Executive Summary

The focus of this paper is on the integration of payment systems into B2C Internet-commerce. Our understanding of the payment integration problem starts from the observation that not all payment instruments are online yet. If they are online they are often not integrated into the online shopping process from the consumer's point of view and they do not easily produce the data the merchants would like to feed into their legacy back-office systems. If this is the case, it is only true for some payment instruments, it is only true for simple cases, and it is only true in the national framework. There are hardly any payment systems that are truly integrated in online shopping of digital goods and services in the market. Solving or tackling these problems would help to increase the efficiency of electronic payment systems.

The paper starts by modelling the whole transaction process; and then addresses the merchant's point of view, followed by the customers' point of view. In Chapter 4, a structured picture of payment relevant B2C standards is drawn before standardization problems are discussed. In Chapters 5 and 6 the B2B integration problem and the challenges for payment integration in the digital goods and services market are addressed. Finally major findings are summarised in the light of potential policy relevance.

The following questions emerged:

Is it appropriate that payment service providers leverage their "payment systems" to take care of all steps of the completion phase of B2C transactions – thus shaping the whole security infrastructure for electronic transaction processes?

Is smooth integration of online payment methods into B2C e-commerce transactions a point on the agenda of major ICT vendors and the banking industry?

How can a common view and common actions of e-banking, e-payments and e-commerce standardisation in the field be achieved?

What measures should be taken to strengthen the position of SMEs, which lack ICT knowledge and have less bargaining power with intermediaries?

How will the competition between identification/authentication approaches within the financial sector and the ICT sector, and between these two sectors, affect the adoption of e-commerce by consumers?

Is convergence of "identity technology" and "payment technology" a privacy threat?
Is the integration of digital rights management technology in B2C e-commerce required for the further development of the European eContent market?

Is the establishment of a micropayment infrastructure required for the further development of the European eContent market?