



IT Project Portfolio Overview

Shahzaib Aamir, IT-RM

The Need For a Project Portfolio in IT

The Project Portfolio is essential for monitoring key ongoing activities in IT and to provide a comprehensive view of projects, resources and overall departmental efforts

The primary goal is to enhance clarity and accountability, helping the department maintain optimal resource utilization and maximize value delivered to stakeholder groups.

Project Initiation Governance

For a project to be included in our tracking, it must **first** be fully endorsed by its Initiation Pathway and **second** by the overarching ITSC (Steering Committee)

The 3 Pathways which initiate projects:

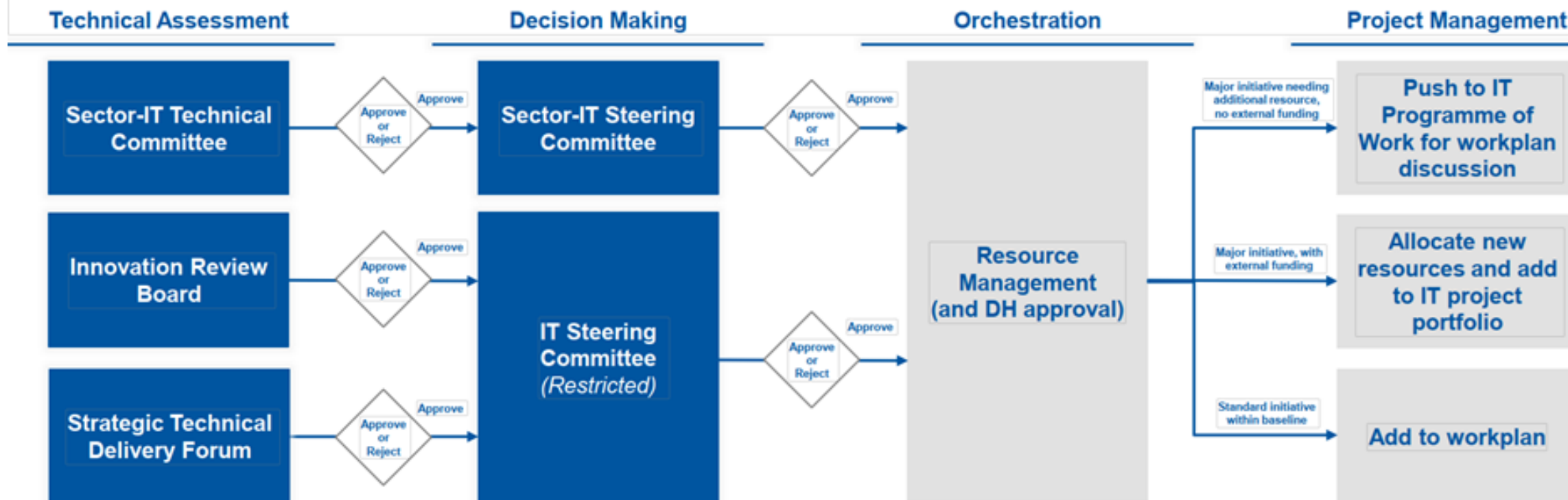
Business Engagement (BE) - Manages engagement channels for CERN's internal collaborations, with each sector (ATS, RCS, FHR) i.e. *ATS-IT Support of Linux distributions*

Innovation (IN) - Oversees new initiatives that differ from current operations and drive innovation i.e. *EC projects, openlab, Next Generation Triggers*

Technical Delivery (TD) - Oversees service evolution i.e. *Drupal to Wordpress Migration*

Project initiation: All pathways

The end-to-end governance process for each of the initiation pathways has been reviewed to drive a simpler and more consistent approach and address existing pain points related to decision making and the role of the existing bodies.

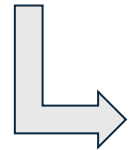


Project Portfolio Lifecycle - Inspired by PM² Methodology

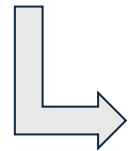
Phases	Initiation	Planning	Execution	Closing
To Do	<ul style="list-style-type: none"> ● Produce charter/PSO ● Get endorsement 	<ul style="list-style-type: none"> ● Create project plan (milestones, deliverables) 	<ul style="list-style-type: none"> ● Execute & track progress 	<ul style="list-style-type: none"> ● Produce impact report ● summary (ITSC) ● Present in ITTF
Gate	→ITSC/Sector-IT committee	→Resource allocation with RM team	→Reviews by IP Boards & PMO →Completion of milestones	→IP Board & ITSC Approval

Types of Projects in the Portfolio

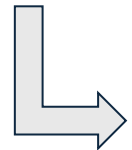
Project is any time-bound activity with a well-defined scope, producing a deliverable(s), **requiring additional resources (material and/or personnel)**



Internal Projects: *Funded with IT budget and personnel*



Service Evolution: *Activities to improve ongoing IT Services*



External Projects: *Projects funded by external sources (E.C. projects, private companies)*

The Project Catalogue - Information That Matters

Project ID	Project Name	Initiation Pathway	Funding	Status	Project Manager	Group
P-001	Migration from AFS to alternatives	TD	IT	Executing	Fons Rademakers	SD
P-007	Migration of DFS Home and Project Folders to CERNBox	TD	IT	Executing	Sebastian Bukowiec	SD
P-021	MC event generators acceleration (Madgraph)	IN	IT	Executing	Stefan Roiser	FTI
P-038	Quantum Simulation of neutrino-nuclei scattering	IN	QTI	Executing	Michele Grossi	FTI
P-049	Model Registry in the Cloud (CERN – Oracle Joint Research)	IN	OL	Executing	Sofia Vallecorsa	FTI
P-058	Improvements in Indico to make it suitable for JACoW conferences	TD	IT	Executing	Adrian Mönnich	CA
P-064	Multi-Domain Campus Network	BE	IT	Executing	Carles Kishimoto	CS
P-070	Applied Quantum Computing for HEP and Earth Observation with Intel	IN	QTI	Executing	Michele Grossi	FTI
P-071	FAIRCORE4EOSC: Core Components Supporting a FAIR EOSC (H2020)	IN	EU	Executing	Lars Holm Nielsen	CA
P-072	Quantum Time-Series for HEP and Earth Observation Applications	IN	QTI	Executing	Michele Grossi	FTI

Major impacted FE in IT	Start Date	Estimated End Date	Duration	People	FTEs	Overall status
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- on track
- concerns
- blocked
- no data



The Project Catalogue - Resources/Personnel

Project ID	Project Name	Name and Surname	Role	% Effort (0-100)	Duration (months)	Completed (months)	Remaining (months)
P-001	Migration from AFS to alternatives	Fons Rademakers	Project Manager	10	144	95	49
P-007	Migration of DFS Home and Project Folders to C	Sebastian Bukowiec	Project Manager	30	72	59	13
P-021	MC event generators acceleration (Madgraph)	Stefan Roiser	Project Manager	35	66	58	8
P-021	MC event generators acceleration (Madgraph)	Andrea Valassi	Project Team	60	66	58	8
P-021	MC event generators acceleration (Madgraph)	Zenny Wettersten	Project Team	100	36	28	8
P-021	MC event generators acceleration (Madgraph)	Enrico Bothmann	Project Team	100	7	0	7
P-038	Quantum Simulation of neutrino-nuclei scatteri	Michele Grossi	Project Manager	20	46	39	7
P-049	Model Registry in the Cloud (CERN – Oracle Joir	Sofia Vallecorsa	Project Manager	5	36	23	13
P-058	Improvements in Indico to make it suitable for .	Adrian Monnich	Project Manager	5	48	38	10
P-058	Improvements in Indico to make it suitable for .	Duarte Galvao	Project Team	10	36	36	0
P-058	Improvements in Indico to make it suitable for .	Michel Succar Medina	Project Team	85	24	13	11
P-064	Multi-Domain Campus Network	Carles Kishimoto	Project Manager	10	36	35	1
P-070	Applied Quantum Computing for HEP and Earth	Carla Rieger	Project Team	100	36	30	6

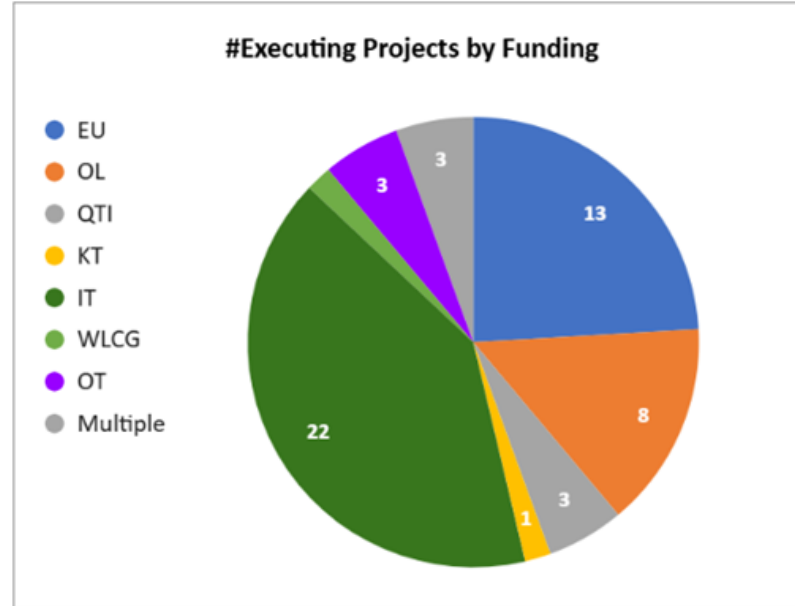
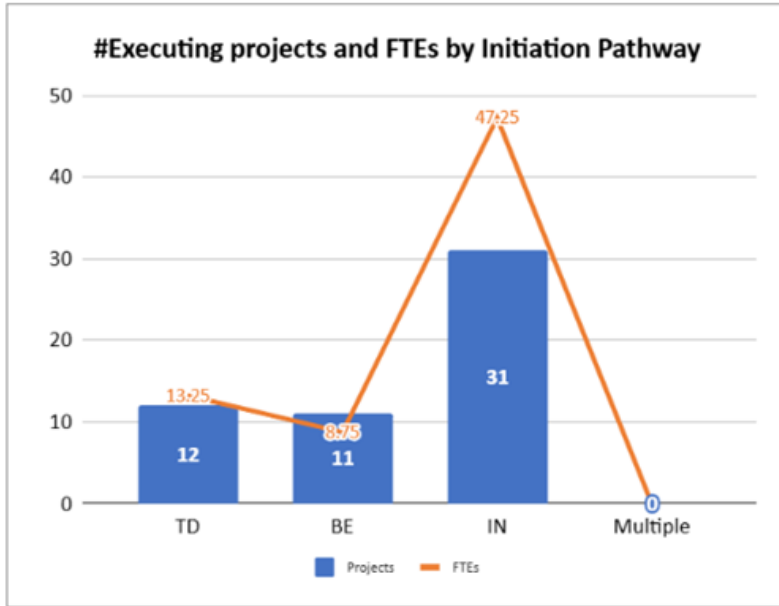
Project Information

Project Personnel

Catalogue Stats and Charts

Data Collection & Reporting

Number of Executing Projects
54



Project Pathways	Projects	FTEs	Person-months
TD	12	13.25	336.70
BE	11	8.75	277.55
IN	31	47.25	1,301.90
Multiple	0	0.00	0.00
	54	69.25	1,916.15

Funding	Projects	FTEs	Person-months
EU	13	16.70	402.45
OL	8	1.35	40.80
QTI	3	2.60	88.20
KT	1	0.05	2.10
IT	22	28.85	862.90
WLCG	1	0.20	4.80
OT	3	13.20	351.70
DG	0	0.00	0.00
Multiple	3	3.80	115.20
Unknown	0	2.50	48.00
	54	69.25	1,916.15

Project Information

Project Personnel

Catalogue Stats and Charts

Key Data Collected - Milestones and Deliverables

ID	Type	Name of Milestones and Deliverables	Status	To Be Reviewed By	Planned End Date dd/mm/yyyy	Actual End Date dd/mm/yyyy	Deviation (months)
1	Deliverable	Cross-architecture performance modeling and profiling tools	Complete		01/06/2023	01/06/2023	
2	Deliverable	Use case integration, validation and demonstration report	Complete		01/10/2023	01/10/2023	
3	Deliverable	EMDC V1.0 prototype validation and release	Complete		01/04/2023	01/04/2023	
4	Milestone	EMDC V1.0 released	Complete		01/04/2023	01/04/2023	
5	Deliverable	SYCLOPS complete platform validation and release	Complete		01/01/2024	01/01/2024	
6	Deliverable	ACORAN compiler with auto-vectorization	Complete		01/10/2024	01/10/2024	
7	Deliverable	hipSYCL graph runtime & cross-device scheduling	Complete		01/10/2024	01/10/2024	
8	Deliverable	SYCL-DNN library	Complete		01/04/2024	01/05/2024	1
9	Deliverable	SYCL-ROOT library	In Progress		01/10/2024	01/12/2024	2
10	Milestone	Complete SYCLOPS stack released	In Progress		01/10/2024	01/12/2024	2
11	Milestone	End-to-end use case demonstration and verification complete	In Progress		01/01/2025	01/03/2025	2

The Purpose of the Catalogue

Centralized Information Hub

Ensure Information is easily accessible in one place - Reports, Details, FTE's

Improved Resource Management

Identify Personnel Assigned to Projects - To Aid in Decision Making on Staffing

Up-To-Date View on CERN IT's Capacity & Priorities

Historical & Current Records Can Assist in Future Planning

Visibility & Transparency on Work as Demand Grows

Alignment with Department Objectives, Improvements in Collaboration

How Management Leverages Portfolio Data

Monthly Reports are submitted to the IT Steering Committee - detailing developments of key projects and recent updates:

- Recently endorsed projects
- Extension of timelines
- Recently completed projects
- Significant changes in FTEs
- Relevant Statistical Data for Holistic Viewpoint

Management will review and evaluate FTEs to assess staffing needs, assess ongoing projects to align future strategies with departmental objectives.

How Management Leverages Portfolio Data - Stats to ITSC

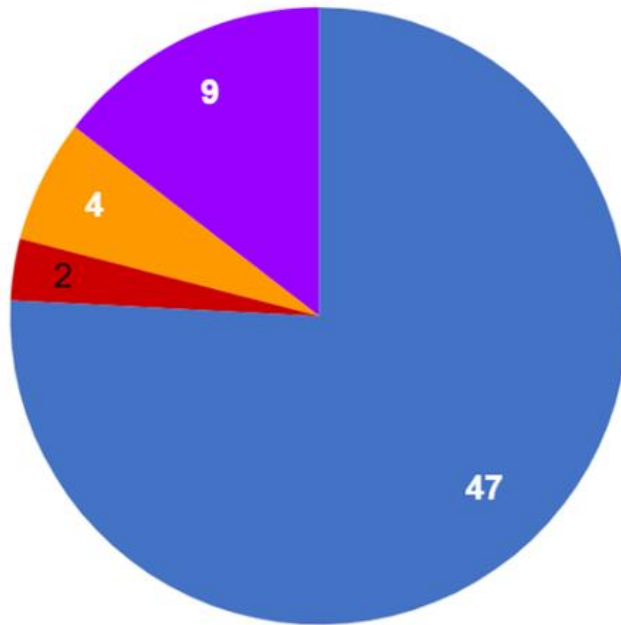
Project Portfolio

4 initiating projects
+ 1 projects added

47 Executing projects
+ 0 projects added

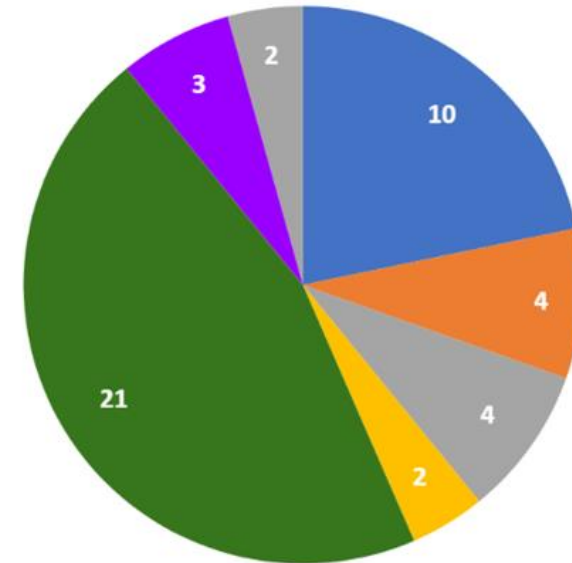
#Projects by Status

- Executing
- On hold
- Initiating
- Not started



#Executing Projects by Funding

- EU
- OL
- QTI
- KT
- IT
- OT
- Multiple



Final Thoughts

IT PPM main focus is on **Timelines** and **Resources**

We assess how our resources are distributed across the dept.

We conduct internal reviews to track progress and identify whether additional support is needed.

Through our refined governance process, project and catalogue management: we can effectively monitor achievements, value delivered and overall department objectives.