# Technology Standards in China: the Structured Uncertainty of a Brave New World?

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### Main Findings

### President Truman we have a problem: our new science advisers have six hands

- Different and competing views on Market and State
- Different (confused and competing) perspective's on the value of IP and how it should be utilized
- State rules but has no role? Or does it still rule but without rules? Or has the main role without ruling? And yes the laws...

# Institutions of Standardization: SAC and CNIS

- Standardization Administration of China
  - Governmental body under State Council
  - Initiates, approves, and internationally submits and represents Chinese standards
- China National Institute for Standardization
  - Quasi-governmental body
  - Conducts research and policy advisement
  - Increasingly involved in education for standardization

# Institutions of Standardization: MIIT and Industrial Ministries

- Ministries are responsible for Industry Standards
- Specific divisions for standards work
- Create specific organizations to promote and carry out standards work (CESI, CCSA)
- Must work with SAC to push industry standards as national or international standards

### Act I: a place for the "Market"?

- US Position: Market forces work best
- Chinese (similarly to the EU) Position: Markets are fine but the state provides strategic vision and order to ensure progress
  - The state must lead to prevent chaos and enable "fair" competition
  - State leadership can create the space and time necessary for Chinese technologies to mature and compete

# Embedded IP: The leprechaun's gold or the rainbow?

- China's Intellectual Property challenge:
  - Embedded IP is problematic IP
  - Seek continued access to foreign technology
  - Set own technologies at a cheap price

 Coordinated action to establish new norms through the development process of Chinese standards

### The Fog of War...

Assumption: China will converge to US practices and strategies concerning IP

- Fact: China's IP situation is rapidly changing
  - Enterprises generating protected IP
  - Increase in both junk and legitimate patents
  - Increase in IP litigation
  - Government efforts to encourage IP monetization

### Reality: China's IP Approach

#### • The Assumption:

 For a producers/manufacturers-based economy sustainable profits come from sales of tangible goods and services

#### • The Problem:

 Licensing IP is expensive, and with time getting more expansive relative to other factor costs

#### • The Solution:

- Lower the price of IP:
  - Change norms by setting different "rules of the game"
  - Develop own IPR
  - Set new standards with indigenous embedded IP

# Tools for the Job I: Standards and Licensing Fees

Step i) Create indigenous technology standards with low price for technology

Step ii) Foreign standards alliances lower licensing costs for Chinese manufacturers

Step iii) Chinese firms abandon Chinese standard and produce foreign standard-compliant goods

– Examples: Chinese DVDs, AVS, TD-SCDMA?

# Tools for the Job II: Set Domestic Rates Low

Form industry alliance to promote an indigenous standard

- Encourage "promoting" and "core" members to contribute IP at nominal (free) licensing rates
  - Encourage broad adoption
  - Encourage greater technology cooperation
  - Pressure foreign standard to follow suit
- Examples: AVS, IGRS, iTopHome, CESI plans

# The "Masses" are Rising: New Approaches to IP are Bottom-Up

- While still ultimate director, state power is now greatly constrained
- Multiple Experimentation from below:
  - Alliances set their own IP policies
  - Pursue cheap licensing in the "interests" of their members
  - Cheap technology will bring larger revenues

# The Myth of the Chinese State: The POWER facade

- Highly fragmented and subject to bureaucratic competition and in-fighting
- Increasingly powerful and vocal industry
- Growing technical complexity = Government representatives increasingly sidelined
- Formal reforms and imposition of protections have repeatedly backfired

### Summary

- As in other domains, structured uncertainty shapes standardization in China
- China and the US hold very different views on the proper roles for the Market and State
- China's IP policies are in flux but actors appear to broadly agree it should be cheap
- The state rules and guides, but not overtly
- China will continue standards development and new approaches to inexpensive IP