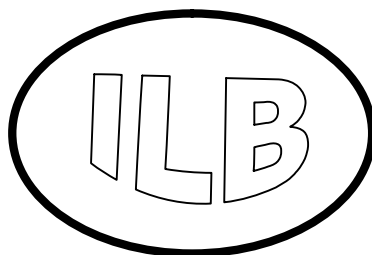

**INFORMATIONSMANAGEMENT
IN AGRAR- UND ERNÄHRUNGSWIRTSCHAFT**
(Hrsg. G. Schiefer)

BERICHT A - 09/1

**Information Systems in European Pork Chains
- A Literature Review on Principles of Information Systems -**

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Abstract

The production of high quality pork and pork products is a complex issue with a multitude of interacting aspects. One important aspect for producing competitive and safe pork and pork products is an optimal organisation of information infrastructures in the chain. Many European pork chains have a backlog in this field since their information infrastructures are fragmented and insufficiently support (cross-) chain logistics optimisation, integrated chain quality management and fork-to-farm traceability. Moreover, enterprises in agri-food chains are increasingly confronted with requirements according to product and process related quality management, food safety as well as tracking and tracing across the whole production chain. However, the companies in the pork chains are not able to resolve the inefficiencies in their information infrastructures by themselves. They need professional, organisational and technical help. As a first step, it is necessary to analyse the current situation and categorise the different types of information systems used in European pork chains. The present report shows an approach by dividing the systems into enterprise and chain focused information systems. Thereby, the enterprise focused systems are correlating with the different levels of business management in the enterprises whereas the chain focused systems are concentrating on tracking and tracing, food safety and quality management information within the chain.

Table of contents

1	Introduction.....	1
2	Information systems in European pork chains.....	2
2.1	The pork chain.....	2
2.2	Information system requirements	4
2.2.1	Legal requirements	5
2.2.2	Market requirements	7
2.3	Classification of information systems.....	10
2.3.1	Information systems with enterprise focus	14
2.3.2	Information systems with chain/sector focus.....	16
3	Summary	25
	List of figures	26
	List of tables	26
	List of abbreviations.....	27
	References	28

1 Introduction

The production of high quality pork and pork products is a complex issue with a multitude of interacting aspects. The European Union with its self-sufficiency and outstanding position in the global market supports the development of an economical and environmental sustainable pork production since it is related to its peoples' demand as consumers, citizens and producers. In order to keep this position and to compete against recently challenging countries like Brazil, Canada, China and the USA it is necessary to develop innovative, integrated and sustainable food production chains of high quality pork and pork products matching the consumer demands.

One important issue for producing competitive and safe pork and pork products is an optimal organisation of information infrastructures in pork chains. Many European pork chains have a backlog in this field since their information infrastructures are fragmented and insufficiently support (cross-) chain logistics optimisation, integrated chain quality management and fork-to-farm traceability. Moreover, enterprises in agri-food chains are increasingly confronted with requirements according to product and process related quality management, food safety as well as tracking and tracing across the whole production chain (SCHIEFER 1997, BEULENS et al. 2005, HANNUS 2008). Since some of these aspects have also become legal requirements, the sector is forced to act (SCHIEFER 2006).

However, the companies in the pork chains are not able to resolve the inefficiencies in their information infrastructures by themselves. They need professional, organisational and technical help (PETERSEN et al. 2005, SCHULZE ALTHOFF 2006, POIGNÉE 2008). Thereby, a cost-efficient solution should be found which considers the information requirements of all involved actors (PETERSEN et al. 2002, SCHIEFER 2002a). In order to find such a solution first of all it is necessary to analyse the present situation and categorise the different types of information systems used in European pork chains.