

## **CMG Corporation**

### **INTRO:**

It had been quite a day for Jean. First, she had been called into her boss's office. Now she had just received an urgent call from the division vice-president.

Jean Carlyle is a supply chain manager at CMG Corporation. She often deals with problems with supplies not being where they are needed or unusable parts being delivered. Today's crisis involves a problem at one of the company's key distribution centers (DC). The New York DC urgently needs to increase its supplies to avoid shortages, which are becoming more frequent.

### **BACKGROUND**

The CMG Corporation is a manufacturer of luxury cars based in Seoul, South Korea. Its cars sell well in the Asian markets, but the company wants to grow its sales in the United States. To maintain its reputation for excellent service, the company needs to have plentiful supplies of replacement parts readily available for its authorized repair shops. These parts are stored at the company's distribution centers and then delivered promptly when needed. One of Jean's top priorities is avoiding shortages at these distribution centers.

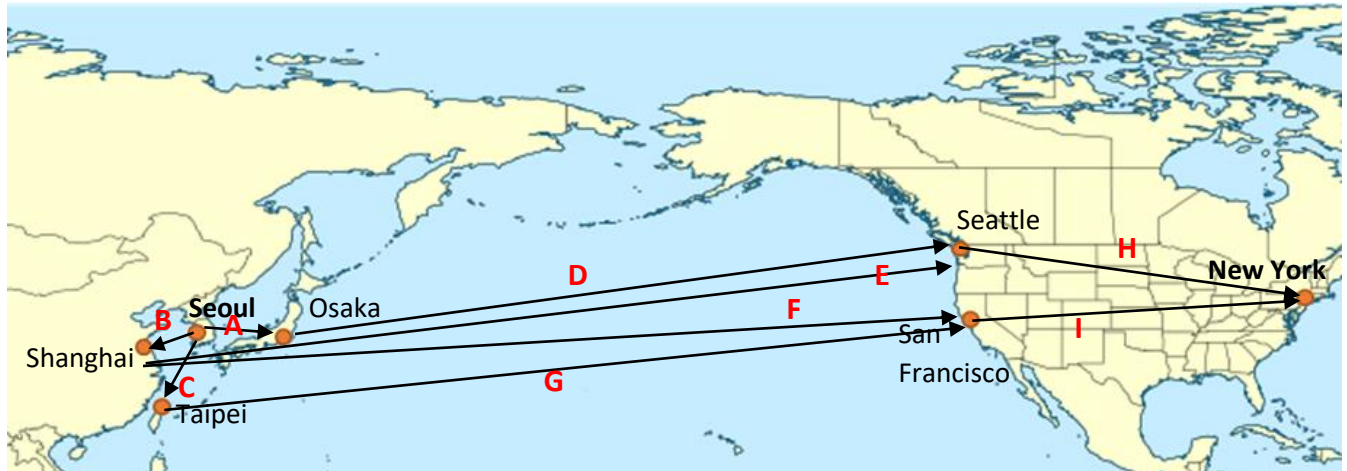
Jean oversees the distribution at the US Distribution Centers, which are located in New York, Seattle, and San Francisco. Since the company's cars are becoming more popular on the East Coast, it is especially important to keep the New York Distribution Center well supplied. For this reason, any shortages at the New York DC are of real concern to CMG's top management. They are willing to invest now to ensure that shortages do not re-occur.

Most of the replacement parts are produced in the company's main plant near Seoul, along with the production of new cars. It has been this factory that has been supplying the US market with parts. Some of these parts are bulky, and very large numbers of certain parts are needed, so the total volume of supplies has been relatively massive – over 300,000 cubic feet of goods arriving monthly. Now a much larger amount will be needed to replenish dwindling supplies over the next month.

### **PROBLEM:**

Jean needs to develop a plan quickly for shipping as much product as possible from the main factory to the DC in New York over the next month. The factory is already producing more than can be shipped to this one distribution center, so the limiting factor on how much can be shipped is the limited capacity of the company's distribution network. This network is shown in Figure 1.

The companies that operate these ships, railroads and trucks are independently owned companies that ship goods for numerous firms. Because of prior commitments to their regular customers, these companies are unable to drastically increase the allocation of space to any single customer on short notice. For this reason, CMG is only able to secure a limited amount of shipping space along each shipping lane over the next month.



**Figure 1: Distribution network for parts from the Seoul plant**

Shipping route	Maximum Additional Containers for CMG	Cost per Container
A	50	\$1100
B	70	\$900
C	30	\$1000
D	50	\$2400
E	30	\$2000
F	40	\$2000
G	30	\$2000
H	80	\$800
I	70	\$900

Your team has provided rapid recommendations to Jean in the past, and she is now calling on you to help her devise the best plan for restocking the New York Distribution Center so that it does not experience shortages in the future.

Jean has arranged for your team to meet briefly with her manager, Pat Henderson, and with the New York DC manager, Chris Trevino. She will also have time to meet with you to answer your questions. Your first task is to prepare a list of questions and an interview plan for meeting with each of these individuals.

## Stakeholders

Jean Carlyle, Supply Chain Manager, US Distribution (Based in Seattle)

Jean earned a bachelor's degree in supply chain and international business seven years ago. She joined the company right out of college and became a supply chain manager after 5 years.

Pat Henderson (Jean's Boss), Division Head, US Logistics and Operations (Based in Seattle)

Pat has been with the company for 15 years, and has earned an MBA. Pat is responsible for overseeing the US dealerships (sales and operations, which includes service). The dealerships

are franchises that have to follow the guidance from CMG Corporation. The availability of parts is key for quick and effective service, which is a key component of customer satisfaction and repeat purchases.

Chris Trevino, New York Distribution Center Manager

Chris is a native New Yorker, who joined CMG at the NY DC two years ago in order to return to the New York area. Previously, Chris was the DC manager at JMG, the sister company to CMG, in Baltimore.