# Symbols

#### Sets

Name	Domains	Description
factories	*	
clients	*	

### **Parameters**

	Name	Domains	scription	
of	fer	factories		
de	emand	clients		
cc	st	factories, clien		

#### Variables

	Name	Domains	Description
X		factories, clien	5S

## **Equations**

		Name	Do	mains	Des	scription
supply_equation		factor	ies			
demand_equation		clients	S			

#### **Model Definition**

 $\begin{array}{l} \mathbf{min} \ \sum_{factories, clients} cost_{factories, clients} \cdot x_{factories, clients} \\ \mathbf{s.t.} \end{array}$ 

 $supply\_equation_{factories}$ 

$$\sum_{clients} x_{factories, clients} \le offer_{factories}$$
  $\forall factories$ 

 $demand\_equation_{clients}$ 

$$\sum_{factories} x_{factories, clients} \ge demand_{clients}$$
  $\forall clients$ 

 $x_{factories, clients} \ge 0 \ \forall factories, clients$