# Scheduling

Difference between Capital – & Turnaround Project Schedule



### **Personal Introduction**

- Edwin van Doeselaar
- 55 years old and living in the South-West area of The Netherlands
- Founder and CTO of Advando Project Control
- Over more then 25 years experience in (Turnaround) Project Control
- Specialized in (Turnaround) Project Planning & Scheduling





### **Company Introduction**

- Advando Project Control B.V.
- Founded in 2011 and located in the South-West area of The Netherlands
- Brand promise "Zero Delay" on (Turnaround) projects
- Services: Professionals (Mission Control Room), Solutions and Consultants
- Turnaround Competence Center



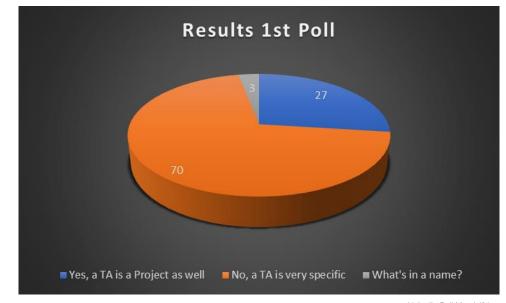




## Capital Project = Turnaround Project?

Being certified Project Management professional makes you a Turnaround Management professional?

- Yes, a TA is a Project as well
- No, a TA is very specific
- What's in a name?



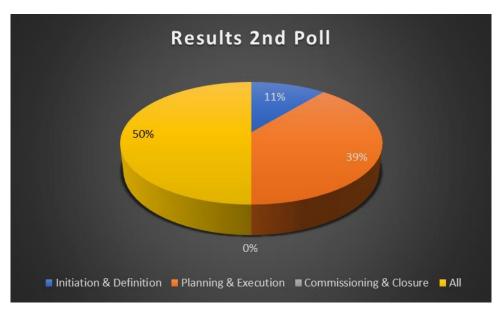
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### Capital Project = Turnaround Project?

In what stage are the main differences between Project – and Turnaround Management?

- Initiation & Definition
- Planning & Execution
- Commissioning & Closure
- All



Linkedin Poll March '21



### CAP Schedule vs TAP Schedule?



Schedule content is similar



#### Schedule content similarities

#### Activities

- o Activity type
- Activity description
- o Duration
- o Activity Calendar
- $\circ$  Start- and Finish dates
- o Codes
- o Etc.

Relationships

- Predecessor / Successor
- Relationship type
- Lag / Lead

- Resources
  - Resource name
  - Resource type
  - Number of resources and/or number of budgeted units
  - o Resource Calendar
  - Actual units
  - o Etc.

Schedules for both project types preferably being set up according to CPM (Critical Path Method)

"The Critical Path Method is the sequence of scheduled activities that determines the duration of the project."



### CAP Schedule vs TAP Schedule?



Schedule content is similar



Project goals are different



### **Project Goals**

#### CAPEX

- Capital expence creates future benefits
  - o Environmental
  - o Economic
- Modification / Upgrade existing installation
- Extension of existing installation
- New installation

#### Turnaround (Opex)

- Operational expense for day-to-day operation

   License to operate
- Inspection, cleaning & repairs existing installation
- Modification / Upgrade existing installation (offline)
- Lifespan extending



### CAP Schedule vs TAP Schedule?



Schedule content is similar



Project goals are different



Schedule work process is different



#### **1. Schedule Levels**

LEVEL	САР	ТАР
Level 1	Masterplan with main milestones and key deliverables for overall project and used to assist in the decision making process (report to GM/PM)	Masterplan with main milestones and key deliverables for the planning & execution phases of the project (report to Business)
Level 2	Management Summary; summary of Level 3 (report to PM)	Management Summary (per process unit); summary of Level 3 (report to Steering Team)
Level 3	Project Coordination Schedule; summary of level 4 (report to CM)	Turnaround Coordination Schedule Summary per scope item; summary of Level 4 (report to TAM)
Level 4	Detailed Execution Schedule (report to Supervisors/Contractors)	Detailed Execution Schedule (report to Supervisors/Contractors)



#### 2. Scoping

#### CAPEX

- Scope known at Initiation & Definition phase
- Scope final during design phase
- Single scope source

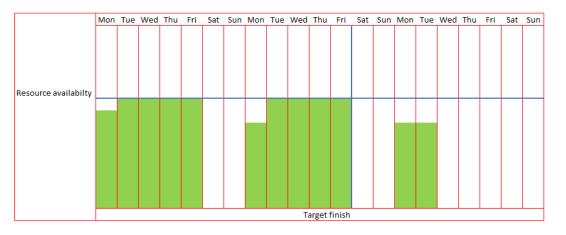
#### Turnaround

- Inspection and Project scope known at Initiation & Definition phase
- Scope final at Prime-on of the installation
- Multiple scope sources
- Repair scope is great uncertainty



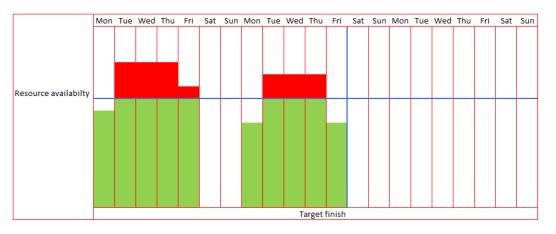
#### 3. Resource Limited vs. Time Limited

#### **Typical Capex schedule**



- Resource optimized
- Driven by resource availability
- Longest path (can be) resource driven

#### Typical Turnaround schedule



- Resource maximized
- Longest path duration max. optimized
- Longest path activity driven



#### 4. Dynamic scheduling

#### CAPEX

- Level of detail up to equipment or isometric
- Weekly progress update and reporting
  - Often executed within demarcated construction area with limited interference with hazardous substances and mainly just new materials to be handled
- Limited disruption of original plans
- Resource constraint

#### Turnaround

- Level of detail up to equipment parts or piping spools
- At least daily progress update and reporting
  - Always executed within production unit, that can be partly operational, faced with lot of hazardous substances and old, corroded materials to be handled
- Lot of disruption of original plans; inefficiency
- Time constraint



### Conclusion

- Being certified Project Management professional doesn't make you a Turnaround Management professional
- Being a CAPEX scheduler doesn't make you a Turnaround scheduler
- Does being Turnaround Management professional makes you a Project Management professional?
- Does being a Turnaround scheduler makes you a Project scheduler?



### Want to know more?

Want to know more about Advando and/or TACS?

Contact: <a href="mailto:edwin@advando.nl">edwin@advando.nl</a>
or go to: <a href="mailto:www.advando.nl">www.advando.nl</a>

