



**HAL**  
open science

# Quality Management Systems Alignment in European Pork Chains: A Governance Perspective

Nalini Rakotonandraina, Loïc Sauvée

► **To cite this version:**

Nalini Rakotonandraina, Loïc Sauvée. Quality Management Systems Alignment in European Pork Chains: A Governance Perspective. Q Pork Chains International Conference, Oct 2011, Palma de Majorca, Spain. 2011. <hal-04322669>

**HAL Id: hal-04322669**

**<https://normandie-univ.hal.science/hal-04322669v1>**

Submitted on 5 Dec 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



HAL Authorization



# Quality Management Systems Alignment in European Pork Chains: A Governance Perspective

**Rakotonandraina, N., & Sauvée, L.**  
 Institut Polytechnique LaSalle Beauvais, France  
 (nalini.rakotonandraina@lasalle-beauvais.fr ; loic.sauvee@lasalle-beauvais.fr)

**Abstract:** This research proposes an analytical framework in order to assess the alignment of quality management systems (hereafter QMSs) understood as the concrete implementation between different QMSs in European pork chains. The approach uses the concept of governance of quality in the analytical part, defined as a set of functions to solve quality coordination problems. Thus QMSs are analyzed through a governance of quality perspective by considering its fulfilled functions and levels of decision as regard to institutional environment. Four case studies in French pork chains are used to illustrate the analysis. Results contribute in their theoretical part to the institutional economics theory in line with previous works on alignment and at empirical level give managerial perspectives on the alignment of QMSs in terms of efficiency in the one hand (cost, QMSs coherency, quality controls and specific roles of actors) and highlights complementarity and redundancy devices as regard to the QMSs alignment typology in the other hand.

- Objectives**
- ✓ To provide a governance perspective on QMSs in pork chains
  - ✓ To propose a framework to investigate the question of alignment of QMSs within pork chains
  - ✓ To identify the main "alignment situations" between QMSs in real cases

- Research questions**
- ✓ How to characterize the functions related to the governance of quality?
  - ✓ What objectives do the QMSs fulfill from the quality point of view?
  - ✓ What are the properties of different governance structures?

- Design Theories**
- ✓ Governance of quality: objectives, functions and levels
  - ✓ Alignment between QMSs: an analytical framework based on a governance perspective

- Operationalization**
- ✓ Case study approach
  - ✓ In depth interviews

- Empirical research: application to French case studies**
- ✓ Ham of Bayonne: Protected Geographical Indication applied to dry cured ham in the South West of France
  - ✓ Le Cochon de Bretagne: a collective pig producer's brand in Brittany, West of France
  - ✓ Porcillin/ Saveurs en OR: pig producer brand coupled with a collective regional brand in the Nord-Pas de Calais region in France
  - ✓ Ham Fleury Michon with omega 3 /Bleu Blanc Coeur: national processor's brand associated with a collective nutritional brand

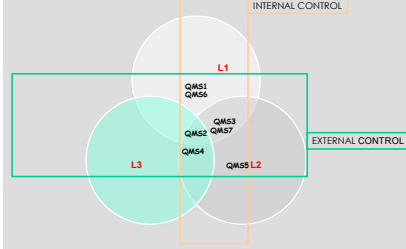
**Acknowledgement**  
 The authors gratefully acknowledge from the European Community financial participation under the Sixth Framework Programme for Research, Technological Development and Demonstration Activities, for the Integrated Project Q-PORKCHAINS FOOD-CT-2007- 036245.

**Table2: QMSs classification of the case study Fleury Michon /Bleu Blanc Coeur**  
**Table3: Governance adaptation in Fleury Michon/Bleu Blanc Coeur**  
**Table 4: QMSs alignment typology**  
**Figure3: Control mechanisms**

| Levels of QMS            | Mandatory Risk management global objective             | Voluntary Risk management global objective                | Voluntary Differentiation strategy                         |
|--------------------------|--|---|--|
| Public                   | Animal welfare regulation (QMS4)<br>Food safety (QMS2) |   | CCP (QMS5)   |
| Private Legally mandated |  | VPF (French origin, traceability, identification) (QMS 3) | ISO norms, FSI (QMS1)<br>private requirements (QMS6, QMS7) |
| Private                  |  |   |  |

QMSs composing the scheme Fleury Michon/Bleu Blanc Coeur are classified as in the table (2)

L1: Decentralized level  
 L2: Intermediate level  
 L3: Centralized level



As observed in the figure (3) QMSs can be checked at various levels and are controlled according to two steps, internal and external parts. Internal controls are done by the company or collective groups like producer groups. Independent certification body guarantees the conformity and credibility of the scheme by external control. Besides, public body exercises control at external level through its sanitary or veterinarian department for safety inspection.

- Listing of QMSs including the quality scheme:**
- QMS1:** Quality assurance approach: ISO 9001 and IFS
  - QMS2:** Food safety
  - QMS3:** Traceability system by the VPF (Viande de Parc Française/ French pork programme)
  - QMS4:** Animal welfare
  - QMS5:** French official sign CCP certification (Certification de Conformité Produit) for pork
  - QMS6:** Private specifications (genetics, pig feed, ...)
  - QMS7:** Bleu Blanc Coeur (BBC) specification: use of flax seeds in the diet of pigs to insure the natural presence of omega 3 in the ham.

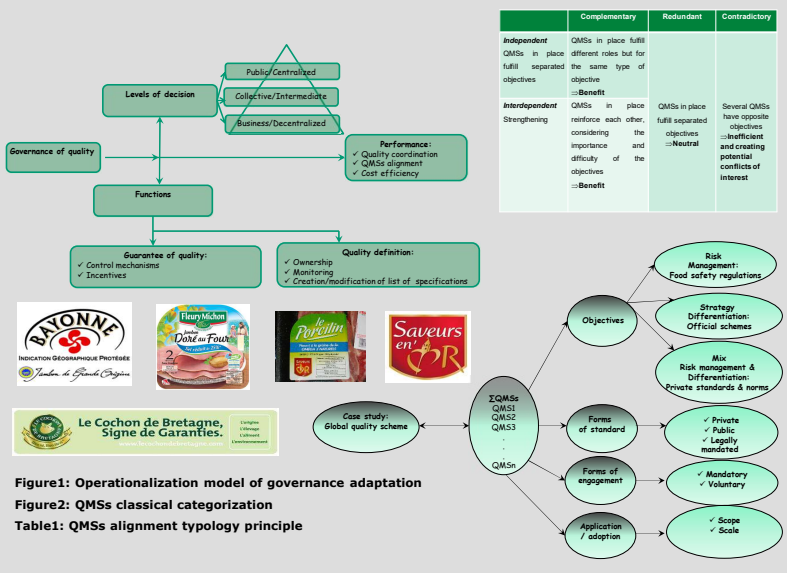
| Governance functions  | Level 1 decentralized  | Level 2 intermediate  | Level 3 centralized                                  |
|-----------------------|--|---|--|
| Ownership             | QMS6 (Fleury Michon)   | QMS1 (AFNOR organization)<br>QMS3 (NAPORC/ French pork Council)<br>QMS7 (BBC Association) | QMS2 (QMS4 QMS5)                                     |
| Monitoring            | QMS1<br>QMS2<br>QMS3<br>QMS4<br>QMS5<br>QMS6<br>QMS7   | QMS3<br>QMS4<br>QMS5<br>QMS6<br>QMS7  |  |
| Definition of quality | Creation/modification of standardized list of specification (minimum standard for market access) | QMS1  | QMS2<br>QMS4<br>QMS5                                 |
|                       | Creation/modification of differentiated list of specification                                    | QMS6<br>QMS7  | QMS1<br>QMS2<br>QMS3<br>QMS4<br>QMS5<br>QMS6<br>QMS7 |

This table (3) shows interaction between levels of decision as regard to governance functions fulfilled by each involved QMS. Monitoring are usually done at the company level (Fleury Michon) and at the collective level (producer group partner). Both have also important roles in defining or modifying differentiated list of specifications as regard to quality definition of the approach.

|                 | Complementary | Redundant                         | Contradictory |
|-----------------|---------------|-----------------------------------|---------------|
| Independence    | Sub2&Sub3     | Sub1&Sub 3 (QMS2&QMS1; QMS3&QMS1) |               |
| Interdependency | Sub1&Sub2     |                                   |               |

This table (4) gives an overview of QMSs alignment typology considering subgroup of QMSs found in the case of Fleury Michon/Bleu Blanc Coeur.

**References**  
 Coulibaly M., Sauvée L., 2009. Value creation in brand alliances: a dynamic conceptualization. *Journal of Business Market Management*, vol. 4, n°1, pp 3-25  
 Luning P.A., Marcelis W.J., 2009. *Food quality management: technological and managerial principles and practices*. Wageningen Academic Publisher, 425p  
 Henson S., Humphrey J., 2008. *Understanding the Complexities of Private Standards in Global Agrifood Chains*. Paper presented at International Workshop on Globalization, Global Governance and Private Standards, Leuven, Belgium, 20 p.  
 Ponte S., Gibbon P., 2005. Quality standards, conventions and the governance of global value chains. *Economy and Society* vol. 24, n°1, pp1-31  
 Rakotonandraina N., Sauvée L., 2009. 'Cochon de Bretagne': a Brand and Producers' Organization. In *Trienekens et al.*, 195-209.  
 Rakotonandraina N., Sauvée L., Wever M., Wognum N., 2010. Alignment between governance designs and quality management systems in European pork meat chains. A comparison of IKB (The Netherlands) and VPF (France). WICANEM conference, Wageningen, The Netherlands, 26-28th May 2010.  
 Rakotonandraina N., Sauvée L., 2010. Ham of Bayonne. In *Pork Supply chains in the EU*. Open learning repository available at [http://sisfan.fask.slu.se/opc/3\_Pork\_Supply\_Chains/]  
 Rakotonandraina N., Sauvée L., 2011. Linking marketing innovation and territorial resources: The example of Porcillin/Saveurs en OR a regional brand with nutritional attribute. The 51st European Congress of ERSA, Barcelona, Spain, 30 August -3 September 2011.  
 Rakotonandraina N., Sauvée L., Trienekens J., Wognum N., 2011. Governance of Quality and Quality Management Systems Alignment. Methodological research note. Report drafted within the Q-PORKCHAIN Project, Module IV.2 « chain management » piloted by Wageningen University The Netherlands, founded by European Commission FP6 (2007-2011).  
 Raynaud E., Sauvée L., Valceschini E., 2009. Aligning Branding Strategies with the Governance of Vertical Transactions. *Industrial and Corporate Change*, October, vol. 18, n°5, 835-868.  
 Sauvée L., Coulibaly M., 2010. The Interorganizational Dynamics of Brand Alliances. *The IUP Journal of Brand Management*, Vol. VII, n°4, pp 34-50, December.  
 Trienekens J., Petersen B., Wognum N., Brinkmann D., (Eds) 2009. *Matching Demand and Supply in European Pork Chains*, pp 195-209, Wageningen Academic Press.  
 Wever M., Wognum N., Trienekens J., Omta O., 2010. Alignment between chain quality management and chain governance in EU pork supply chains: A Transaction-Cost-Economics perspective. *Meat Science*, vol. 84, n°2, 228-237.  
 Williamson O. E., 1996. *The Mechanisms of Governance*. New York: Oxford University Press.  
 Williamson O. E., 2005. The Economics of Governance. The Richard T. Ely lecture, *American Economic Review*, May, 1-18.  
 Williamson O. E., 2009. Pragmatic methodology: a sketch, with applications to transaction cost economics. *Journal of Economic Methodology*, vol. 16, 145-157.



**Figure1: Operationalization model of governance adaptation**  
**Figure2: QMSs classical categorization**  
**Table1: QMSs alignment typology principle**

- Results**
- ✓ Synthesis based upon case study categories
  - ✓ Background theories about governance of quality
  - ✓ Managerial implications: Global synthesis/Recommendations to public and private stakeholders on cost efficiency, effectiveness of QMSs and control redundancy

- Further research**
- ✓ Comparison of the same category of case studies in different countries and country comparison: situation at stake/institutional aspect

**Disclaimer**  
 The views expressed in this publication are the sole responsibility of the author(s) and do not necessarily reflect the views of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use, which might be made of the information. The information in this document is provided as is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability.