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Seminar

Procurement Management for Cost Minimization & Benefit Maximization – Vendor Management

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■ **Kostas Theofanides, MSc,** *k.theofanides@projectyou.gr*

- 32 years of service in a wide range of managerial roles in Operations, Logistics, Engineering, Sales, Projects in MOBIL, BP, BOVIS LENDLEASE, ELPE, in Greece and Europe
- Led in 1997-98 a european team of Logistics Managers to reengineer BP-Mobil Logistics facilities and fleets

Kostas Theofanides is startups founder and provides Career mentoring, Training, Business Development, Project management, Business Mentoring services to individuals and enterprises, consolidating his wide business experience with thorough theoretical knowledge.

He is founder and Partner of Projectyou ltd (www.projectyou.gr) : Training, mentoring, project management services

He is trainer and Coordinator of the training programs for the European Logistics Certification – ELA and International Project Management Association - IPMA

His main training capabilities are :
Entrepreneurship workshops, Leadership and change management, Breakthrough thinking, Efficient decision making, New Business development, Project management – hard and soft skills (certified trainer), Transportation economics, Logistics, Procurement, Career and business mentoring

Previous Jobs :
Engineering Mgr - EKO / BP, Country Mgr - BovisLendlease, Transportation Mgr – BP, Brand projects mgr - BP Europe, Wholesales Mgr - BP, Logistics Mgr Mobil, North Greece General Mgr - Mobil

Qualifications and Roles
- MSc Operational Research and Production Management, Brunel University / London
- Mechanical - Electrical Engineering, Polytechnic University / Thessaloniki
- Chairman of Association of Advisors for Safe Transportation of Dangerours Goods (2004-2012)
- Treasurer of PM Greece (ΕΔΔΕ- Ελληνικό Δίκτυο Διαχειριστών Έργων) (2008-2012

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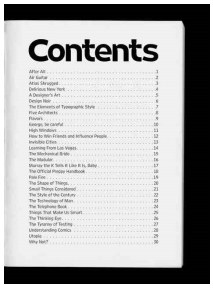

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1. PERFORMANCE MAXIMIZATION IN PROCUREMENT MANAGEMENT

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The Scope of the Procurement Department

- Direct supplies
  Products sold either as it is, either in packaging or with some processing

- Indirect supplies
  Equipment, materials and services needed for company's construction and operation (Constructions, machinery, warehouse and office equipment, shelves, refrigerators, cashier machines, vehicle fleet, Logistics services, consumables, clearance sales, etc)

- For which supplies is the Procurement department in your company responsible?

- What is your job responsibility?

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The core issues of the Procurement Department

- **what products to buy**
- **from which suppliers**
- **at what prices**
- **when to place an order**
- **what order quantities to set**
- **how to co-work with planning department, warehouses, finance department to ensure a smooth flow of the supply chain**

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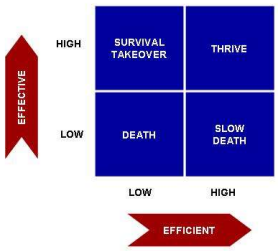
Successful Procurement

should focus on:



Efficiency - ***Effectiveness***

Effectiveness is about doing the right thing. (Strategically Effective)
Efficiency is about doing things right. (Operationally Efficient)

Effective *gets results,* ***Efficiency*** *reduces cost and waste.*

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Successful Procurement

Death – *Doing the wrong things badly*
These organizations will close soon

Slow Death – *Doing the wrong things well*
These organizations are struggling to survive but sooner or later they will not avoid it unless they change their strategy and become more effective.

Survival Takeover – *Doing the right things badly*
These organizations have the right strategy but are not effective. In the future, they risk to be bought by other organizations that are not effective but are profitable.

Thrive – *Doing the right things well*
These organizations thrive because their effective Strategy is combined with efficient operation.

Procurement Management is about procuring the right goods and services with minimum waste and cost to meet Customer requirements.

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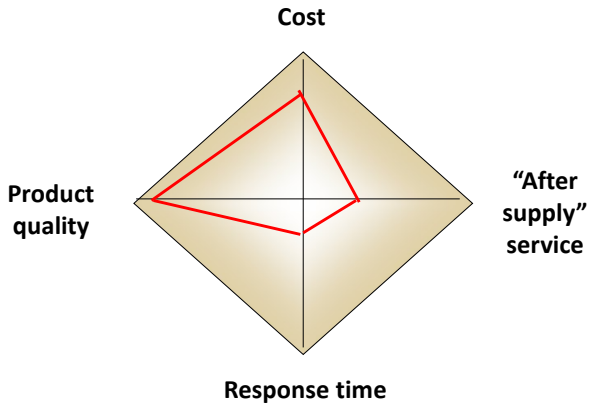
What do business units (internal customers) expect from the Procurement Department?



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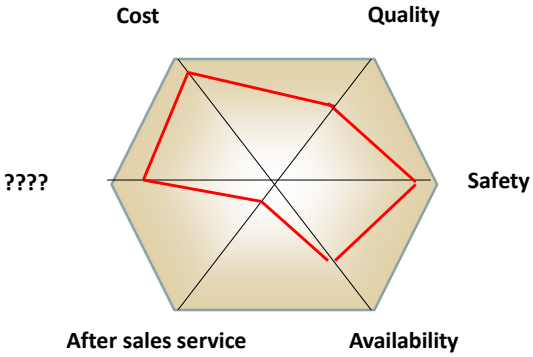
What are the expectations of external customers from the Procurement Department?



EXERCISE: Design the profile for your Procurement Department

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How does "Customer" satisfaction increase?

- Communication
- Interest from supplier
- When we take him out of his "prison"
- Understand the problems and each requirement
- "Exceed his expectations"
- "Positive surprises"
- Quick response
- “Post supply service”, client feedback
- "ASE“
- ……
- ……
- ……

Which of these, should we improve in our company?

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How can we reduce the response time?

- Reduction of workload beginning from low-value activities
- Time Allocation depending on the significant cases
- Long-term contracts
- Framework agreement contracts
- Parallel execution of activities, and not serial
- Standardization of procedures, forms, letters, simplification of specifications, reduction of the number of approvals
- Gradual deliveries
- Change of role within Procurement executives and senior management, depending on workload

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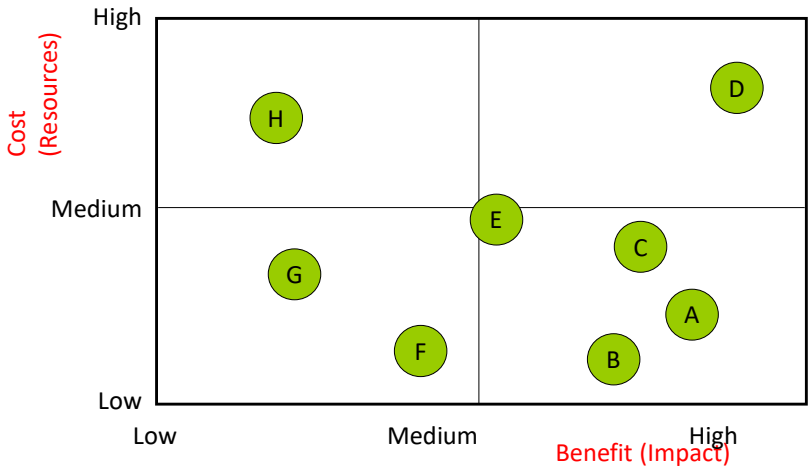
Planning the workload



EXERCISE: On what priority sequence should the Procurement Department deal with the above requests?

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Open Purchase Orders (Frame Agreement)

-Where do they apply:

- Materials, mainly low with value

- Benefits:
  - Best prices due to mass procurement (economies of scale)
  - Lower process costs
  - Time saving for more important procurement cases

- Preconditions:
  - Market and price research every year
  - Provision for automatic adjustment due to change in significant cost factors (eg fuel, iron, labor)
  - Indicative rather than binding total order quantity

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Open Purchase Orders (Frame Agreement)

- Duration: 1-3 years

EXERCISE: What recurring supplies in your Company can be made through OPEN ORDERS?

-
-
-
-
-
-
-
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"Before order" and "After supply" service

Procurement Department should be interested in "customer" service at all stages:

BEFORE DETERMINING CLIENT'S NEED

•Precautionary research of customer's needs with interviews, questionnaires, purchase statistics

•Reminders for timely submission of needs

•Maintaining minimum stocks

AFTER SUPPLY

•Spare parts insurance

•Interviews to evaluate customer's satisfaction

•Joint review meetings (customers, suppliers, Procurement Department)

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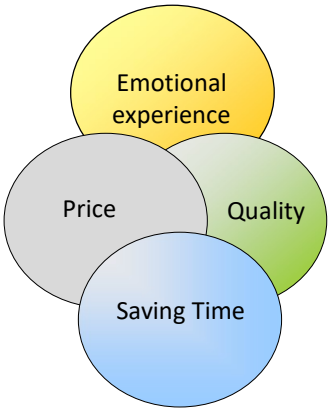
How people buy



The sale must be exciting !!

Customers often do not distinguish facts from emotions.

In the future we will not talk about customer service but about the consumer experience.

The key of success:
1. Develop a **great** idea
2. Tell a strong story
3. Create the ultimate experience

The share in the mind precedes the market share

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Visualize the future of your business,

for example, how future supermarket will be like?

- Scenography and sets
- Penetrating
- Personalized service
- Digital functions
- Smart trolleys
- Electronic shopping list
- RIF technology
- Electronic posters that will "read" the customer
- Smart scale
- Smart dressing room
- Etc.-etc (see attached article by Despina Mergiani)

DISCUSSION:

What changes will bring in the procurement department?

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Improve performance with SWOT Analysis

With this method we investigate:

- The **Strengths** and **Weaknesses** of the organization
- The **Opportunities** and **Threats** that open

so that we can then select the appropriate actions to:

- take the most out of the strengths
- improve the weak points
- we take advantage of the opportunities
- while reducing the risks

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2. ASSIGNMENTS BASED ON THE BEST "LIFE CYCLE COSTS"

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Life Cycle Cost -*LCC ή Total Cost of Ownership – TCO*

Includes:

- ***Initial Cost***
- ***Maintenance / Replacement***
- ***Lost Revenue due to maintenance/replacement downtime***
- ***Annual Energy***
- ***Operational labor/Annual wages***
- ***Delivery & Logistics***
- ***Inspections & fees***
- ***Taxes***
- ***Other site costs***
- ***Environmental Costs/Risks***
- ***Disposal & recycling –resale value***
- ***REVENUE generated***

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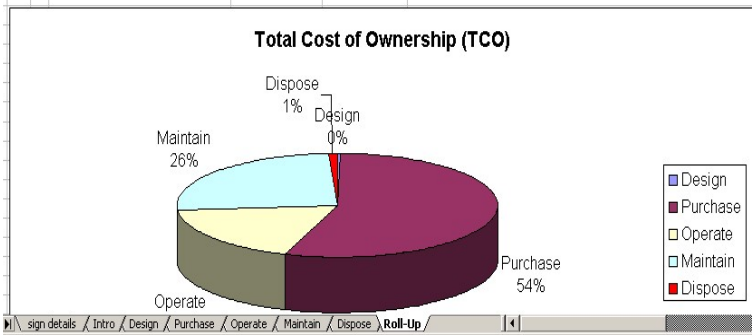
Total Cost of Ownership

TOTAL COST OF OWNERSHIP (TCO) MODEL
Retail Site Signage

	Category	Cost for 20 yrs.	% of Total	Comments
1	Design	$ 8,750.00	0%	
2	Purchase	$ 1,612,878.75	55%	
3	Operate	$ 544,060.05	19%	
4	Maintain	$ 752,634.24	26%	
5	Dispose	$ 20,822.42	1%	
	Total	**$ 2,939,145.47**		



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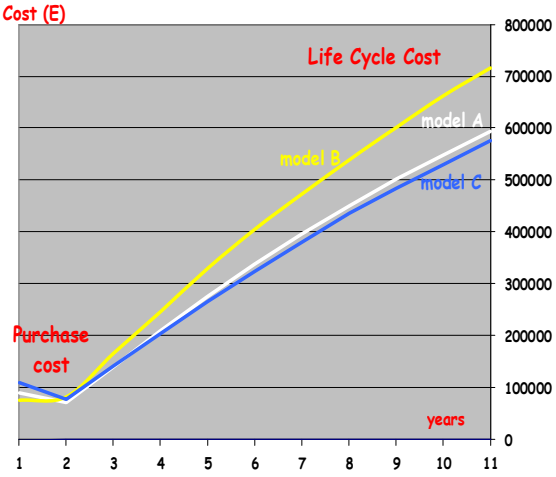
Decision based on Life Cycle Costs

Example: Which equipment is cheaper?



Model B based on the Initial Supply Cost

Model C based on the LCC

What is preferable?

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Life cycle cost– Calculation example

	1	2	3	4	5	6	7	8	9	10	
Initial investment in works	200										
Rent		70,0	72,8	72,8	75,8	75,8	79,0	79,0	82,2	82,2	
Shared costs		7,0	7,3	7,7	8,3	8,7	9,2	9,7	10,2	10,7	
Energy (heating - cooling)		15,0	15,6	16,2	16,7	17,3	18,0	18,7	19,5	20,4	
Maintenance		2	2	2	2	2	2	2	2	2	
Lost income		30	30	32	32	34	34	37	37	39	
Staff Transportation and parking		4,0	4,2	4,4	4,6	4,8	5,1	5,4	5,7	6,0	
TOTAL	200	128	132	135	139	143	147	152	157	160	
NPV at 7%											985

PROPERTY B

Initial investment in works	150										
Rent		80,0	80,0	83,2	83,2	86,5	86,5	90,0	90,0	93,7	
Shared costs		7,0	7,3	7,7	8,3	8,7	9,2	9,7	10,2	10,7	
Energy (heating - cooling)		10,0	10,5	11,0	11,5	12,0	12,6	13,1	13,8	14,6	
Maintenance		1	1	1	1	1	1	1	1	1	
Lost income		10	10	11	11	12	12	13	13	14	
Staff Transportation and parking		1,0	1,0	1,1	1,1	1,2	1,2	1,3	1,3	1,4	
TOTAL	150	109	110	115	116	121	123	128	129	135	
NPV at 7%											810

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3. HOW PROCUREMENT MANAGEMENT BRINGS VALUE TO THE ORGANIZATION

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Creating Value from Procurement

1. **Cost reduction**
   Με καλύτερη διαπραγμάτευση επιτυγχάνουμε χαμηλότερες τιμές από τις τρέχουσες
2. **Cost avoidance**
   With different specifications, procedures, packaging, substitute products, etc. we achieve lower cost
3. **Revenue Increase**
   By planning the supply of new more attractive products and services we bring additional income to the company
4. **Efficiency Increase**
   The supply of new products or services increases the productivity of the sector that uses them.
5. **Technological upgrade**
   With innovative products and services, the Procurement Department supports the continuous technological upgrade of the company.

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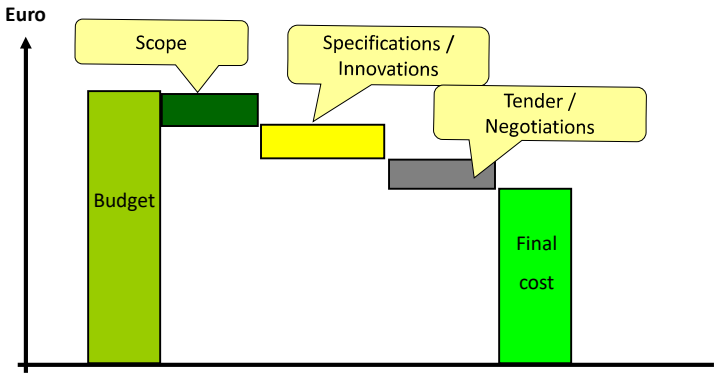
Cost savings origin



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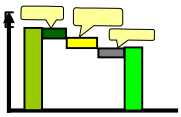
Ensuring cost savings through Interdepartmental cooperation



The **Scope** is defined by the Users(Sales), the **Specifications** by the Technical Department, the **Tender** by the Procurement Department.

To achieve savings it is required:

- Establishment and staffing of an Interdepartmental Project Team from all departments
- strong support from Senior Management
- all three (3) regions of economies to be considered as a single approach
- let everyone have an opinion in all three economies
- to protect the group from external pressures and stakeholders
- reward the team for the overall result
- to establish an environment of trust and teamwork *(appropriate seminars: Team Building, Six Thinking Hats του de Bono, Conflict Management, Costing etc)*

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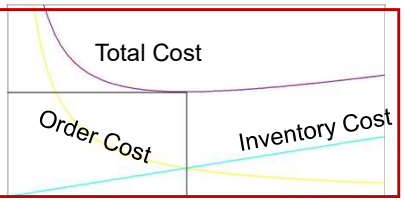
EOQ model

The objective of the EOQ model is to determine **the economic order quantity.**
In the model, two major expense categories are included. In particular:

- The order costs, is the order cost per order per article multiplied by the number of orders per year
- The cost of inventory, is the total inventory cost is the cost to store a product multiplied by the average stock and the time.

$$Q_0 = \sqrt{\frac{2.D.C_b}{C_v}}$$

With:
D = annual demand
Cb = order cost per order
Cv = inventory cost per product



The ordering of large orders has the advantage that the delivery cost (this is a fixed costs) can be divided over a larger number of ordered units, but has the disadvantage that large quantities are kept in stock, which brings greater cost of stock keeping with it.

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How Purchases Affect Supply Chain Cost

1. **Order cost**
2. **Inventory cost**
3. **Warehouse operating cost**
4. **Economic order quantity(EOQ)**
5. **Days payable outstanding (DPO)**
6. **Delivery schedule**

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Days payable outstanding (DPO)

It is the ratio of payables to suppliers divided by the average daily cost of sales.

Days Payables Outstanding = Accounts Payable/(Cost of Sales/360)

Example:

A multistore had a sales cost of 10 mE the last year, while another 7 mE debt is appearing on the balance sheet, to suppliers. Therefore the company's DPOs during this year are:

DPO this year = 7,000,000/(10,000,000/360) = 252 days

In the previous year the company had a cost of 6 mE sold while in the balance sheet it showed 4 mE payable. The DROs were:

DPO last year = $4,000,000/($6,000,000/360) = 240 days

The increase in DPOs shows that the company paid its suppliers later than last year.

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High or low DPO

The Payable Accounts (A / P) appear in the Balance Sheet on the Liabilities side and belong to the Short-Term Liabilities to be paid within the following months.

DPO Reduction: Indicates that available funds are used and therefore the company's working capital is reduced
(working capital = Current Assets - Current Liabilities)

If the DPOs are too low, it means that **the company is not using its available resources efficiently,** because it directs them to early supplier payments and misses the opportunity to invest them in sales growth.

DPO Increase: Indicates that a source of cash is being created because the company pays later and therefore does not use cash so quickly.
If the DPOs are too high, the company may soon find itself **unable to find cash and unable to repay its suppliers.**

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4. PROCUREMENT PROCEDURES

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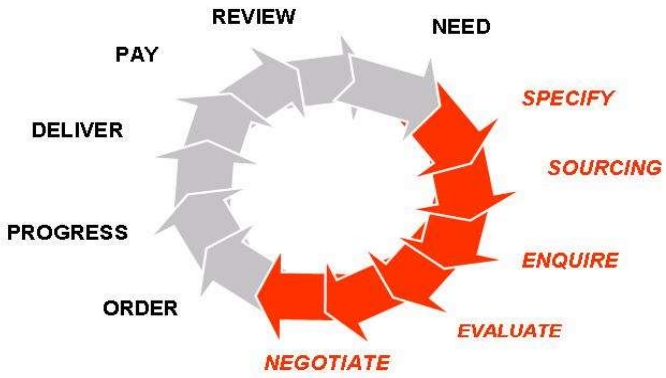
How Procurement works



For Procurement to be effective, the Procurement Department will need to be involved with procuring the goods and services at a very early stage.

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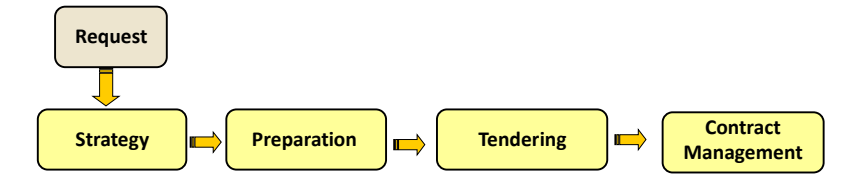
Procurement Procedure



Strategy	Preparation	Tendering	Contract Management
- Tender Method - Number of Contractors - Contract Duration - Work team - Timetable - Budget	- RFI, RFP - Specifications - Value engineering - Vendor selection - Bid evaluation criteria - Terms of the Tender Notice	- Tender Notice Announcement and Invitation - Technical Bid Opening - Financial Bid Opening - Opening Committee suggestion - Negotiations - Approval	- Contract signing - Warranties - Claims management - KPIs check - Payments - Lessons Learned

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Coordination of a Procurement Project

SCOPE:	**BUDGET:**
GOALS: 1. 2. 3.	**FINANCIAL GOAL:**
METHODOLOGY:	**TIMETABLE:** • Request: • Specifications: • Market research: • Tender Notice: • Bids: • Evaluation: • Decision: • Notarization: • Project delivery:
WORK TEAM: • Project Manager: • Specifications: • Market research: • Team members:	
RISKS:	**OPPORTUNITIES:**
APPROVALS: **Project Mgr:** **Head of Procurement:** **Managing Director:**	

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Example: Terms of Reference: "Structures Sourcing Project"

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PHILOSOPHY:
Develop and implement a procurement process for the supply, transport and installation of Retail structures, (canopies, shops and car wash buildings), with a cost efficient "TCO" solution for the sourcing of components for the Retail network of new and existing sites.

OBJECTIVES:
- Consolidate BP's European demand for structures on NB, R&R, dealer and maintenance projects
- Standardise, where practical, on European design and performance requirements
- Create a competitive dynamic in the market place through the consolidation and standardisation of the BP structure requirements
- Deliver a cost efficient and practical solution for the procurement of structures

APPROACH:
ISSP process with DSP's, Gatekeepers, milestones and support
- Appraise stage will review market intelligence, cost of ownership, risk analysis, demand plan, forecast savings and practicality of implementation
- Select stage will identify sourcing and strategies, quantify the risk assessment and refine demand forecasts
- Define stage will develop supplier selection criteria, propose approach to market and prepare required documents
- Execute stage will be approach to market, evaluation, communication plans and award
- Operate stage will require working reviews of supplier and buyer performance and development of learning and lessons learnt to deliver operational excellence

SCOPE:
All service station structures requirements for NB, R&R programmes in Europe. The objective is to implement 3 year agreement for the sourcing of this requirement. The 3 year spend across Europe for this commodity is estimated to be ca $ 49 Million based on current Retail investment strategy information.

RESOURCES & TIMING
- Project leader: Laurie Burn - Procurement
- Appraise stage to be completed by Dec 23rd 04
- Select stage target is 15 Jan 05
- Define stage target is 31 Jan 05
- Execute stage target is 28 Feb 05
- Operate stage target is 31 March 05

MEMBERSHIP:
Gatekeeper for all stages: Jack Allard
Core Team: Laurie Burn, Soner Keskinel, Muhib Ali.
Extended Team: Greg Covelli, Richard Standring, Bas Van Gelderen, Elena Filippova, Dirk Zeller, Wilhelm Lang, Harris Xanthopoulos, Antonio Camarao, Pawel Pilat

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The purpose of Specifications

- to ensure that Bidders will offer the **product that is needed**
- to have the exact same **terms and conditions** between the Bidders
- for all participants to **understand** equally the auctioned equipment or service
- to be **evaluated** during product's usage and in case of any malfunction if product meets the specifications

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Specification Risks

Risks from **overdetailed** specifications

- They can be considered "photographic" in favor of a specific product or supplier
- They may exclude certain innovative products or suppliers that we would not like to exclude
- May increase bid prices to incorporate upgrade costs

Risks from broadly **general specifications**

- There is no measure of comparison
- Difficulty in comparison and evaluation
- Products with old level of technology and low requirements can be offered

The appropriate level of specifications must be selected, depending on the scope of the tender, the offer, the level of technology, the type of product, etc.

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Value Management – Value Engineering

Value Management

These are techniques that can be used to ensure that the product or service provides the best value for money to the person concerned.

Value management is applicable to the scope, performance, timing.

Value Engineering

It is the revision of the specifications and their critical examination in order to serve the purpose (fit for purpose) and to reduce the cost through innovative techniques and materials and by avoiding unnecessary specifications.

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Value Engineering

In order to find the unnecessary specifications of products or services that cost without adding value as perceived by the customer, the following questions can be asked:

- Could it be cancelled?
- Could the material be replaced by another of a standard specification?
- Could its dimensions be reduced?
- Could its weight be reduced?
- Could any product treatment be deleted as unnecessary?
- Is the purchase more profitable than building the product or vice versa?
- Could packaging costs be reduced?
- Could its maintenance be simplified?
- Could …..

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Budget

It is crucial:

1. For the financial approval of the purchase
2. To reject very low and very high offers

Cost analysis:

1. Equipment
2. Transportation of equipment
3. Equipment installation
   - 3.1. Labor costs
   - 3.2. Machinery (trucks, cranes, scaffolding etc)
   - 3.3. Staff transportation cost
   - 3.4 Material
   - 3.5. General-administratively costs(overheads)
   - 3.6. Contracting benefit

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Invitations to suppliers

Request for Information (RFI)

Suppliers are asked for information about their company in order to be evaluated (infrastructure, financial data, client's lists, certifications, etc.). It can be done through public press announcement, on the website, etc.

Request for Proposal (RFP)

Suppliers are asked to submit their proposal in order to meet the request (technology, specifications, available systems, alternatives, etc.)

Request for Quotation (RFQ)

Suppliers are asked for their financial offer for the requested product or service as described in the tender dossier

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RFP – Win Supplier's knowhow

Before writing and sending the tender package it is useful to know what products and technologies are available or are under development in the market.

Working close with the manufacturers and competitors, the main suppliers are aware of technological developments.

In such way you can **incorporate the latest technologies in your specifications** and create competition among bidders while if you do not, they can be offered as options so you will have to negotiate without the pressure of competition.

If there is a possibility that this invitation may raise any **ethical or legal issue**, some companies are announcing a **design tender(consultancy)** and participants are being paid for their technical solutions as proposals. This information now passes into the ownership of the company while the winner of the tender has a better chance of getting the project.

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Pre-evaluation of suppliers

PROCEDURE

1. Definition of criteria
2. Weighting factor of the criteria
3. Vendor rating
4. Classification
5. Approval by Senior Management
6. Invitation

TYPES OF CRITERIA

- General
- Financial
- Technical
- Security – Environment
- ……

The Criteria as well as the Weighting factors are determined depending on the type of material or service and the strategy of the Organization.

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Example: General criteria

General Company Information max: 13 points	6.10 2% business with BP	6.12 3% customers reference	6.16 2% Market sectors	6.17 3% Programme roll outs	6.20 3% Countries	Pts	Rank
Prolicht	8	9	8	8	8	10.70	1
ECCE (Kubald)	8	6	8	8	8	9.80	2
Klostermann	8	9	6	6	8	9.70	3
Megaplas	8	9	8	8	4	9.50	4
Westiform	8	9	8	6	6	9.50	4
Visotec	0	9	8	8	8	9.10	6
Sistem Reklam	8	9	8	4	6	8.90	7
Gama Reklam	8	9	8	4	6	8.90	8
Sint group	0	9	8	8	6	8.50	9
Nova Reklam	8	6	4	8	6	8.40	10
Stergiopoulos	8	9	8	6	2	8.30	11
Apamilux	6	9	8	4	4	7.90	12
Setech UK	8	7	6	4	6	7.90	13
Neonstar	6	8	2	6	6	7.60	14
KDH Werbung	6	6	4	4	8	7.40	15
Roura Cevasa	0	9	8	4	6	7.30	16
Blaze Signs	0	8	8	8	2	7.00	17
World Image	0	9	2	8	4	6.70	18
Say Reklam	4	9	0	4	6	6.50	18
Armada	0	6	0	8	6	6.00	20
T&I	8	6	6	0	4	5.80	21
Active Signs	0	4	2	6	4	4.60	22
Wood & Wood	0	5	6	0	4	3.90	23

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Example: Technical criteria

Technical Information max: 35 points	9.3 6% Logistics	9.4 6% Production	9.5 6% Installation	9.6 6% Design & Engineering	9.7 5% Customer service	9.8 6% Project management	Pts	Rank
ECCE	8	8	8	8	9	9	29.10	1
Gama Reklam	8	8	7	8	8	8	27.40	2
Westiform	8	8	7	7	9	8	27.30	3
Prolicht	8	8	8	6	7	9	26.90	4
World Image	8	8	6	7	7	9	26.30	5
Blaze Signs	7	8	7	7	8	8	26.20	6
Megaplas	6	8	7	8	6	9	25.80	7
Roura Cevasa	8	8	6	7	7	7	25.10	8
Sint group	7	7	7	6	8	8	25.00	9
Apamilux	6	8	7	6	7	8	24.50	10
Setech UK	6	6	8	6	8	8	24.40	11
Visotec	5	8	5	7	8	9	24.40	12
Stergiopoulos	7	8	6	5	7	8	23.90	13
Klostermann	5	8	6	6	8	8	23.80	14
KDH Werbung	7	7	6	5	8	7	23.20	15
Sistem Reklam	5	8	8	5	8	6	23.20	16
Nova Reklam	8	6	6	5	7	7	22.70	17
Armada	8	7	5	5	6	7	22.20	18
Active Signs	6	7	7	5	7	6	22.10	19
Wood & Wood	6	7	7	5	7	6	22.10	20
Say Reklam	5	8	5	5	6	7	21.00	21
Neonstar	4	6	6	4	5	8	19.30	22
T&I	0	6	6	5	4	0	12.20	23

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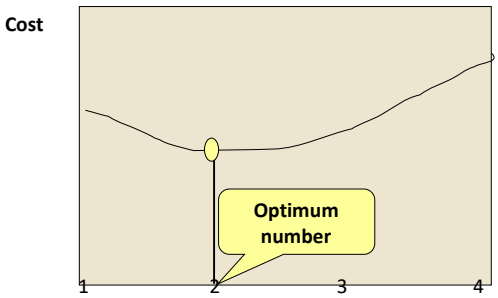
Optimal Number of Contractors

- The number of contractors must be **pre-agreed** by the Organization before the announcement of the tender.
- This number is related to **market conditions, type of product, capabilities and size of suppliers, maturity of organizations for partnerships, criticality of equipment, ability for the project to be divided, the possibility of maintenance by third parties**, etc.
- The final cost must be considered the total Life Cycle Cost, internal and external



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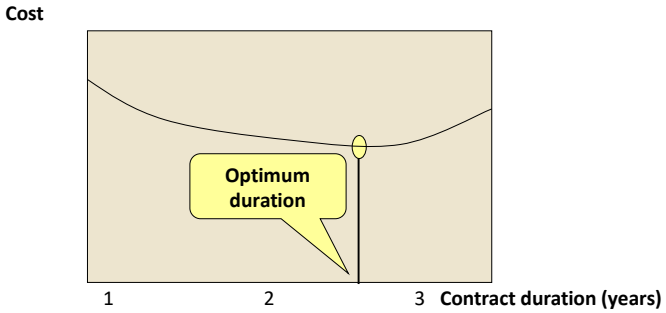
Optimal Contract Duration

The duration of the contract depends on various factors such as:

- Whether we expect better prices due to longer duration
- Whether we predict an increase or decrease in prices in the future
- Whether we anticipate the production of innovative products or not in the future

Long-term contracts should predict the terms of automatic adjustment when cost factors change (price of iron, fuel, labor, etc.)



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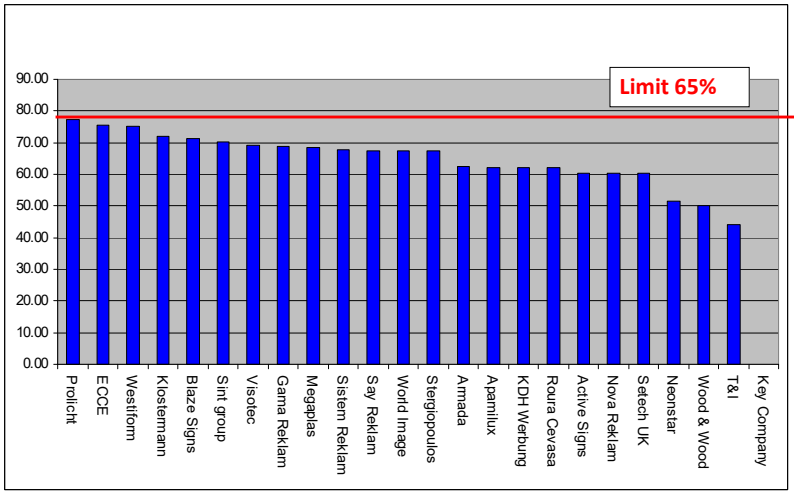
Example: Classification with overall criteria



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Responsibility assignment– RACI Chart

Project	Responsible	Accountable	Consulted	Informed
Budget verification	BU	BU	Fin	Proc
Specifications	Engin	BU	HSEQ	Proc
Terms	Proc	Proc	Legal, Engin	BU
Commercial evaluation criteria	Proc	Proc	BU, Fin, Engin	
Technical evaluation criteria	Engin	BU	HSEQ, Proc	
Technical Bid evaluation	Engin	BU	HSEQ, Proc	Proc
Financial Bid evaluation	Proc	Proc	BU	Engin
Proposal for Award	Proc	BU	Engin, HSEQ	
Supplier Audit	Proc	Proc	Engin, Fin	

R : The one who does the assignment **A : The one who is accountable to the Board of Directors**

C : His opinion must be considered **I : He must be informed of the decision**

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Tender documentation package

The tender documentation package must include:

- Invitation to Bid
- Instructions to bidders

  (type, place, time of tender, duration of validity of the offer, documenation for completion, etc.)

  - Terms of contract

  (supplier must agree with them or reject them)

  - Contractor selection method

  (best price, best offer, rejection due to unreasonably low price, etc)

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Best Price or Best Offer?

The best price method is applied when:

1. A very good pre-evaluation of suppliers is already in place and there is confidence that everyone passes the technical and commercial requirements
2. When the product or services are widely offered
3. When the cost savings goal is primary
4. When there is difficulty, lack of data or time pressure that does not allow the technical (commercial) evaluation
5. When after the purchase there are no significant risks for possible low performance of the supplier

   (eg building materials, scrap sale, space cleaning etc)

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Impact of special requirements

- **Rejection due to unreasonably low price**

Fruitful discussion with the prospective supplier to prove whether or not it is "unjustifiable". It helps to focus on realistic offers and discourage "opportunistic" suppliers. Not recommended when we expect a few suppliers to offer

- **Assignment of a big part of the Project to a bidder**

When the project is to be awarded to several suppliers, most of it is awarded to the one who gave the biggest discount. This method gives increased motivation for big discounts. On the contrary, the method by which the best bidders share the work equally is discouraging for big discounts.

- **Rejection due to deviation from standard requirements**

In general, too many formal terms should not be included as reasons for rejection, because on the one hand they cause objections from the other bidders, on the other hand there is a risk that a competent supplier will be rejected. Such defaults may be requested to be clarified by the Candidate.

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Calculation of a more advantageous offer

EXAMPLE

TECHNICAL EVALUATION RATE 1 - 5				RATE OF TECHNICAL OFFER
COMPANY	PARAMETER 1	PARAMETER 2	PARAMETER 3	
A	2,00	3,00	5,00	3,10
B	5,00	3,00	2,00	3,40
Γ	3,00	5,00	4,00	**4,20**
WEIGHTING FACTORS	30,0%	50,0%	20,0%	

ΟΙΚΟΝΟΜΙΚΗ ΑΞΙΟΛΟΓΗΣΗ ΒΑΘΜΟΣ 1 - 5		
COMPANY	TECHNICAL OFFER	RATE OF FINANCIAL OFFER
A	50.000,00	2,00
B	20.000,00	**5,00**
Γ	40.000,00	2,50

TOTAL RANKING	
COMPANY	TOTAL CALCULATION
A	2,33
B	**4,52**
Γ	3,01

WEIGHTING FACTORS	TECHNICAL	30,0%
	FINANCIAL	70,0%

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Post tender negotiations – PTN

They are usually **not allowed** in many companies and in public tenders. They are used by large **private and multinational companies**. There is a controversy whether they should be conducted, because suppliers probably do not give the best price if they know that PTN will follow.

Negotiation is a very sensitive process because the customer-supplier relationship must balance on a **win-win line and not break.**

The negotiations must be conducted by **experienced executives** of the two sides who will have started working together before the tender and will continue after.

The negotiator on the client side must stimulate the supplier's desire to **win the tender** and at the same time keep the **price expectations low.**

They are usually conducted by a Committee.

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Online tendering process- 1

e-tender

- Web enabled systems support all procurement procedures
- They keep supplier databases
- They provide transparency to all stakeholders
- Suitable for medium and large competitions (> 50,000 EUR)
- They ensure the integrity of the process
- Based on statistics, they have a 20% success of price reduction compared to budget
- Skepticism whether buyers should see the initial offers of suppliers

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Online tendering process- 2

e-tender

- They support tenders(reverse auctions) where Buyers specify a maximum price and Sellers try to bid on that
- They support bidding tenders (Datch auctions) where Sellers set a minimum price and Buyers try to bid on that
- **Online Purchase Joint Ventures:** Many buyers join together their purchasing power to achieve the best prices

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Online tendering process- 3

e-tender

They include procedures such as:

- Advertising offers
- Online bidding
- Online orders
- Online procurement through third parties
- E-mail between buyers and sellers
- Contract Management
- Search for suppliers

e-sourcing : Search for products, suppliers

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Online tendering process- 4

e-tender

DISCUSSION:

What are the benefits of online auctions? -

-
-
-
-
-

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Contents of Contracts

A Contract (mainly for projects) should include:

- **General Terms & Conditions** (limits of liability, deviations, expiration etc)
- **Subject** (Services, operating conditions, delivery time, delivery protocol, etc.)
- **Specifications** (technical specifications, performance standards, manuals, drawings, etc.)
- **Payment** (costing formulas, payment schedule, motivations, etc.)
- **HSSEQ** (safety, environmental, hygiene and quality standards)
- **Customer facilities** (services, information, workplaces, access to computers, etc.)
- **Contract Management** (representatives, reports, complaints etc)

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Public Private Partnerships – PPP

Law 3389/05

They refer to Infrastructure construction. The individual undertakes the design, financing, construction, operation, maintenance and operation of the property

Advantages for the Public sector:

Finding financial resources, avoiding public lending, improving budgetary indicators, pairing cost-effectiveness, taking risks from individuals, possibility and financial gain, cost shrink, improved build quality, faster project completion and utilization, be familiar with private entrepreneurship rules, etc.

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Public Private Partnerships – PPP

There are many PPP models depending on the combination of actions and responsibilities undertaken by PPP for example BBO, BOOT, BLOT, MOO etc

B : Buy
B : Build
D : Design
D : Develop
F : Finance
L : Lease
M : Maintain
M : Manage
M : Modernize
O : Own
O : Operate
R : Rent
R : Rehabilitate
T : Transfer

BBO: Buy-Build-Operate

Purchase of real estate, construction of facilities and their operation

BOOT: Build-Own-Operate-Transfer

Construction of facilities, ownership of them, operation and in the end transfer them to Public sector

BLOT: Build-Lease-Operate-Transfer

Construction of facilities, financial leasing to the Public sector, their operation and in the end transfer them to the Public sector

MOO: Modernize-Own-Operate

Renovation, ownership, operation

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5. SUPPLIER FEE SCHEMES

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Price setting

A fair and reasonable price is one that benefits both parties. It is shaped by factors such as:

- The complexity of the item/service
- The urgency of the request
- The duration of the contract and the size of the order
- The clarity of the specifications
- The degree of competition in the market
- Business risk assessment
- The actual production cost

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1. Fixed Cost

A fixed price is agreed which contains the cost of materials, labor, other costs, general costs, supplier profit.

Advantages:

- **there are no fluctuations in the cost**
- **simple financial monitoring**

Disadvantages:

- **does not provide space for improvements and changes during project execution**
- **does not provide motivations for cost savings**

Applicable:

- **when the specifications are clear**
- **when the resources needed can be predicted**

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2. Fixed Cost with price adjustments

A fixed initial price is agreed and adjusted in a predetermined manner when cost factors change.

Advantages:

- The supplier does not include in the cost the possible increases
- They protect both sides from any risk

Disadvantages:

- It requires constant monitoring and knowledge of the market by the buyer
- It does not provide motivations for cost savings

Applicable:

- When product prices change (eg fuel)

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2. Fixed Cost with price adjustments

EXAMPLE:
For iron constructions a price (E / kg) is agreed with price adjustment. An adjustment is agreed when iron prices (Y) and labor costs (E) increase. An initial price To is agreed while the labor cost contributes to 30% and the material to 35% of the cost.

The calculation of the Ti value at time (i) is defined with the formula:

$$Ti = To\ (30\% + 35\% * Yi/Yo + 30\% * Ei/Eo)$$

- Cost factor participation rates must be recalculated when they change significantly, in accordance with a procedure predicted already in the contract
- To reduce bureaucracy and approvals it can be agreed that the price will be adjusted only when it fluctuates more than +/- a%.

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3. Fixed Cost with price negotiation

A fixed price that is valid for an initial period is agreed and a price renegotiation is foreseen for the continuation.

Advantages:

- The supplier does not include the possible future increases in the cost
- They protect both sides from any risk

Disadvantages:

- It requires constant monitoring and knowledge of the market by the buyer

Applicable:

- When product prices are changing
- When order quantities change significantly and provide opportunities for price improvements

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4. Cost plus fixed fee

A fixed price list is agreed and the final cost is obtained by measuring and applying the unit prices of the price list. A percentage is also agreed upon for the supplier's fee.

Advantages:

- It is applied in cases where the object of the project is not exactly quantified in advance

Disadvantages:

- Risk of errors in measurements
- Supplier tendencies to expand the item or expand the contingency, lack of incentive to reduce costs
- Complex financial monitoring

Applicable:

- When product prices change (eg fuel)
- When the product is technologically evolving
- When the works have a high level of risk (eg shipwreck lifting)

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5. Total Cost installed plus bonus/malus

A target budget is agreed. For the deviation (positive or negative) from the target, a bonus-malus percentage is agreed with limited maximum values. All the above enter the tender process for an offer.

Advantages:

- It motivates the supplier to reduce the final cost
- It parallels the goals of both sides
- The two sides work closely together for improvements

Disadvantages:

- It is necessary to predetermine which deviations will count in the calculation of the bonus / malus
- Complex negotiations

Applicable:

- When tasks are not easy to predict
- When we want to speed up the execution time we give motivation to reduce the time

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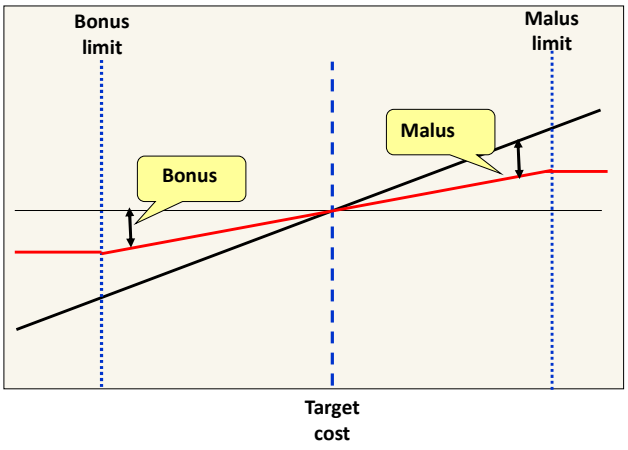
5.a. Total Cost installed plus bonus/malus



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6. Reimbursable Cost plus incentivized fee

All costs are issued in the customer's name and paid by him (reimbursable) without containing overheads and supplier profit. The supplier has "open books" for these costs and are subject to audit. A management team cost, a cost for the overheads and a profit for the supplier are agreed, which is also related to the achievement of specific goals (budget, time, etc.)

Advantages:

- It motivates the supplier to reduce the final cost
- It parallels the goals of both sides
- The two sides work closely together for improvements

Disadvantages:

- Significant involvement of the customer and the supplier in the contract administration and management

Εφαρμόζεται:

- In Alliances open book contracts

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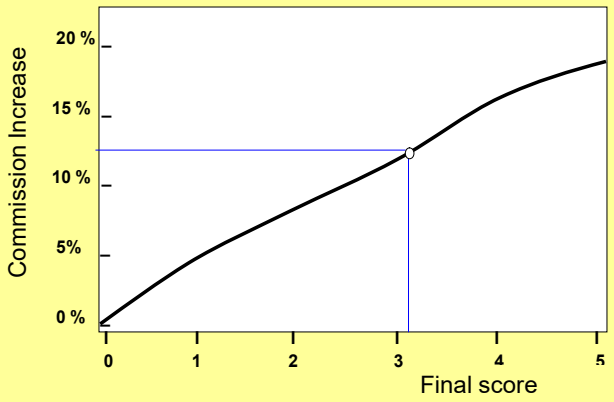
6. Correlation of payment with performance

Example for a contract with a Transport company



The score is derived from the Performance scorecard

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PAYMENT BASED ON SCORECARD

example

A/A	GOALS	Weight. Factors	Score justification	SCORE	Final Score
1	Transp. cost reduction	40%	Initiatives for cost reduction 0 - 10000 E : 1 10001 - 20000 E : 2 20001 - 25000 E : 3 25001 - 30000 E : 4 30000 - E : 5	3	1,2
2	Accident reduction	20%	Accident with death or injury 0 ατυχ : 5 1 ατυχ : 4 2 - 3 ατυχ : 3 4 - 5 ατυχ : 2 > 6 ατυχ : 0	4	0,8
3	Return reduction	15%	Returns % x delivery capacity < 1% 5 1% .....2% 4 2% .....3% 3 3% .....5% 2 5% .....7% 1 > 7% 0	3	0,45
4	Customer's complaint reduction	15%	Complaint % x number of deliveries < 1% 5 1% .....2% 4 2% .....3% 3 3% .....5% 2 5% .....7% 1 > 7% 0	2	0,3
5	Loss reduction	10%	Losses in MT 0 5 0 - 2 MT 4 2 - 4 MT 3 4 - 7 MT 2 7 - 10 MT 1 > 10 MT 0	4	0,4
	Total	100%			3,15

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6. VENDOR MANAGEMENT

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Suppliers Sourcing

- Previous tenders
- Suppliers of other companies or similar facilities
- We ask our suppliers of similar items
- Internet
- Relevant Magazines
- Participants in industry exhibitions
- E-sourcing / e-tendering companies (eg Cosmo-one)
- Conferences, Company Associations, etc
- …….
- ……

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Approved supplier List

Why you need it:

- For recurring supplies
- To have long-term relationships with suppliers
- To have an evaluation and qualification system
- In order not to be pressured by new suppliers
- To have competition to enter and stay on the list
- To keep the knowledge and the know-how in the suppliers
- ……

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Approved supplier List

How the list is created:

- Finding suppliers from various sources
- Invitation for information (infrastructure, list with clients, projects, staff, certifications, etc.)
- Evaluation based on established criteria
- Approval by Senior Management
- Update with a similar procedure

How to delete a supplier:

- Failure to comply with a contractual term
- A written warning is pre-submitted
- With the approval of the same or higher-level executive that entered the supplier in the list
- Inform the supplier about the reasons for the cancellation

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Supplier selection criteria

INFRASTRUCTURE -CAPACITY - Facilities - Machinery - Vehicles - Staff - …	**ECONOMICS** - Balance sheets of recent years - Creditworthiness - …
MANAGEMENT - Executives - Procedures - ISO, certificates - Quality control - Use of e-tender - …	**CLIENTS** - Reputation - Turnover - Client list - …

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Sources for suppliers' information retrieval

- **Web page**
- **Prospectus**
- **Newspapers**
- **Industry magazines**
- **Stock market**
- **Business catalogues**
- **Chambers**
- **Certification providers**
- **Credit audit companies**
- **Other buyers**
- **Competitors**
- **Questionnaires**
- **Visits**

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Key Performance Indicators (KPIs)

- They are placed in special contracts of great importance
- They serve the customer's strategy
- Agreed with the supplier
- Included in the contract
- They are produced monthly by the customer and / or the supplier
- Linked to a fee (bonus - malus)
- They ensure transparency
- Discrepancies are interpreted and improvement decisions are made

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Exercise: Selection of KPIs

Select the four (4) most important of the following KPIs that could be included in a crane maintenance contract with Thessaloniki Port Authority:

1. Number of failures per month
2. MO hours off (not operational)
3. MO intervention response time
4. MO time of visit
5. % within SLA hours off (not operational)
6. % within SLA intervention response time
7. % within SLA visit time
8. % of recurrent failures
9. …

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Service Level Agreement (SLA)

Specifies the levels of service that are considered unacceptable, acceptable or exceptional.

Example for maintenance contract:

a. Hours and days of support

b. Response time

c. Level of spare parts in stock

d. Minimum number of maintenance techicians

e. …… ..

f……..

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Informing suppliers upon the tender results

- What do we say to the person selected as a contractor:
- What not to say to the person selected as a contractor:
- What do we say to those who were not selected:
- What we do not say to those who were not selected:

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Cooperation with suppliers

	TRADITIONAL	MODERN
Access to information	Limited, only those needed	"Open book" at supplier costs
Pursuit for profit	Win – lose	Win – win
Payment	Fixed cost	Cost plus, incentivized fee
Goal	Cost minimization Separate goals	Maximize value Common goals
Frequency of meetings	Small	Big
Relationships	Dispute	Cooperation
Who evaluates	The customer evaluates the supplier	The customer evaluates the supplier and via versa
Dispute Resolution	Through courts	Harmonious
Duration	Short	Long term

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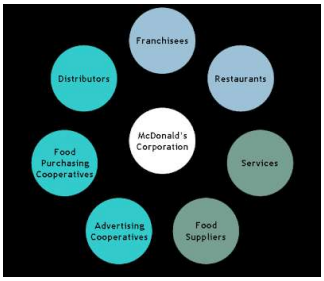
Extended Enterprise

This is a concept when a company does not operate in isolation but in cooperation with other companies because her success depends on those close business relationships.

When the Suppliers become partners of the company then the company gains competitive advantages from the suppliers.

This company represents a broader organization that includes company-affiliated Customers, Suppliers, Distributors, Staff, and anyone who formally or informally collaborates in the design, development and promotion of the product to the final consumer.



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Recommendations for vendor management- 1

- Learn from your supplier the market news and the strategy of your competitors
- Learn from your supplier about products, processes, technology
- Treat him as you would like your customers to treat you
- Advise him on how he could develop
- Always think how to maximize the mutual benefit for your company and for him
- Do not pass on information to other suppliers-competitors

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Recommendations for vendor management - 2

- Inform him about immediate and short-term market developments
- To fulfill the obligations of your side (orders, payments, etc.)
- Ensure to simplify the bureaucracy and spare him from unnecessary costs
- To pursue open book approach
- To pursue a policy of saving sharing και risk sharing

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7. CODE OF ETHICS IN PROCUREMENT

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Cooperation with suppliers

Basic Rules to follow:

- Selection with creditable criteria, without conflicts of interest, gifts and hospitality or other kind of favor that may jeopardize the choice of supplier
- Seek cooperation with suppliers who comply with the law and act in a consistent manner with your Company's commitment as set out in the Code of Conduct
- Suppliers understanding by of your Company's requirement to comply with legislation and ethical principles
- Alertness and reference any action of the suppliers that is incompatible with the requirements of your Company as they are mentioned in the Code of Ethics to your senior management
- No provision of confidential business information from one supplier (eg bid details) to another

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Cooperation with suppliers

We use the following simple method to check if our attitude towards suppliers is correct:

We wonder:

«… how would I feel if I saw what I discussed or wrote to a supplierwere published in newspapers tomorrow?"

«… how would my Employer react if he/her became aware of this behavior?"

«… if I was in the position of supplier or supplier's competitor, would I like to be treated the same way?"

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8. NEGOTIATIONS

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Negotiation tactics

	Strengths	Weak points
Ours	**1** - We are their best customer - We have tenders for preparation	**2** - We need the contract - No one else can meet all our demand - We must definitely keep them as second choice suppliers
Theirs	3 - They have a patent - They have no competitors - They have sold their production	4 - Future price reduction - Competitors are preparing to enter the market - Customer's Complaints

EMPHASIZE

WITHHOLD

UNDERESTIMATE

EXPOSE

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The dynamics of Negotiations

Negotiation style:

The tough negotiator wins the soft one!

SOFT:
Focuses on building and maintaining the relationship
- Aims at the agreement
- Avoids conflicts
- Trusts others
- Makes offers

HARD:
- Sets agreement as a condition for the relationship
- Aims to win
- Pushes the lines
- Does not trust others
- Sets threats

If you do not want to get into the dilemma of choosing between Soft and Hard style, change the discussion from the level of negotiating the scope of the Contract to the level of negotiating the Process to be followed.

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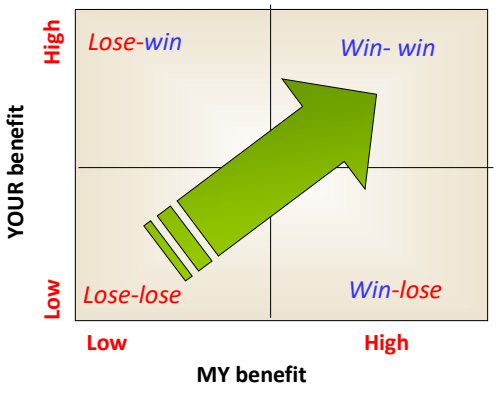
Negotiation tactics

1. Separate the problem from the people
2. Focus on the interests, not the positions
3. Insist on the use of objective criteria
4. Discover options for mutual benefit



In effective negotiation, each side tries to shift the negotiation from a win-lose or lose-win to a win-win situation by expanding and spreading the material under negotiation.

Examples:

1. .....
2. .....

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Negotiation process

Before Negotiating	Defining a Negotiation Strategy	Negotiating	After Negotiating
1. Study marketing and procurement strategy	1. Set goals	1. Approaches	1. Conclusions and agreements
2. Study the market analysis	2. Make the negotiation plan	2. Tactics	2. Notarization
3. Evaluate the dynamics of competition	3. Be Prepared	3. "Tricks"	3. Lessons for the future
4. Check out historical information	4. Ensure agreement of stakeholders	4. Cultural differences	
5. Confirm the business requirements			

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Checklist for negotiation

1. Review the relevant Strategies: Business Strategy, Market Sector Strategy, Commodity Strategy or Sourcing Strategy
2. Stakeholders
   - Have all the relevant stakeholders been engaged?
   - Do they agree with the negotiation strategy?
3. Have all the business requirements (specs and technical aspects) been validated, are they well defined?
4. Have the business drivers been identified and are they aligned with the MSS?
5. Market Analysis
   - Are the Market Drivers understood and are they aligned to the MSS/SS?
   - Are the trends in the industry, the supplier and the product/service market well understood?
   - Has TCO and/or Life Cycle Costs been reviewed?
6. Has the commodity been fully segmented *this will drive the approach and level of effort?
7. Based on the segmentation what are the Value Levers and tactics
   - What are the Value Levers being used?
   - What are the tactics being used?
8. Contracts:
   - Is there a contract in place (in R&M or in the rest of BP in country or global agreement)?
   - If not, has the standard contract been agreed? Are there any outstanding Terms and Conditions to be negotiated (from RFP)?
   - Have the non-negotiable Terms and Conditions been identified?
   - Have any Intellectual Property, Patent or Royalty clauses been agreed?
9. SPMM
   - Are there KPIs currently being used? Will these KPIs change?
   - If there are no KPIs in place, have they been discussed and agreed with the supplier?
   - How do they relate to the overall SPMM requirements?
   - Historical performance?
10. Document, Document, Document

This is a dynamic process, you may want to revisit your statement of objectives and options as your plan progresses.

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Stages in Negotiations and suggestions on managing the negotiation

Phase	Tasks
Preparing & Planning	1. See previous Slides
Conditioning	1. start to condition supplier early 2. make a strong impression 3. conduct yourself professionally, ethically and with confidence
Opening	1. check who's who on the supplier's team - what are their roles 2. be clear about your intent - drive the agenda 3. adopt a clear position - aim high 4. be prepared and ready to back up you position 5. question and listen carefully 6. summarise before moving on
Exploring	1. continue to seek more information 2. be persistent 3. control the process flow 4. test understanding 5. explore options 6. buy time to think before responding

Phase	Tasks
Testing & probing	1. keep your aim high 2. probe facts and articulate arguments 3. keep focused on important issues 4. resist pressure to switch subjects too soon - "park" them till later 5. look for bargaining positions 6. keep options open 7. clarify trade-offs - "what if….."
Persuading & trading	1. make openings for them to suggest 2. make your own proposals 3. encourage movement 4. don't close down too early 5. don't feel pressurised to break a deadlock 6. listen and watch for signals of movement 7. make concessions slowly and get a concession in return 8. keep a running score of the value/cost of concessions given/made 9. Summarise to ensure clear understanding
Closing	1. make sure you are satisfied with the balance of concessions before closing 2. playback all of the agreed points in detail 3. summarise the outcome and next steps 4. confirm everything in writing

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Some Suppliers' "tricks"

1. "The good and the bad":
   While one is yielding and supports your demands, the other argues with evidence that it is not possible
2. Generalities:

While you are looking for answers and commitments at specific points, the supplier escapes with vague promises and generalities

1. Delays:

While listening to all your comments and requests they do not respond but promise to look into it and come back

1. Changes in promises:

While they are promising something in your meeting, at later stage they suggest slight changes

How will you deal with these "tricks"?

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Case Study

The Company asks the Procurement Department to run a tender for the replacement of all electronic equipment (Computer, server, etc.). How would you handle the following procurement procedures?

1. **Scope of Tender:**
   What information would you ask from the Senior Management and the IT Department to understand the business strategy?

2. **Tender Strategy:**
   Tender Method, Number of Contractors, Contract Duration, Project Team, Schedule, Budget

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3. **RFP**
   Would you ask from your sizable suppliers to offer you technologically innovative solutions?

4. **What evaluation criteria would you propose for the bids and with what weighting factors?**

5. **Would you support the e-tender process?**

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6. What contract type would you suggest?

7. What method of financial offer and payment would you suggest?

8. What KPIs would you predict in the contract?

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9. Project Management in Procurement

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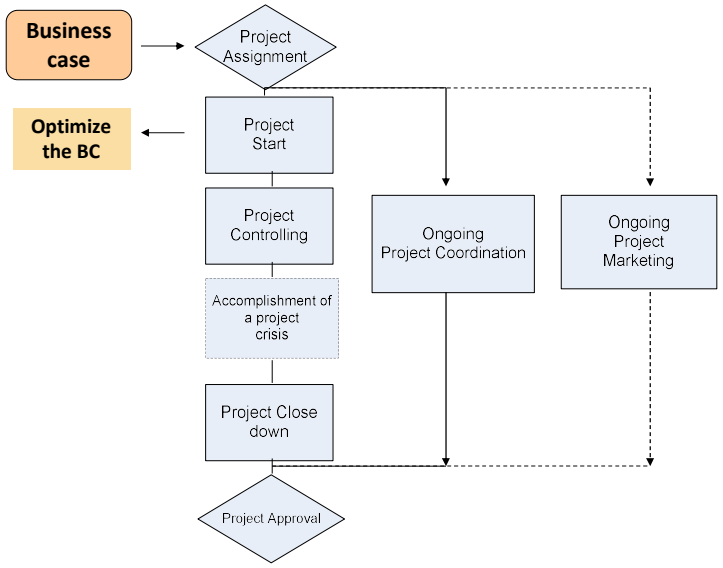
Project Management Process



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A.
1.1 Project Objectives (objectives, non-objectives)

<Project name> <Project no.>	PROJECT OBJECTIVES	
Type of objective	**Project objectives**	**Adjusted prroject objectives as of…**
objectives: • **Main objectives** • **Additional objectives**	•	•
Non-objectives	•	•

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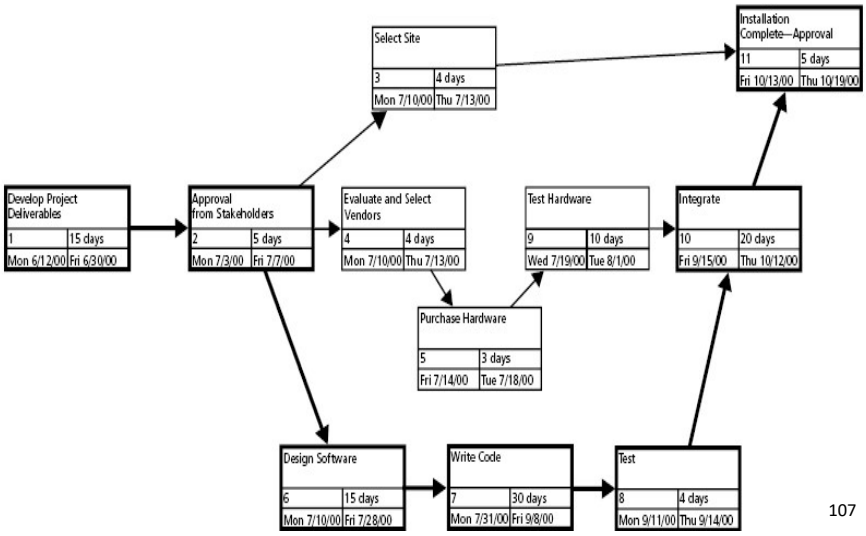
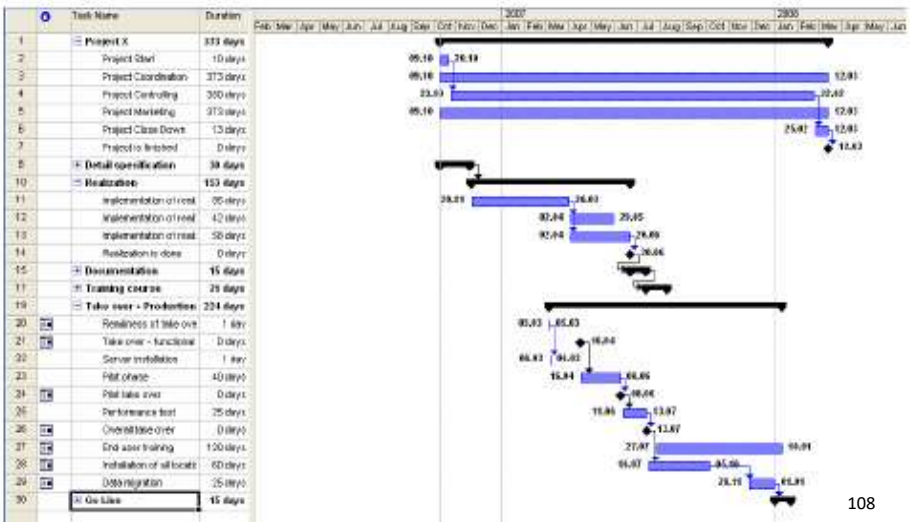
B. Work Breakdown Structure (WBS)



C. MS Project – Timetable



C. **Milestoneplan**

<Project name>
<Project no.>

MILESTONEPLAN

WBS-Code	Milestone	Plan date	Revised date	Actual date

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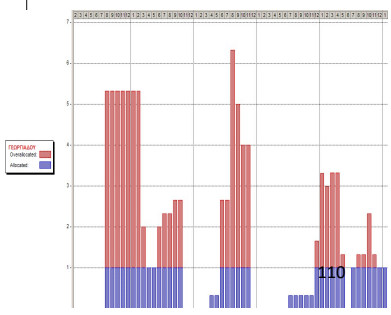
D. **Resource Plan**

<Project name>
<Project no.>

Resource Plan

WBS-Code	Phase/Work-package	Type of resource	Planned quantity (days)	Revised quantity (days)	Actual quantity (days)	Deviation (days)



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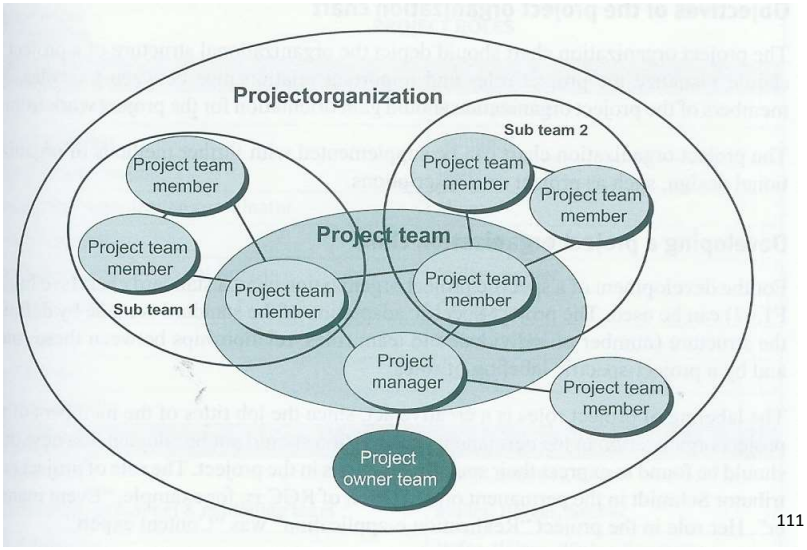
E. Project Organization – Work team



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10. SPECIAL KNOWLEDGE

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Procurement criteria

Product selection

- Price
- Safety and Hygiene
- Quality
- Packing
- ……

Suppliers Selection

- Production capacity
- Exclusivity
- Consistency of price lists
- Financial profil
- ……..

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How to organize the orders

- **Traditional ways**
- **Electronic order management**
- **Vendor managed inventory (DVI)**

- certified suppliers
- commitment agreements for stock adequacy
- access to the corporate system
- monitor the flow of goods
- place orders

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How to organize the receivals

- What is the Address of the recipients who do the quality control (responsibility)?
- Which Department has the responsibility (accountability) for quality control of receipts?
- How are they trained in quality control/check?
- What sampling methods are used?
- What forms (check lists) are used?
- How is the Procurement Department informed about the defective products?
- How defective products are managed?

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Transportation costs

- Routes over 300 km with full load / mounted or sliding vehicle: 1.1 - 1.3 E / KM (if returned load is applicable)
- Partial load in compliance with other loaders: 1.1- 1.3 E / KM X truck payload coverage rate (either by volume or by weight)
- In-city distributions depending on:
  - Route km,
  - number of deliveries,
  - landing time, etc.

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Transportation costs

- The cost is normally calculated from the formula:

K = FCF *** Hours of Route + ΣMK * KM Route**

Όπου : FCF = Fixed cost factor (E / h)
VCR = Variable Cost Ratio (E / KM)

FCF, VCR depend on purchase cost, age, vehicle consumption, payroll

- The commision is based on the above but is freely negotiable

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Storage

- Leads to operating costs reduction
- Brings balance between supply demand and smooth production process
- Inventory reduction (working capital - liquidity
- Reduction of storage spaces

- **ABC analysis**
  A : Fast moving (placed in shelves and near the exit)
  B : Normal moving
  C : Slow moving (placed in shelves and away from the exit)
  Dead stocks : Normally must be returned / sold

- **JIT (Just-in-time) method**
- Smaller orders but more frequent
- The products are received shortly before they are needed
- Very good demand forecasting and synchronization are required

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EXERCISE: Holistic(total) cost of supplies

When negotiating food shipment you have two options:

1. Receipt of 24 MT cargo with a value of 24,000 EUR, with a transfer cost of 500 EUR, losses due to expiration date, 5%,
2. Receipt in 3 monthly shipments of 8 MT, value of 1.1 EUR / kg, transportation cost for each shipment 250 EUR, losses due to expiration 1%. Possible losses due to 1% stock shortages

- The sale price is 2 EUR / kg.
- The cargo is paid in 2 months upon loading.
- The storage cost is 0.2 EUR/ MT / day.
- The demand is 8 MT / month..

Which case does the procurement department consider more feasible?

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