

ANEXO.

Características del escenario diseñado para los participantes de las sesiones de ILMG en la Universidad Politécnica de Cartagena

Initial Conditions of the Game

You are the managers of the corporation and you have to decide what to produce and where to sell produced products. You are also responsible for the financial department of your corporation.

There are two types of products available for production: Standard Bike and Sports Bike. You can decide to produce and sell bikes in three different regions: Scandinavia, Baltic States and Western Europe.

The initial state for each company is the following:

Company has initial cash amounting to €40,000,000 and Securities Type 1 amounting to €1,000,000 as its initial assets. It has one operational plant in Scandinavia valued at €5,000,000. The Corporation has an initial bank loan amounting to €10,000,000. The Corporation's Ordinary Share Capital is €41,000,000. Market in Scandinavia is established and two products are adopted.

Market investigation shows a price between 1000 and 4000 is realistic. The volume is depending on industries price level, marketing effort, product development and Business Cycle index in the different markets.

ASSETS			LIABILITIES	
Current Assets		41 000 000	Current Liabilities	
Current Bank Account (Debit)	40 000 000		Current Bank Account (Credit)	
Interest Receivable			Accrued Interest	
Short Term Investments	1 000 000		Trade Creditors	
Trade Debtors			Current Tax Due	
Materials-on-Order			Bank Loans	10 000 000
Materials-in-Transit			Provision for Stock Writedown	
Raw Materials Stock			Total Liabilities	10 000 000
Work-in-Progress				
Finished Goods			EQUITY	
Goods-in-Transit			Ordinary Share Capital	41 000 000
Fixed Assets	5 000 000	5 000 000	Profit/Loss	-5 000 000
Buildings and Machinery	5 000 000		Opening Balance 1.1.01	
Warehouses			Retained For the Period	-5 000 000
Plants under Construction			Dividends	
TOTAL	46 000 000	46 000 000	Total Equity	36 000 000
			TOTAL	46 000 000

Figure 1: Balance Sheet of January 1st, 2001

You have available several data related to Financial Parameters, Regional Parameters, Products Technical Parameters, and Transport Parameters as showed in the Tables below.

Table 1 Initial Conditions period 1

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Region	BCI	P	W
Scandinavia	97	100	300
Baltic states	100	100	330
Western Europe	100	90	250

BCI =Business Cycle Indices P =Regional Productivity Indices W =Wage Levels

Table 2 – Financial Parameters

Prime Rate (%)	2.5
Bank Loan Rate Factor	2
Standard Loan Period (Years)	5
St Loan Repaym Freq (Quart=0, Ann=1, Month=2)	0
Tax Rate (%)	30

Table 3 MarketRelated Parameters

Region	Market Introduction Time (Days)	Market Introduction Fee (€1000)
Scandinavia	15	200
Baltic States	10	150
Western Europe	15	200

Table 4 – Regional parameters (Examples)

Item	Scandinavia	Baltic States	WesternEurope
Unit Projecting Cost (€1000)	2500	1800	2000

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Construction Time (Days)	40	50	45
Unit Abolishment Cost (€1000)	300	200	300
Abolishment Time (Days)	30	30	30
Nom Capac Expansion per Inv (Monthly Mach Hrs/€1000000)	3000	3200	2800
Capacity Expansion Fixed Cost (€1000)	100	100	100
Capacity Expansion Lead Time (Days)	20	30	25
Warehouse Capac Expansion per Investm (Units/€1000000)	1000	800	1000

Table 5 – Material Move Tariff

From To	Scandinavia			Baltic States			Western Europe		
	Time (Days)	Fixed Cost(€)	Variable Cost(%)	Time (Days)	Fixed Cost(€)	Variable Cost(%)	Time (Days)	Fixed Cost(€)	Variable Cost(%)
Scandinavia	2	500	5	4	400	5	6	600	5
Baltic States	4	400	5	2	500	5	4	400	5
Western Europe	6	600	5	6	500	5	4	500	5

Table 6 – Regular Transport Tariff (Express Transport Tariff)

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To	Scandinavia			Baltic States			Western Europe		
	From	Time (Days)	Fixed Cost (€)	Variable Cost (%)	Time (Days)	Fixed Cost (€)	Variable Cost (%)	Time (Days)	Fixed Cost (€)
Scandinavia	1 (1)	300 (600)	5 (15)	2 (1)	500 (600)	5 (15)	2 (1)	500 (600)	5 (15)
Baltic States	2 (1)	500 (600)	5 (15)	1 (1)	300 (600)	5 (15)	2 (1)	500 (600)	5 (15)
Western Europe	2 (1)	500 (600)	5 (15)	2 (1)	500 (600)	5 (15)	1 (1)	230 (600)	5 (15)

Table 7 – Technical Coefficients of Products

Item	Scandinavia		Baltic States		Western Europe	
	Standard Bike	Sports Bike	Standard Bike	Sports Bike	Standard Bike	Sports Bike
Material per Unit (Tons/Unit)	0.01	0.02	0.01	0.02	0.01	0.02
Machine Hours per Unit	5	10	5	10	5	10
Work Hours per Unit	10	20	10	20	10	20
Setup Cost (€)	50	50	50	50	50	50