# Project Management

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## Project planning exercises

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# Exercise 1 – text

➢ **Enter "Duration" and "Predecessors" information respectively in rectangles 1 and 4 and rectangles 2, 3, 5, 6 and 7 in the picture on the next page so that the information is consistent with the sequence of tasks for two work packages shown in the network diagrams in the right part of the picture.**

(For practical purposes in this exercise, testing & debugging of a component are completed simultaneously, as shown in the 1st network diagram, and translation does not start until writing in French has been completed, as shown in the 2nd network diagram. Also note that no work is done during weekends.)

# Exercise 1 – picture

# Exercise 1 – solution (1)



| | Task Name | Duration | Resource Names | Predecessors | | 15 May '17 | | | | | | | 22 May '17 | | | 29 Ma |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | S | M | T | W | T | F | S | S | M | | |
| 1 | Component coding, testing & debugging | 6 days | | | 1 | | | | | | | | | | Network diagram | |
| 2 | Code & debug software component 1 | 5 days | Development engineer 1 | | | | | | | | | | | | Development engineer 1 | |
| 3 | Test software component 1 | 3 days | Test engineer 1 | 2SS+2 days | 2 | | | | | | | | | | Test engineer 1 | |
| 4 | Code & debug software component 2 | 6 days | Development engineer 2 | | | | | | | | | | | | Development engineer 2 | |
| 5 | Test software component 2 | 4 days | Test engineer 2 | 4SS+2 days | 3 | | | | | | | | | | Test engineer 2 | |
| 6 | | | | | | | | | | | | | | | | |

# Exercise 1 – solution (2)

| Task Name | Duration | Resource Names | Predecessors |
|---|---|---|---|

| # | Task Name | Duration | Resource Names | Predecessors | |
|---|---|---|---|---|---|
| 7 | ⊟ **Article writing & translation** | **4 days** | | | **4** |
| 8 | Write articles 1 & 2 in French | 1 day | Content writer 1 | | |
| 9 | Write articles 3 & 4 in French | 1 day | Content writer 2 | | |
| 10 | Translate articles from French into English | 2 days | French to English translator | 8;9 | **5** |
| 11 | Translate articles from English into Chinese | 2 days | English to Chinese translator | 10SS+1 day | **6** |
| 12 | Translate articles from French into Japanese | 2 days | French to Japanese translator | 8;9 | **7** |

**Network diagram**

Content writer 1

Content writer 2

French to English translator

English to Chinese translator

French to Japanese translator
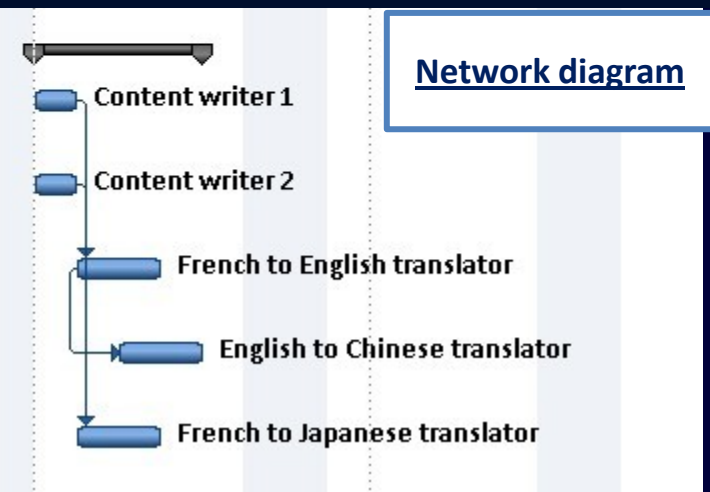
# Exercise 1 – solution (3: complete)

# Exercise 2 – text

➢ **Take into account the "Resource" and "Duration" information provided in the excerpts of a Resource Sheet and Gantt view on the next page to calculate the "Work(load)" (in person-days) and "Cost" (in €) of the featured "Task", then enter the values respectively in <u>rectangles 1 and 2</u>.**

# Exercise 2 – picture

| Resource Name | Type | Max. Units | Std. Rate |
|---------------|------|-----------|-----------|
| R1 | Work | 100% | € 400/day |
| R2 | Work | 100% | € 360/day |
| R3 | Work | 100% | € 320/day |

| Task Name | Duration | Resource Names | Work | Cost |
|-----------|----------|----------------|------|------|
| Task | 12 days | R1;R2[75%];R3[25%] | | |
| | | | **1** | **2** |

# Exercise 2 – solution (1)

| Resource Name | Type | Max. Units | Std. Rate |
|---|---|---|---|
| R1 | Work | 100% | € 400/day |
| R2 | Work | 100% | € 360/day |
| R3 | Work | 100% | € 320/day |

| Task Name | Duration | Resource Names | Work | Cost |
|---|---|---|---|---|
| Task | 12 days | R1;R2[75%];R3[25%] | 24 days | |

**1**　　　**2**

**Workload: 12 + 9 + 3 = 24 person-days**

# Exercise 2 – solution (2: complete)

| Resource Name | Type | Max. Units | Std. Rate |
|---|---|---|---|
| R1 | Work | 100% | € 400/day |
| R2 | Work | 100% | € 360/day |
| R3 | Work | 100% | € 320/day |

| Task Name | Duration | Resource Names | Work | Cost |
|---|---|---|---|---|
| Task | 12 days | R1;R2[75%];R3[25%] | 24 days | € 9 000 |

**1**   **2**

**Workload: 12 + 9 + 3 = 24 person-days**

**Cost: 12 x 400 + 9 x 360 + 3 x 320 = € 9,000**

# Questions?