

# Chapter 1

## Facilitating E-Commerce Adoption: An Electronic Customs System

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### ABSTRACT

*International trade conducted electronically is seen as a major driver of globalisation. We argue that the development of international electronic trade might grow faster if adequate governmental regulations support it. Based on a literature review and EU/OECD reports, we demonstrate how legislation is important for the success of international e-commerce. In particular, we focus on EU e-customs regulations and related IT systems. We show how e-customs systems might be used as a tool for e-commerce adoption facilitation. As an example we consider Switzerland as a non-EU country having to adapt its regulations to be EU compliant and therefore facilitate international trade for local companies. We analyse the situation of small and medium-sized enterprises (SMEs) in Switzerland, and study eight factors that can change after e-customs implementation and possible advantages yielded by such implementations. Finally, we propose factors related to e-customs implementation: increased control of the customs office, less entry errors, electronic notice of VAT assessment, data and communication standardisation, declaration possible 24 hours a day and more transparent export process; as well as three EU customs regulations: Integrated Tariff of the European Communities, Modernised Customs Code, and Community Customs Code that can enhance e-commerce adoption.*

### INTRODUCTION

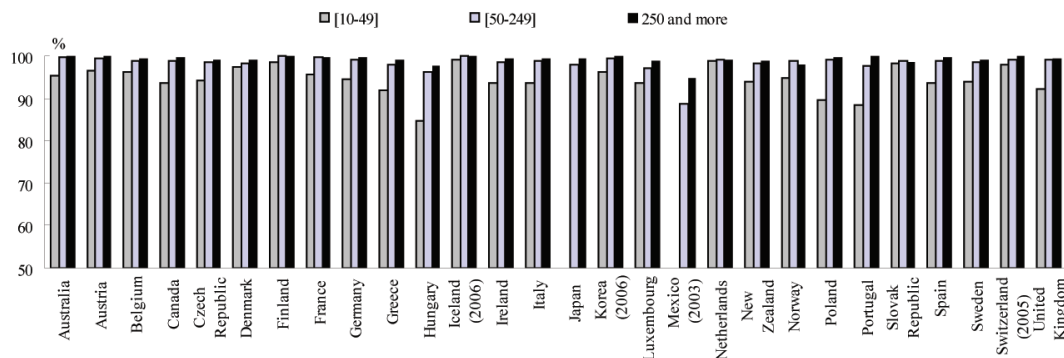
In the last eight years, i.e., from 2000 to 2008, Internet usage grew tremendously worldwide. According to data provided by Internet World Stats

(2008), 384 Mio Europeans use the Internet. Internet population penetration among the 27 member states has already reached 48%. In actual fact, during the mentioned time period, European Internet usage grew by an astonishing 266%.

Internet diffusion changed the way of doing business in general and commerce in particular. The

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Figure 1. Internet penetration by firm size class, 2006 (Adapted from OECD, 2007a)



quick growth of e-commerce has already been noted by many authors towards the end of the 1990s (Cheung, 1998; Froehlich, Hoover, Liew, & Sorenson, 1999; Leebaert, 1998; Maes, Guttman, & Moukas, 1999). According to OECD statistics (OECD, 2007a), Internet penetration in different businesses all over the world reached almost 100% as early as 2006. In the same year, selling and purchasing through the Internet became a reality for many industry groups in several countries. For example in Germany, the wholesale and retail industry reached 18.2% for selling and 48.3% for purchasing, respectively (OECD, 2007b). Not only big enterprises but also small and medium-sized enterprises use Internet for their business (see Figure 1). We refer to small and medium-sized enterprises (SMEs) according to the definition given by the European Commission in Article 2 of the Annex of Recommendation 2003/361/EC (European Commission, 2003, p. 4): *'The category of micro, small and medium-sized enterprises is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding € 50 million, and/or an annual balance sheet total not exceeding € 43 million'*.

SMEs represent a large share of the business sector economy and generate most of business turnover. According to an OECD study that took place in 2002, SMEs represent between 96% and

99% of the total number of enterprises in most economies (OECD, 2002). Despite this high percentage, which highlights the importance of SMEs in the world market, SMEs are under-represented in world trade (OECD, 2005). However, SMEs show willingness to go international and already have a differentiated approach to internationalisation. Indeed, SMEs try to optimise their international competitiveness by exporting new business opportunities in the value chain, encouraging trade, cross-border clustering and collaboration, alliances or subsidiaries, branches, and joint ventures abroad. Participating in international markets can offer a range of opportunities to firms, for example new niche markets or possibilities to lower costs and access finance. A study of the European Commission (2004) identified seven motivators for the internationalisation of SMEs: (1) Access to know-how and technology; (2) High production costs on the domestic market; (3) Access to new and larger markets for products/services; (4) Strict laws and regulations on the domestic market; (5) Additional production capacity; (6) Access to capital; (7) Access to labour. However, SMEs face many barriers to their internationalisation: the high costs of the internationalisation process, e.g., adaptation of products to foreign markets, travel expenses, or business and financial risks; existing law and regulations; product standards; intellec-

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