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# Innovation Oriented Public Procurement (IOPP) of School Computers

- a comparative case study in the contexts of the UK and China

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Manchester Institute of Innovation Research (MIOIR) UNDERPINN Conference, March 22<sup>nd</sup> 2012, MBS

# **OUTLINE**

- IOPP in China an overview
- Positioning the study
- Case information
- Comparative analysis
- Implications

#### Innovation Oriented Public Procurement (IOPP) definition:

Any public procurement activities that aim at stimulating the creation, improvement, adaption and diffusion of innovative solutions (technological or organisational)

#### **OECD** actions

US 'SBIR' program; EU 'Lead Market Initiative (LMI)'; Australian 'Climate Ready' program; Japan promoting international standardization

#### China policy initiative

The National Medium- and Long-term Program for Science and Technology Development (2006-2020), MLP (2006-2020)

- Settled 'indigenous innovation' as a fundamental national strategy
- Explicitly highlighted systemic usage of public procurement and standardization together with supply-side measures

#### Before 2006

- 'Catching up' was a theme while 'indigenous innovation' was not yet explicit
- STI policy instruments were mainly supply-based
- Emerging literature in academia debating the potential of IOPP

#### 2006 - July 2011

- Announcement of MLP (2006-2020); implementation measures were enacted
- A regulatory system supporting IOPP practices was formed, featuring 'product/technology catalogues' as a means of communicating between demand and supply
- Implementing actions by regions
- International concerns and criticisms, mainly from USCBC (US-China Business Council) and EUCCC (EU Chamber of Commerce in China)

#### July 2011 - present

- The Chinese ministries eventually withdrew four of the fundamental policy measures in July 2011
- From explicit to implicit, from routinized to occasional

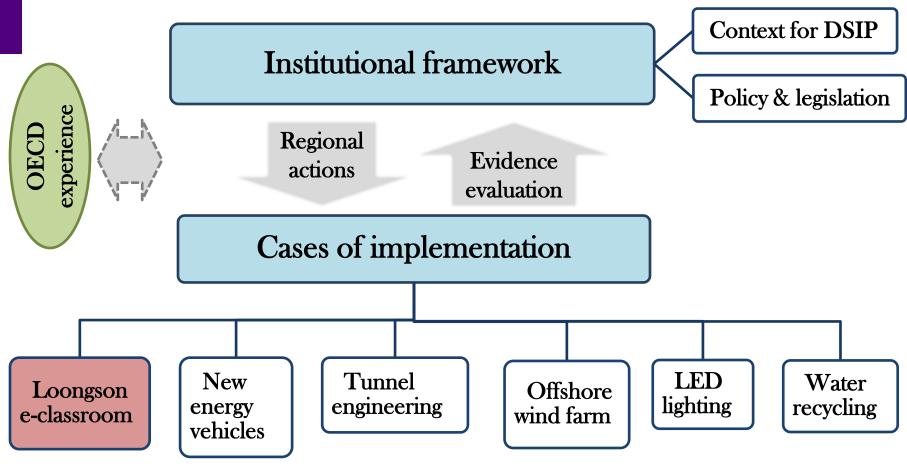
#### Existing problems & challenges

- Fragmented legal system and institutional setup for government/public procurement
- Conflicts with international interests and obligation to join WTO-GPA
- Doubtful competition environment and regional/national protectionism

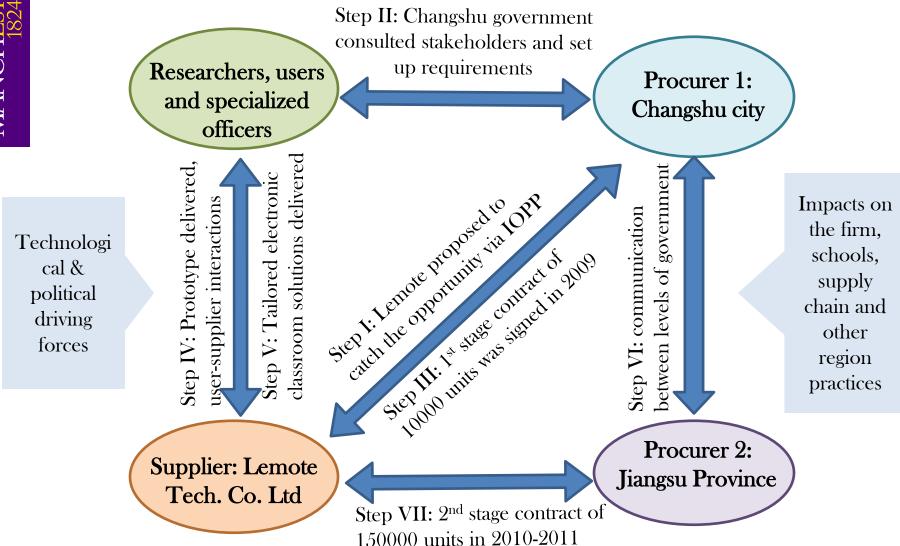
#### **Achievements**

- Raised the awareness of IOPP among various stakeholders
- Facilitated commercialization of some strategic and social need technologies, and a number of IOPP cases emerged

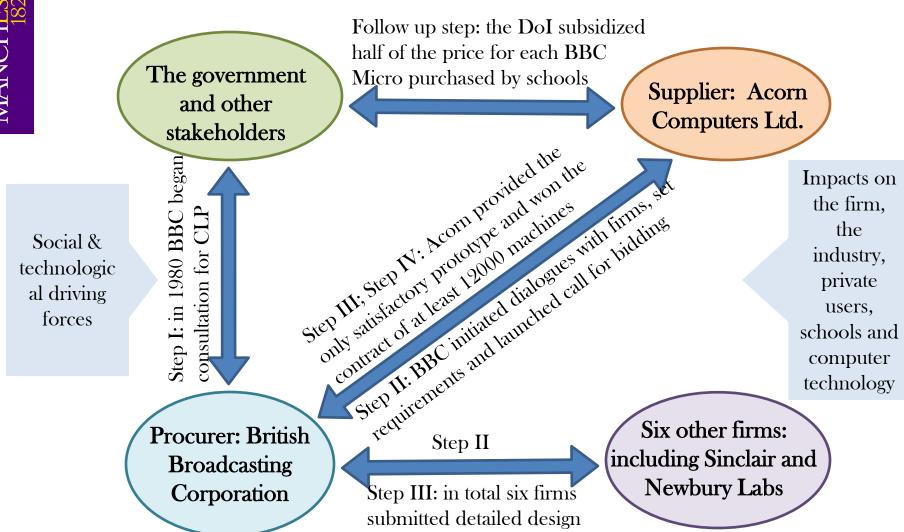
# An Institutional Assessment of IOPP as a Demandside Innovation Policy (DSIP) in China



#### Case 1: Loongson based e-classroom solution



### Case 2: BBC Microcomputer in Computer Literacy Program (CLP)



# Table of comparison - part I

		Loongson case	BBC Micro case
Background and driving forces	Contextual	China, developing country, local articulation	UK, developed country, market mechanism
	Historical	2009-2011, globalization, indigenous innovation	1980s, 1982 named by DoI 'Year of IT'
	Technological	Mature PC technology, needed tailored solutions	Early stage of IT, needed better machines
	Sectoral	Education	Education & private
Implementa			
Implementa	Initiating body	the supplier	the procurer
Implementation actors	Initiating body Procurer	the supplier local and provincial governments	the procurer  BBC
		local and provincial	

# Table of comparison - part II

		Loengson case		BBC Micro case
Procurem ent process	Procedure	'First procurement' under provincial regulations in conjunction with catalogues		Competitive dialogue
	Competition issues	No competition		Initially approached Sinclair and Newbury, then competition
	Stakeholder interaction	Supplier – procurer, supplier, government		Procurer - supplier, government - others
Outcomes & Impacts	Improved s     Loongson j	es for other localities	<ul><li>Signification</li><li>Population</li><li>At least</li></ul>	performing machine cantly accelerated PC arization in the UK; at 70% of UK school aters were BBC Micro

# Table of comparison - part III

	Loongson case	BBC Micro case
Difficulties encountered	<ul> <li>Stakeholders who were unwilling to bear the risk</li> <li>Needed further transformation towards 'e-education'</li> </ul>	• Demand dramatically exceeded supply
Other features	<ul> <li>Strong catching up feature</li> <li>Governmental intervention was the leading factor</li> <li>Brave and interactive stakeholders (e.g. the proactive firm, cooperative users and officials who were willing to bear the risk) played crucial roles in the process</li> </ul>	Although there were mature PC companies providing cheaper machines, and Newbury was favored by government, BBC maintained its principle to buy advanced technologies

#### Coping with the changing social need:

While the process that Loongson case followed might be easily considered as a form of protectionism, the process followed by BBC Micro might not be easily transferrable as the challenges we face nowadays are different. Today the demand is not that demanding, but more problems need to be addressed with IOPP.

#### Making use of sectoral advantages:

Routine mechanism (for communicating and collaborating) can be established in favour of innovation in suitable sectors such as education and healthcare to enhance the effectiveness and efficiency of IOPP.

#### Further communicating and engaging various stakeholders:

Although IOPP is a demand-side tool by nature and normally initiated by procurers and users, it can be initiated from the supplier side. Other stakeholders might be the initiator as well, e.g. researchers/experts who know both the potential of technology and the demand.

# Thank you