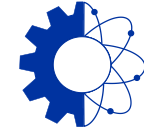


**TECHNICAL GALLERIES
CONSOLIDATION**



**ENGINEERING
DEPARTMENT**

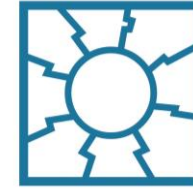
Technical Galleries Consolidation Program

Budget and Resources

S. Evrard – EN – Program Leader on behalf of the Program Team

EDMS 3093700

Agenda



TECHNICAL GALLERIES
CONSOLIDATION

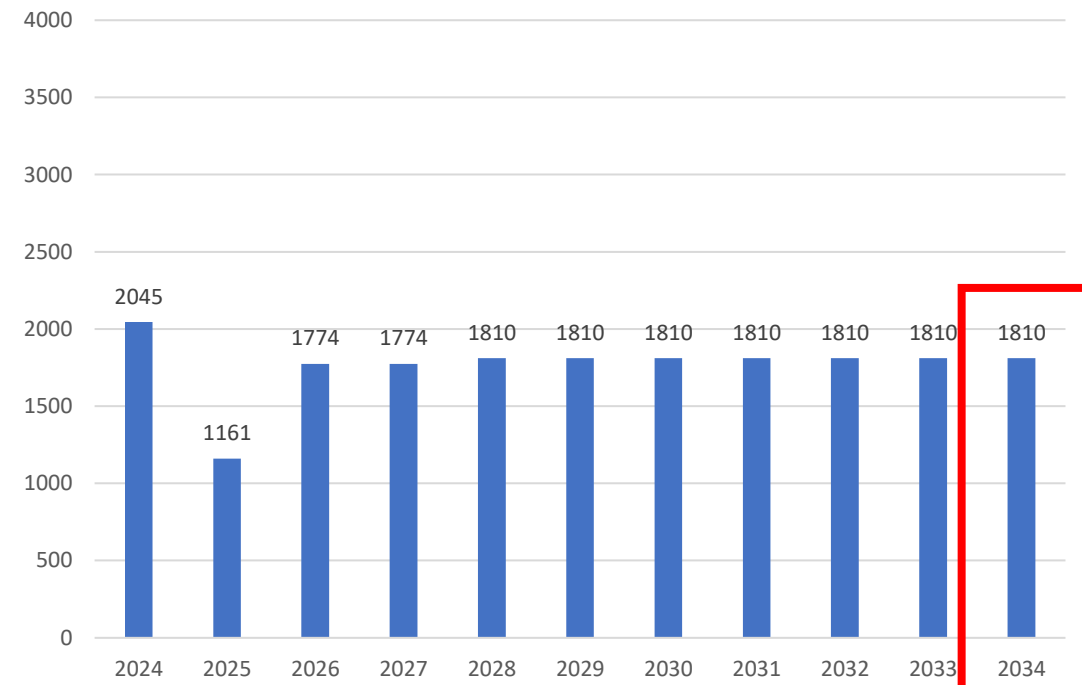
1. Target figures evolution
2. Budget situation
3. Resources
4. Budget Reprofiting Proposal
5. Miscellaneous

Target figures evolution

CVI24: positive → increase of 839 kCHF

			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Grand Total
TG-CONS	FELL	Target A	26										26
		Target B	22										22
		A-B	4										4
GOODS	Target A	2,449	1,185	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	18,114
	Target B	2,358	1,129	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	17,279
	A-B	91	56	86	86	86	86	86	86	86	86	86	835
TG-CONS Total	Target A	2,475	1,185	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	18,140
	Target B	2,380	1,129	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	17,301
	A-B	95	56	86	86	86	86	86	86	86	86	86	839
Grand Total	Target A	2,475	1,185	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	18,140
	Target B	2,380	1,129	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	1,724	17,301
	A-B	95	56	86	86	86	86	86	86	86	86	86	839

Target figures after MTP24 (kCHF)



MTP24: CUT 2% BETWEEN 2025 AND 2027

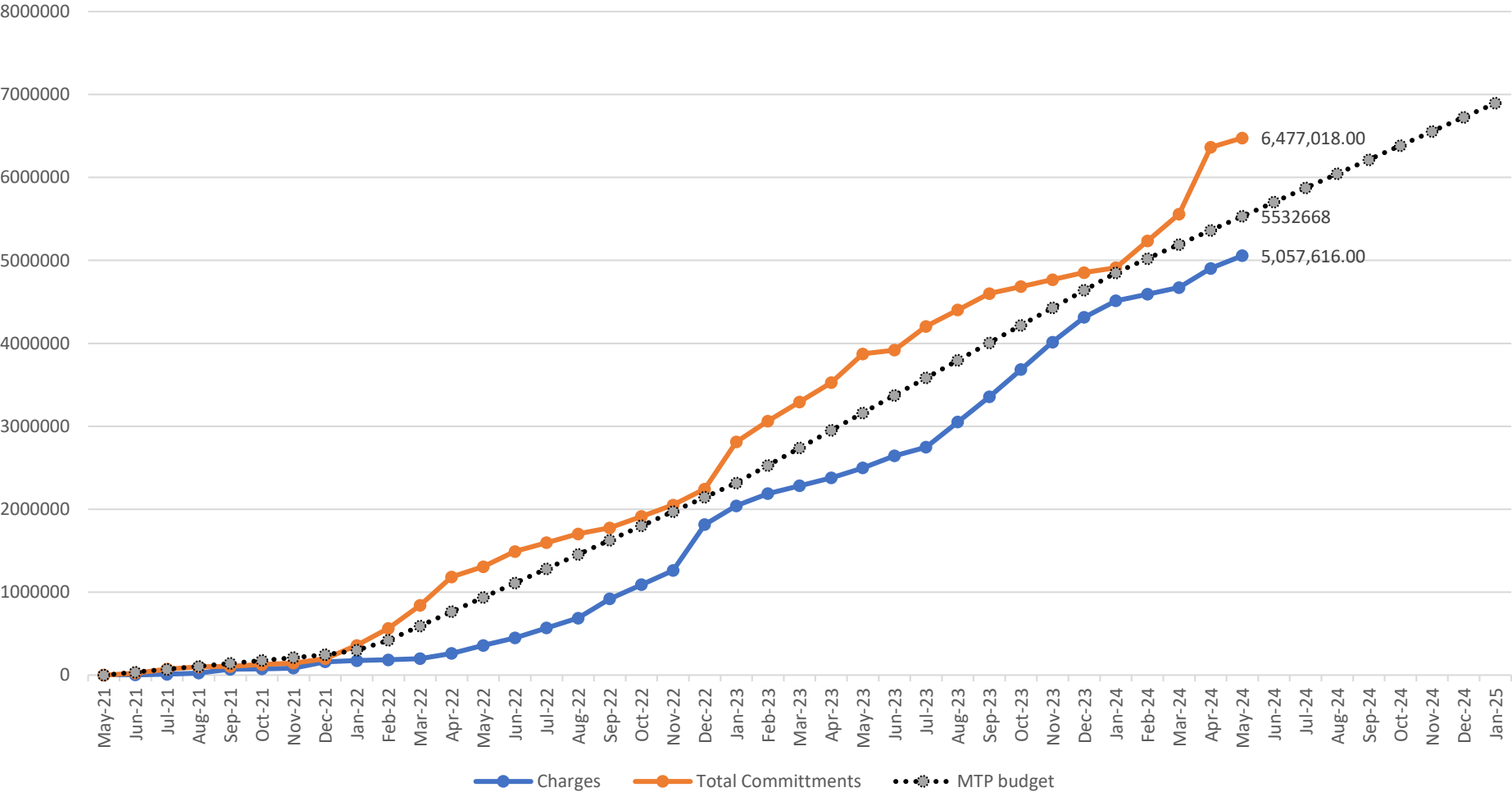
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
TG-CONS	Target A	2,045	1,161	1,774	1,774	1,810	1,810	1,810	1,810	1,810	1,810	1,810
	APT	2,044	1,185	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810	1,810
	A-B		-24	-36	-36	0	0	0	0	0	0	0

Consequence of MTP23: extension of the program over 20 years

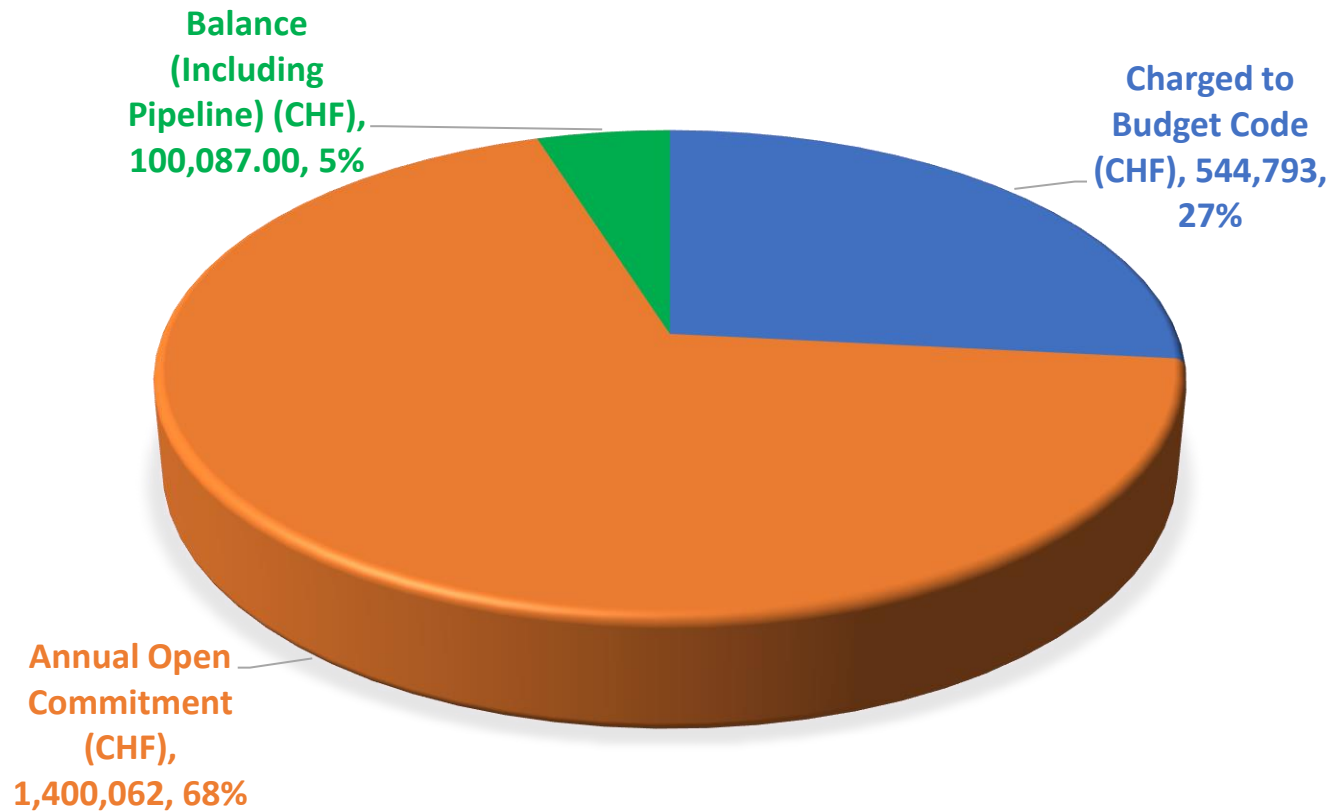
Program Budget Situation on May 28th, 2024



TG-CONS Material Expenses (CHF)



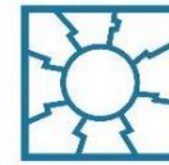
2024 Budget Situation on May 28th, 2024



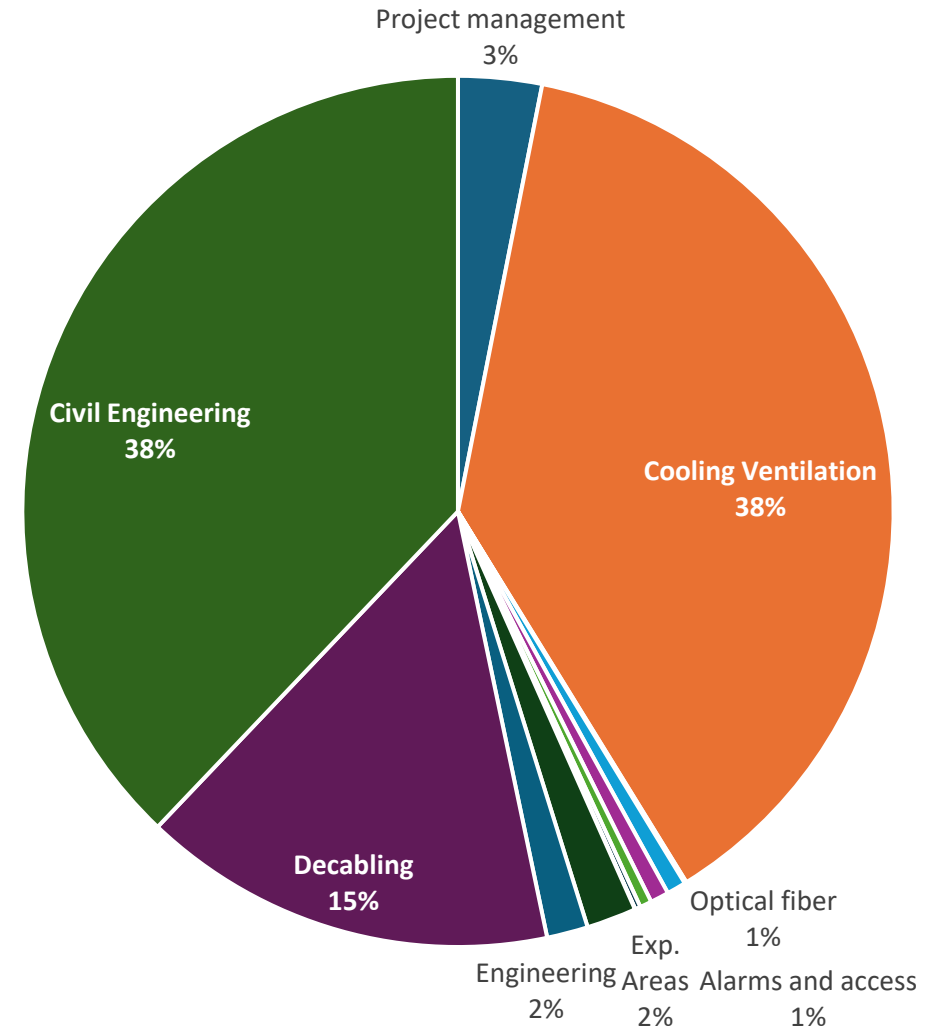
- 2024 Budget: **2045 kCHF**
- Charged: 545 kCHF (27%)
- Open Commitments: 1400 kCHF (68%)
- Pipeline: 0 kCHF (0 %)
- Not Yet Committed: 100 kCHF (5%)

- 2023 Budget: 2534 kCHF
- Charged in 2023: 2497 kCHF
- Charged in 2022: 1855 kCHF
- Charged in 2021: 161 kCHF

Expenditures on May 28th, 2024

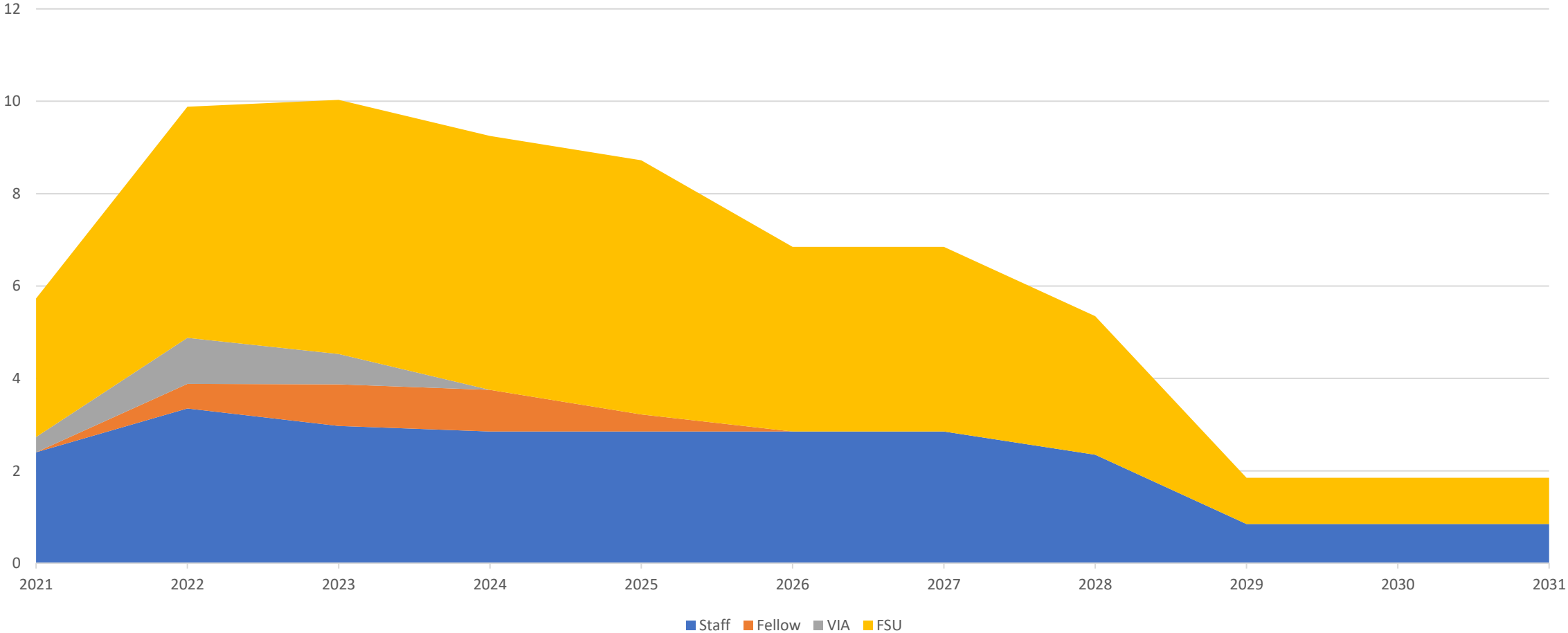


Budget Code	Work Package	Charged (CHF)
54800	Project management	152968
54802	Cooling Ventilation	1876790
54803	Power Distribution	3540
54806	Optical fiber	35031
54807	Alarms and access	33889
54808	Cryogenics	21662
54813	Transport and Handling	9879
54814	Integrated Safety	780
54815	Exp. Areas	91047
54818	Engineering	75208
54821	Decabling	758221
76125	Civil Engineering	1866259
TOTAL		4925274



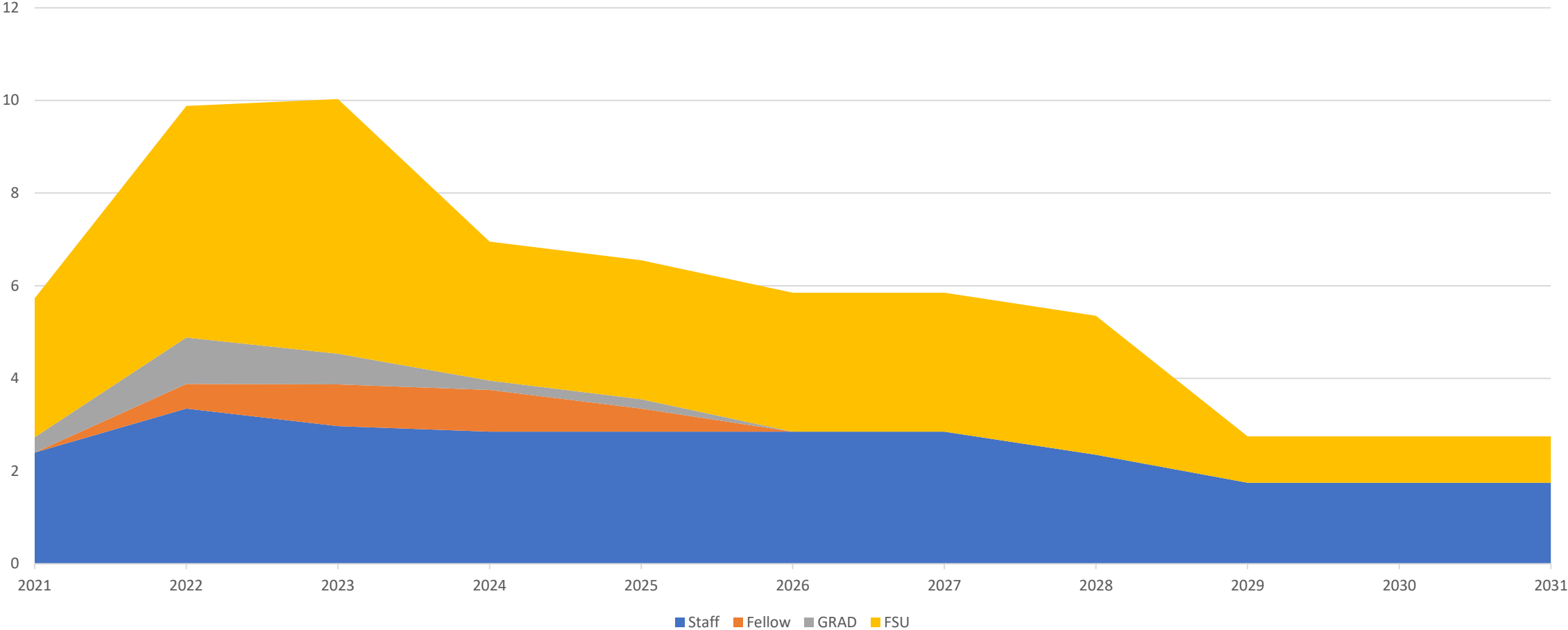
Resources

Personnel CtC 2022 TG-CONS (in FTE)



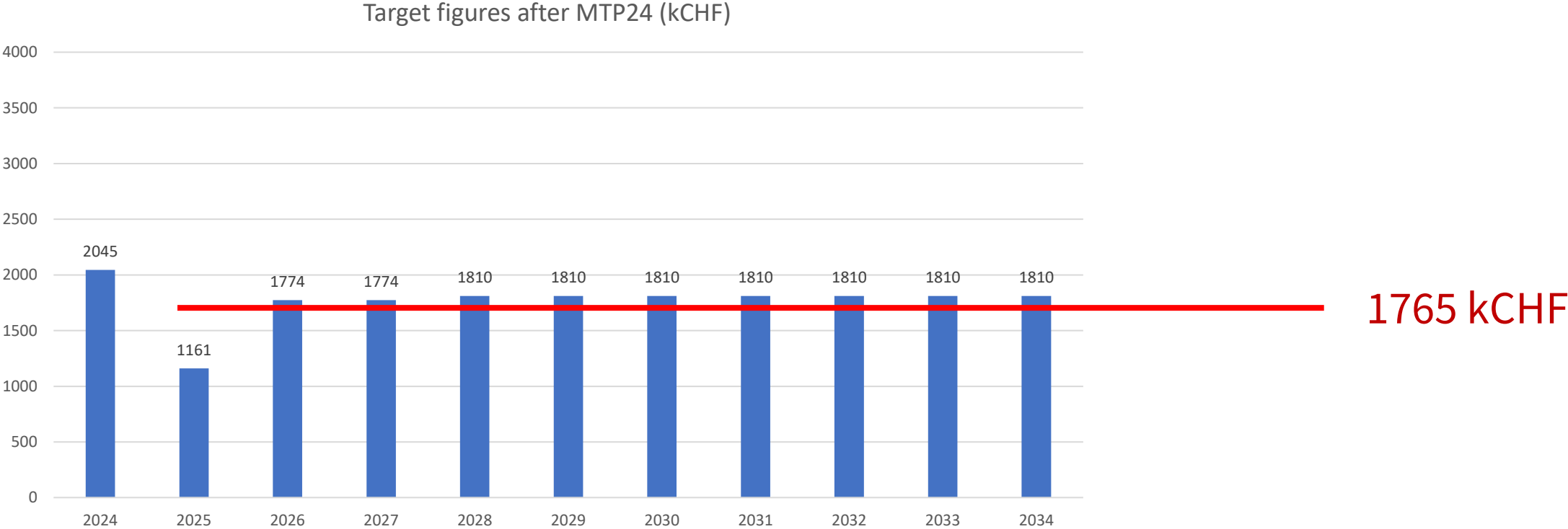
Resources

Personnel CtC 2024 TG-CONS (in FTE)

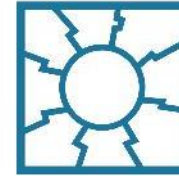


Budget Reprofiting Proposal

Smooth out target figures as from 2025 to ensure balanced budgets every year until the end of the project around 1765 kCHF.



Audit of the Technical Infrastructure consolidation



TECHNICAL GALLERIES
CONSOLIDATION

The objective of this audit is to provide assurance on the

- Governance
- Risk management
- Internal controls

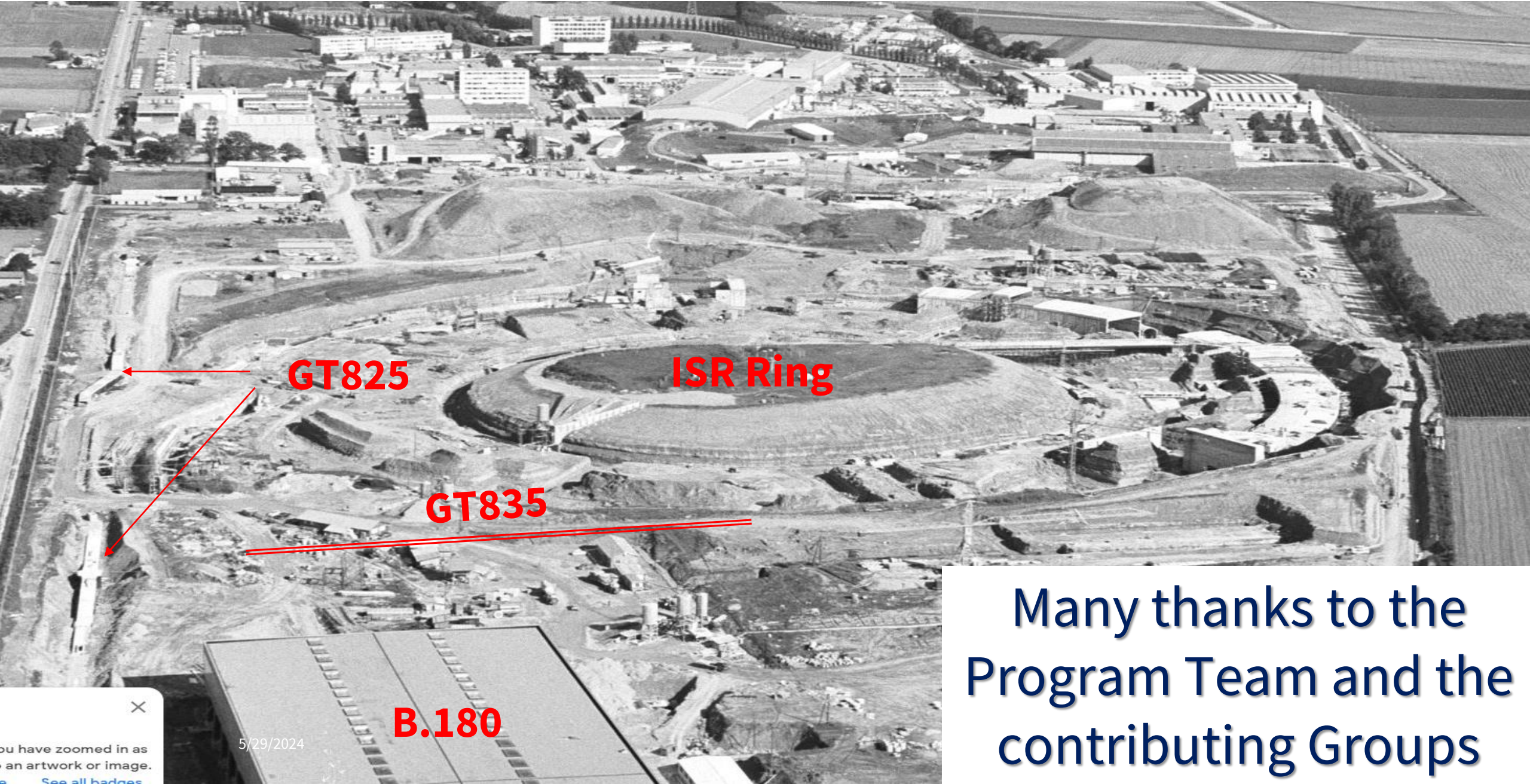
Governance is the combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

Risk management is a process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

Control is any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved.”

The audit went well, and no recommendations were made concerning TG-CONS.

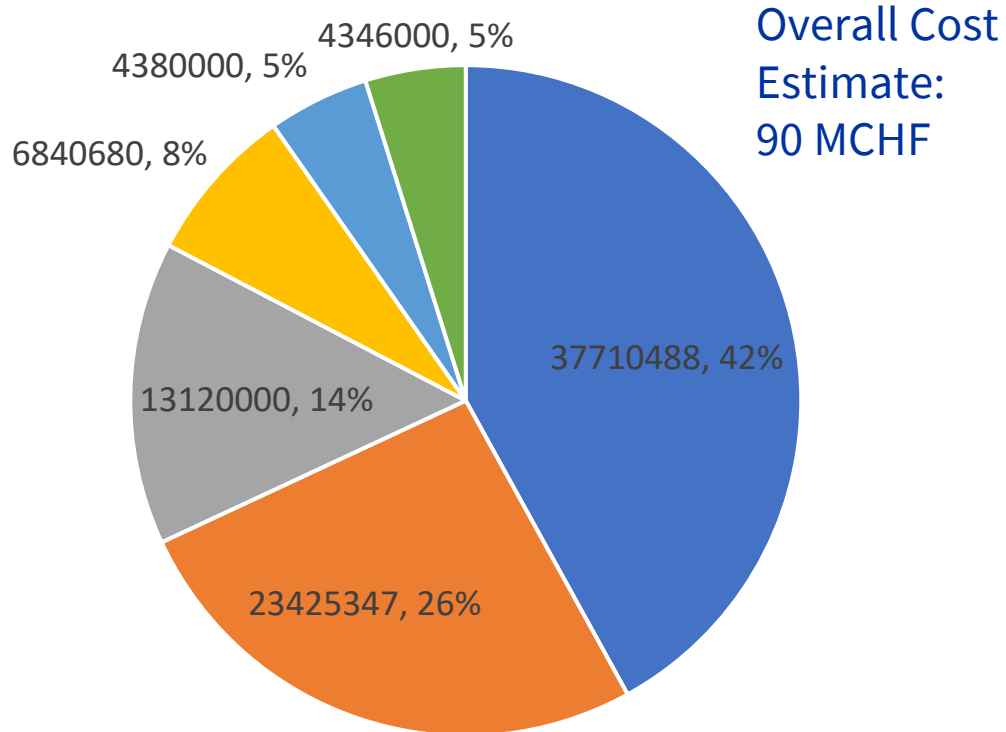
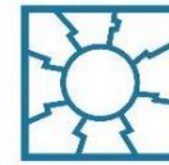
60 years ago, let's get ready for 60 years to come



Many thanks to the
Program Team and the
contributing Groups

BACKUP-SLIDES

Estimated cost of Iso-function replacement



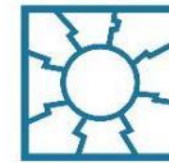
Area	Length (m)
MW	2767
MC	2845
ME	3456
P	4698
Total	13766

- Civil Engineering
- Electricity
- Integration
- Cooling and Ventilation
- Cryogenics systems
- Project management and other

Disclaimer: **some uncertainties remain and are not included:**

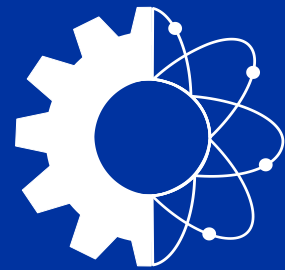
- Additional safety measures ?
- Cable trays containing asbestos
- Reinforcement of overloaded cable trays

Summary on preliminary spending profile



Activities	Cost estimate (kCHF)	Time period
Safety upgrades	3400	5 years
Unexpected Operation issues	1662	20 years
Existing Operation issues	1230	20 years
Replacement of end-of-life systems	24640	20 years
Integration & Project Management	3060	20 years
Total	33992	

Additional requirement: spend only 16624 kCHF during 2024-2033



**ENGINEERING
DEPARTMENT**