These costs are generally undesired since they include several constraints as shown in the scheme. Packaging costs are minimized while respecting constraints like the packaging design and the distribution centre locations.

The two main areas of improvement attached to these flows are reduced as much as possible while keeping the same level of service. The main areas of improvement are the packaging design and the distribution centre locations.

The aim of this project is first to provide a complete mapping of the IM supply chain flows (physical, informational, financial) in order to have better insight on the logistics costs and the transit times.

Value Stream Mapping

The Value Stream Mapping belongs to the Lean Methods. As shown in the scheme, this iterative method considers the value added to the product throughout the supply chain processes and identifies the wastes mainly in terms of time and money.

Every new opportunity must fit several constraints characterizing the business practices. Typical constraints are attached to fiscal, legal, political, commercial or operational aspects. Thus, multidisciplinary solutions are designed for increasing the supply chain performances.

Production Planning

Given the plant locations and the market scale, it is crucial to produce locally as much as possible increasing thereby the performances of the supply chain by reducing mainly the transit times.

Production opportunities are analyzed while considering the most relevant constraints like the availability of raw materials, the plant production resources, the financial structure and the global logistics.

IM Supply Chain Physical Flows

The IM supply chain is organized as shown in the following scheme. The physical flows are mapped and presented since these ones provide a useful insight on the structure of the network and a visual support for further analysis.

Global Logistics

The global logistics is the biggest concern in such a supply chain as suggests the complexity of the physical flows. Costs and transit times attached to these flows are reduced as much as possible while keeping the same level of service. The two main areas of improvement are the packaging design and the distribution centre locations.

Packaging costs are minimized while respecting several constraints as shown in the scheme. These costs are generally undesired since packaging yet necessary does not add any value to the product in accordance to customer needs.

The distribution centre locations are also optimized by studying the sourcing and the demand in specific commercial areas.