Intellectual Property, Regulation and Competition

Standards, Tech-Licensing and Global Value Chains in The Hi-Tech Industries- A presentation by CIIPC co-director

CIIPC

13 June 2019

Yogesh Pai, Associate Professor of Law and Co-Director, CIIPC at NLU Delhi in a session on **'Developing the Linkages between Technology Policy and Other Policies: Thinking in Technology**' spoke on 'Intellectual Property, Regulation and Competition: Standards, Tech-Licensing and Global Value Chains in The Hi-Tech Industries' at the **High Level Policy Dialogue on Technology and Innovation Policy in the Age of Global Value Chain on 11th June, 2019**. The dialogue was organized by the International **Institute for Trade and Development in Bangkok from 10th-12th June, 2019.**

The dialogue focused on harnessing specific technology policies to address the emerging challenges of technology driven competition with a target audience of senior government policy makers, economists and researchers in varied allied fields spanning international trade, trade negotiation focusing on technology transfer, digital trade, high tech industry related trade, competition policies and regional trade agreements.

The first part of Mr. Pai's address focused on the fourth industrial revolution (dubbed 4IR in industry parlance) which signifies a confluence of physical, digital, and biological spheres. He noted that 5G technologies, Internet of Things (IoT), Industrial Internet of Things, robotics, artificial intelligence (AI), and additive manufacturing through 3D technologies will be the key forces defining and driving home the revolution. Citing the World Trade Report, 2018, he highlighted the increasingly significant role of intellectual property in the form of heightened global trading of IP rights because of widespread licensing in certain technological spheres. He also stressed upon the fact that the current IP regime provides the requisite flexibilities to accommodate the different considerations emanating from the fourth industrial revolution.

The next part of the presentation dealt with IP and Global Value Chains (GVCs). Citing the WIPO Report on IP and GVCs (2017), he noted that GVCs are shaped by intangible assets in a minimum of two ways; by IP licensing for knowledge transfer and by determination of success in the marketplace through IP technology, design, and branding. Some facts relating to value capture through intangibles, size of the market, income from intangibles, the share of intangibles, and the GVC locations in the smartphone industry were also shared before moving on to the next part of the discussion.

Next was a comparison of India and China in the global value chain with focus on two sectors, smartphones and solar power. In the smartphone sector, the success of India's Phased Manufacturing Programme (PMP) in luring firms to 'Make-in-India' through progressive tariff hikes was highlighted and it was also noted that with 11 percent share in global mobile phone production, India's is the second largest mobile phone producer. It was also pointed that despite being next-in-order in mobile phone

production; India lags behind in value capture with Vietnam, Brazil, and China racing far ahead in value-addition. With Japan launching a dispute on import tariffs in May 2019, the PMP scheme may be under challenge. In the solar sector, China's position as the top supplier in all upstream and midstream PV market segments was noted, observing that the position has been majorly acquired through acquisition and scaling up. Note was also taken of India's Jawaharlal Nehru National Solar Mission which aims to achieve the capacity of 20000 MW in grid connected solar power. It was also pointed that India after losing the dispute on Domestic Content Requirement (DCR) at WTO has now brought its DCR regulations in compliance, consequent to threats of retaliation. This casts a shadow on India's future GVCs strategy in the solar cells/modules arena.

Moving on to the dynamics of IP licensing, he discussed Pervasive Technologies, IP licensing in industries requiring active know-how, and loss of labour as a comparative advantage in the context of rise of distributed manufacturing. He pointed out how fixing liability for infringement on 3D tech manufacturers since the 3D printing scenario may be problematic under IP laws in absence of actual knowledge of infringement since these machines may also carry-out non-infringing uses. With the remark that because of rampant infringement, licensing mechanisms would have to evolve, the discussion veered towards the challenges faced by the patent system.

Mr. Pai noted that the debate on challenges of the patent system centers on patent quality, patent quantity, and excessive litigation. However, he expressed reservations on the validity of such debates in light of observations marking patent quality debate as a *category mistake,* the self-correcting tendencies of the markets and lack of systemic evidence on anti-commons, the sequential fallacies disputing the patent holdup/royalty stacking theories and also the lack of empirical evidence backing these theories, and finally the different effects different NPAs and PAEs can exert on the markets and the criticism of arriving at the cost of NPE litigation.

Next in the line of discussion were the role and limits of IP, Regulation, and Competition where the dialogue canvassed four key points. One, whether IP was private ordering or public ordering mechanism considering that the knowledge protected by IP is a public good, being non-rivalrous and non-excludable. Two, role and limits of competition law and policy when IP is a legal monopoly but not an economic monopoly and IP licensing is usually pro-competitive. Three, certainty and predictability in both ex-ante and ex-post regulation and four, compliance with international IP regimes.

Taking up two case studies covering licensing of Standard Essential Patents (SEPs) and licensing in Agri-Biotech in India, the discussion in Case Study 1 then focused on the amorphous nature that FRAND commitments usually take, the inherently contentious and litigative nature of SEP licensing, the sudden eruption of FRAND litigation in India, and the pending investigations in Competition Commission of India for abuse of dominant position. Case study 2 covered the nature of BT technology and its use in cotton hybrids, the investigations and litigation surrounding Monsanto and MMBL in India, and price control on patented inputs.

Concluding the discussion, Mr. Pai made certain tentative recommendations calling for conceptual distinctions to be made between the legal instrumentalities to be used by policy makers, namely, private ordering covering contractual restrictions and limitations in restrictive IP covenants, Quasi-Private ordering covering Patent remedies, Quasi- Public ordering covering Competition Law where limitations in the context of IP assume importance, and public ordering covering regulatory mechanisms in the form of price controls and compulsory licences where certainty and predictability are very important. He concluded by stating that a one-size-fits-all approach may be disingenuous for countries at different stages in the context of GVCs.

The presentation can be found**here.**

Image courtesy: https://ec.europa.eu/europeaid/node/1032_nl

Cite as (OSCOLA, 5th ed.): CIIPC, 'Intellectual Property, Regulation and Competition: Standards, Tech-Licensing and Global Value Chains in The Hi-Tech Industries- A presentation by CIIPC co-director' (*The Innovation Brief*, 13 June 2019) <https://innovationbrief.nludelhi.ac.in/essays/intellectual-property-regulation-and-competition> accessed 18 November 2026.

The opinions expressed in the Blog are personal to the author/writer. The University does not subscribe to the views expressed in the article / blog and does not take any responsibility for the same.

Published by the Centre for Innovation, Intellectual Property and Competition, National Law University Delhi. Read online at https://innovationbrief.nludelhi.ac.in/essays/intellectual-property-regulation-and-competition.