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The (future) role of China in ICT standardisation – A European perspective[☆]



Kai Jakobs*

RWTH Aachen University, Computer Science Department (Informatik 4), Ahornstr. 55, D-52074 Aachen, Germany

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ABSTRACT

The paper argues that the Chinese standardisation system should not be perceived as a threat to international ICT standardisation and that the rather more relaxed attitude adopted by the EU is an adequate way forward. It claims that a co-operation based approach to the increasingly powerful relative newcomer is much more appropriate than one based on competition. These arguments are based on a discussion of the European and Chinese standardisation systems and on a subsequent SWOT analysis.

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1. Introduction and motivation

China started life as an economic power to be reckoned with as a manufacturer of products that were based on foreign designs. That is, until not so long ago the country was a classic commodity provider; competitiveness was based on scale and flexibility of manufacturing and on price which, in turn, required the availability of an inexpensive workforce. In this role, standards were primarily something to be implemented to improve economies of scale and to meet customers' needs. This, however, implied that considerable royalties had to be paid, up to a level that frequently reduced margins to almost zero.

Chinese policy makers now have realised that standards are crucial for market success. They have learned (most notably from Germany) that standards may be used in support of an industrial export policy. From the EU they could learn how to use standards to support a single market, and US standardisation showed them how companies can use standards to drive the development and direction of an industry sector (Cargill, 2012).

By now, China is on route to transforming itself into a high-tech economy. Accordingly, the role of, and the importance assigned to, technical standards have changed. For one, the development of 'indigenous' standards (like TD-SCDMA and AVS¹) has become a priority.² They are supposed to reduce dependence on Western technologies, to open up new markets (especially in developing countries), to increase national security and to show that China is well capable of indigenous innovations in high-tech areas. They also serve as a tool to reduce royalty payments through cross-licensing (see e.g. Kshetri, Palvia, & Dai, 2011; Kwak, Lee, & Chung, 2012).

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*Tel.: +49 241 8021405.

E-mail address: kai.jakobs@cs.rwth-aachen.de

¹ Time Division Synchronous Code Division Multiple Access and Audio Video Standard.

² A popular Chinese saying states that third tier companies make products; second tier companies make technology; first tier companies make standards.

Europe has been through this transformation process quite a while ago. By now she has a well developed regional standardisation system with close links to the major international bodies. Nonetheless, the system exhibits a number of flaws, especially in ICT (Information and Communication Technologies) standardisation. Recent initiatives and regulations in this field have been designed to overcome some of the most pressing issues, which most notably include the incorporation of consortium standards into the European Standardisation System (ESS) and the possibility to reference such standards in public procurement (as described in EU (2012)). While some of the proposed remedies are debatable (see also e.g. Jakobs & Blind (2011)), the measures, once implemented, should indeed improve efficiency and effectiveness of the ESS (despite some remaining open issues; see the discussion in Section 4).

Thus far, the EU has considered standards to be primarily tools to support a single European market.³ Yet, standardisation also has 'external' ramifications. While the US and the EU continue to be the powerhouses in international standardisation, China has started to challenge this situation specifically in the ICT sector. The country is well aware of the economic importance of international standards, and given the almost mind-boggling size of its internal market, China is well positioned to successfully push national standards into the international arena. One might, therefore, assume that the two incumbents consider the newcomer as a threat that needs to be fought-off.

Against this background, the paper aims to answer the question whether or not the EU should consider China as a future threat to her position in ICT standardisation. In doing so it argues that a co-operative approach will be the most beneficial way forward.

To this end, Section 2 will offer a brief literature recap. This will be followed, in Section 3, by an overview of the two standardisation systems with a focus on a number of important characteristics. A comparison of the two systems and a SWOT analysis will be provided in Sections 4 and 5, respectively. Finally, Section 6 will offer some final remarks.

2. China in ICT standardisation – a literature recap

Global ICT standardisation has long been dominated by the EU and the US. More recently, a third 'competitor' is frequently said to have entered the scene – China (see e.g. Bach, Newman, & Weber, 2005). Indeed, the country is a relative newcomer to international standardisation. Their national standardisation law dates back to 1988 and their national standards body was founded only in 2001.

Asian, and especially Chinese industry, used to be best known as comparably inexpensive manufacturers of goods on behalf of Western companies. This situation is changing, though. Seo (2012) argues that while in the foreseeable future no individual Asian country will have the power to lead international ICT standardisation (the way the EU and the US are leading today), an alliance of these countries (especially China, Japan and South Korea) might well assume a leading role. To this end, she argues, it will be necessary for these countries to avoid – and learn from – the mistakes made by the EU and the US. Of these countries, China represents the largest market by a mile. Moreover, Japan's strong focus on its home market generated profits for domestic firms but also limited the ability of these firms to participate in international standardisation activities (Murphree, Shim, & Love, 2013). And according to Lee & Huh (2012, p. 10), '... without such a rise as China has achieved in the global economy and international politics, Korea's attempts in international standardisation will be limited in impact'. At least for the time being, this leaves China as the one major international player from Asia.

Ernst (2011b, pp. 102–103) states that in the standardisation arena China's 'speed of learning and institutional adjustments has been impressive'. He finds that China follows a 'two-track' approach to standardisation. On the one hand, he finds that the country works within the international system to create patentable technology that is potentially essential for future global standards. On the other hand, using its geopolitical power China aims to 'transform the international standards system itself'.

It is thus little surprise that several authors focus on the 'threat' that China allegedly poses. For example, Breznitz and Murphree (2013, p. 34) observe a 'low royalties' approach adopted for many Chinese standards. This, they claim, is done in support of the national manufacturing capacity. This approach, however, '... may threaten the business model of companies that rely on the intrinsic value of their IP as a means of earning returns'. In fact, the 'threat' motive in conjunction with IPR appears frequently in this report – reflecting views held by the US industry and the US administration. And along similar lines, (Breznitz & Murphree, 2012, p. 20) note that 'Huawei used the threat of TD-SCDMA to negotiate lower royalty payments for domestic and international CDMA products with Qualcomm technologies'. Suttmeier, Yao and Tan (2006, p. 38) state that Chinese policy makers '...see their mission as one of protecting Chinese national interests in the face of powerful global forces ...'. Yet, they also observe that Chinese companies active in global markets have adopted a more pragmatic approach to standards, which is more in line with their business interests. According to Ernst (2011b, p.3), the US view China's standardisation strategy as 'a critical weapon of China's neo-mercantilist policies to keep American companies at bay'.

A report commissioned by the US Chamber of Commerce (McGregor, 2010) claims that the Chinese policies described in the 'National Medium- and Long-Term Plan for the Development of Science and Technology 2006–2020' (MLP, p. 5) aim to replace foreign technology in core infrastructures, including telecommunication systems and that 'Chinese industrial and technology standards serve as market barriers to foreign technology'. The same report labels China's approach, as laid down in the MLP, as 'techno-nationalism'. This view, however, is debated controversially by scholars. Seo (2012) supports the notion

³ See e.g. <http://ec.europa.eu/enterprise/policies/european-standards/standardisation-policy/>.

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