

System Engineering Project Management PA/QA

at Osservatorio Astronomico di Trieste



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CSN5

Forum della Ricerca Sperimentale e Tecnologica in INAF

Bologna, Area della Ricerca, 22-24/06/2022

Activities

OATs is active in management of **big projects** (around 10 or more Nations, tens of teams, hundreds of persons), which adds **complexity** in all processes.

- Sys. Eng. - System Engineering
 - Requirements capture, traceability and monitoring
 - Euclid SGS
 - Interface management (incl. OBS and WBS development and monitoring)
 - Euclid SGS
 - Configuration (incl. documentation)
 - Euclid SGS
 - AIV - Assembly, Integration and Verification
 - Euclid SGS, FET-HPC ExaNeSt
- PM - Project Management
 - Project Ownership and top level management
 - HERMES Technologic Pathfinder (ASI) & Scientific Pathfinder (EC) (payload & sci coord), ESO/ELT: ANDES, ESO/VLT: CUBES, IBIS 2.0, SKA Control SW, Euclid SGS
 - Project control: costs, risks, reviews
 - Euclid SGS
 - Agile team management in big projects:
 - SKA Control SW
- PA/QA - Project Management & Product Assurance / Quality Assurance
 - PA/QA processes management, incl. product maturity metrication
 - Euclid SGS



Expertise

- Sys. Eng. - System Engineering
 - Requirements capture, traceability and monitoring
 - Traceability tools: requirements - products - validation activities
 - Interface management
 - OBS and WBS development and monitoring
 - System Design
 - Product Tree design and maintenance
 - Configuration (incl. documentation)
 - ECSS standard tailoring for both project-level and component-level documentation set-up
 - AIV - Assembly, Integration and Verification
 - for SW products in distributed infrastructures
 - vertical integration in a big high performance (exa-scale) computation platform (patterns interfaces verif.)
- PM - Project Management
 - Project Ownership and top level management
 - Staff & WBS management and phases monitoring
 - Project control: costs, risks, reviews
 - Risks assessment and monitoring
 - Expense reports for funding agencies
 - Participation in formal reviews (ESA, ASI)
 - Agile team management in big projects:
 - Country level Scrum Master
 - SAFe (Scaled Agile Framework) certified staff (by Scaled Agile Inc.) +
+ Backup Release train Engineer: Observation M&C Agile Release Train
- PA/QA - Project Management & Product Assurance / Quality Assurance
 - PA/QA processes management, incl. product maturity metrication
 - Metrics definition and automatic computation (documents, code inspection tools output)
 - Standardized reporting documents for managers and customers





Persons



Valentina ALBERTI
SKA, ESO/ELT ANDES,
ESO/VLT CUBES, IBIS 2.0



Veronica BALDINI
conf. manager at ESO/ELT: ANDES



Roberto CIRAMI
PM at ESO/VLT CUBES,
PM at IBIS 2.0, ESO/ELT ANDES



Paolo DI MARCANTONIO
PM at ESO/ELT: ANDES,
ESO/VLT CUBES, IBIS 2.0



Fabrizio FIORE
PM at HERMES Tech. Pathfinder (ASI),
PM at HERMES Sci. Pathfinder (EC)



Marco FRAILIS
SDC manager at Euclid SGS



Oriana MANSUTTI
configuration lead at Euclid SGS



Giuliano TAFFONI
integration co-mgr at ExaNeSt



Claudio VUERLI
PA/QA manager at Euclid SGS



Andrea ZACCHEI
PM at Euclid SGS





Cooperation with other INAF institutes

on Sys. Eng., PM & PA/QA (many more on sci and tech)

	SKA	ESO / ELT ANDES	ESO / VLT CUBES	IBIS 2.0	HERMES / SP	HERMES / TP	Euclid SGS	ExaNeSt
Teramo OAAbruzzo	X							
Firenze OAArcetri	X	X						
Bologna OAS	X	X			X	X		
Padova OAPd		X	X					
Milano OABrera		X	X	X	X	X		
Capodimonte OAC			X	X			X	
Roma OAR				X				
Catania OACT				X				
Milano IASF							X	
Roma IAPS							X	
Torino OATo							X	





Discussion

- How to let our colleagues understand the **importance** of these roles, since
 - Since such roles are **mandatory** in all projects nowadays
 - Since their activity is **useful** when their results are used (and understood)
 - But we do not get prepared about it in our **education** systems
- **How to acquire** the needed **proficiency** in Project management, PA/QA, requirements+validation management, team management etc.?
- May it be worth having an **INAF office** (possibly distributed across Institutes) whose aim is to **help in initialising** these **processes** in new projects (or in project that need to initialise them while already in progress)?
 - OM could mention the help received from the ESA PA/QA team at the start of the Euclid SGS (2011)