHAMBER OF COMMERCE

33-43 avenue du Président Wilson, 75116 Paris, France

T +33 (0)1 49 53 28 28 F +33 (0)1 49 53 28 59

E icc@iccwbo.org www.iccwbo.org