

International Conference
on Industrial Engineering and Systems Management

IESM 2009

May 13 - 15, 2009

MONTREAL - CANADA

SME and Planning in Supply Chains: a Socio-technical View ^{*}

Bernard GRABOT ^a, Anne MAYERE ^b,

^a *University of Toulouse, INPT, ENIT/LGP, 47 Av. d'Azereix
BP1629, F-65016 Tarbes Cedex, France*

^b *University of Toulouse, LERASS, 114, Route de Narbonne
31077 Toulouse Cedex 4, France*

Abstract

The co-existence of large and small companies in nowadays supply chains may led to misunderstandings which are prejudicial to the supply chain performance. Based on several studies in aeronautical supply chains, we list some of typical problems linked to the relationship between large and small companies, and show how the solutions promoted by large companies may in some cases be inadequate. We suggest to use different frameworks suggested in social sciences for better understanding the origins of these problems and provide some guidelines for defining a framework of cooperation between large and small companies, oriented on a better mutual understanding.

Key words: Supply Chain Management, Flexible manufacturing systems, Human aspects.

1 Introduction

Supply Chain Management motivates a great interest both on industrial and academics sides, but this ever growing area is most of the time considered according to specific points of view (information technologies, management, social aspects) which can hardly address its multiple interrelated facets. The present study, focusing on the relationships between large and small companies in aeronautical Supply Chains, suggests to consider the SCM problem with the double perspective of production management and social science. Aeronautic supply chains have indeed specificities which make them especially interesting, for instance regarding the complexity of their planning process but also the co-existence in these macro-organizations of very large and rather small companies. After listing these specificities, some daily problems linked to the cooperation between large and small companies will be explored through case studies. The interpretation of these problems according to the dominant partners of the supply chains (OEM - assemblers of aircrafts or of large sub-systems) will be given, together with the solutions they try to implement. The main characteristics of SMEs as they have been identified in social science research programs will then be emphasized and the implications of such characteristics concerning the planning of supply chains which combine large firms and

^{*} This paper was not presented at any other revue. Corresponding author B. Grabot. Tel. +33 5 62 44 27 21. Fax +33 5 62 44 27 08

Email addresses: bernard@enit.fr (Bernard Grabot), anne.mayere@iut-tlse3.f (Anne Mayère).