

ISyE 4803
Advanced Supply Chain Logistics
Fall 2009

Reading Assignment 8

Due Date: November 10, 2009

Read the materials below in preparation for discussion in class. The questions are intended to guide your reading and thoughts, but are not the only aspects that will be discussed in class.

1. Belarmino Adenso-Diaz, Monica Gonzalez, Emerita Garcia, “A Hierarchical Approach to Managing Dairy Routing”, *Interfaces*, vol. 28, nr. 2, pp. 21–31, 1998.
 - (a) Describe the dairy distribution system of Central Lechera Asturiana (CLAS).
 - (b) Describe the hierarchical approach CLAS followed for their distribution system redesign.
 - (c) What performance measures were identified for the distribution system redesign, and how was each performance measure quantitatively measured? What do you think of the performance measures and how they were quantified?
 - (d) Describe how the problem at each level in the hierarchical approach was solved.
 - (e) What were some of the implementation issues faced, and how did they deal with them?

2. Kleywegt, A.J., Lee, J., and Ward, A.R., “Design of Multistar Many-to-Many Distribution Networks”.
 - (a) Explain the decision variables in the paper. Distinguish between design decision variables and operational decision variables.
 - (b) Explain the approach used to approximate operational cost as a function of the design decision variables.
 - (c) Explain the approach used to choose a distribution network design.
 - (d) Explain the approach used to evaluate and compare distribution network designs.