



Competency Frameworks @ CERN

Past, Present, Future

Career Development Frameworks @ CERN

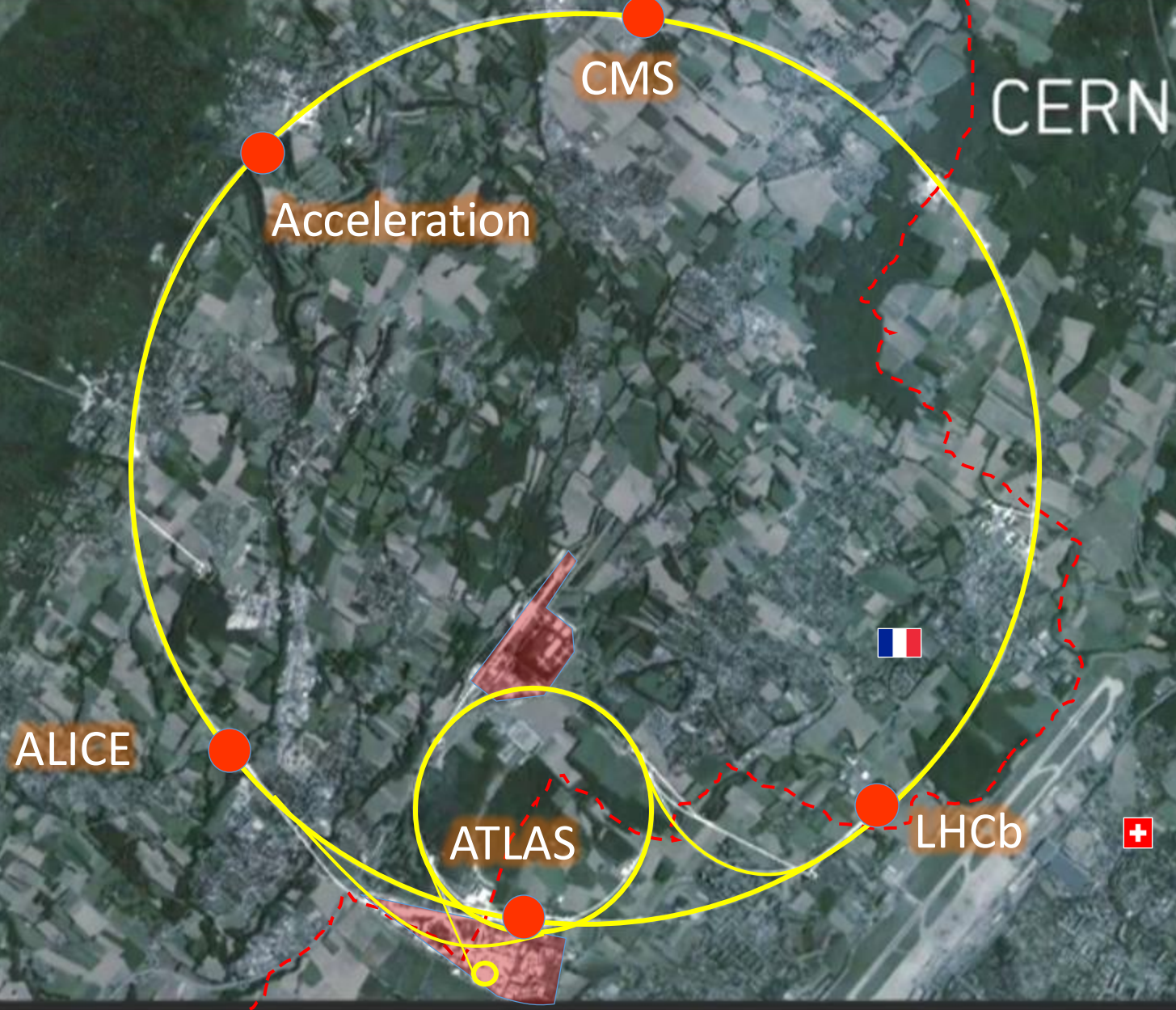
A journey through CERN's HR history: past, present, future

I. Introduction

II. Current framework through the understanding of the past

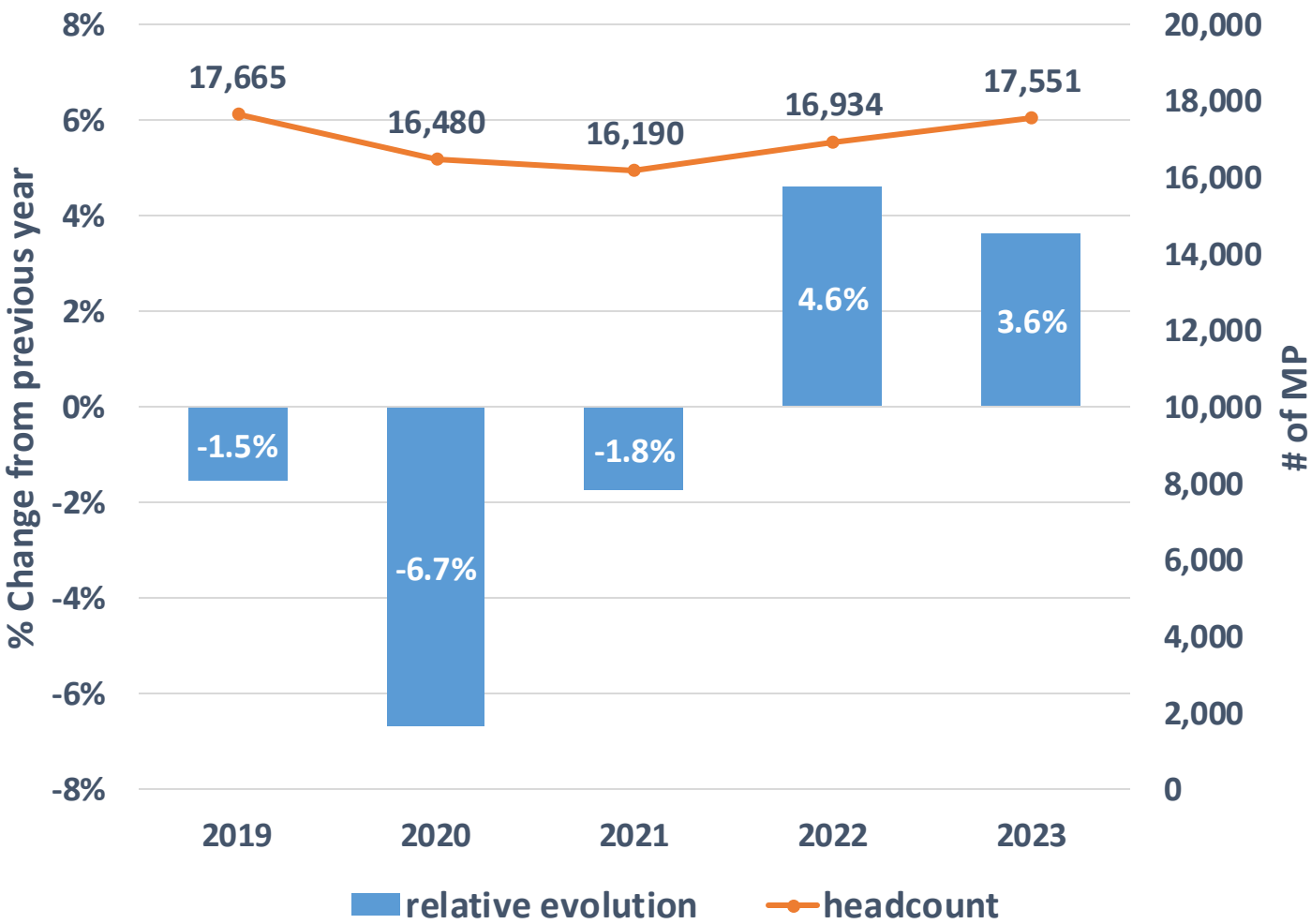
III. Preparing for the future

Largest machine on Earth

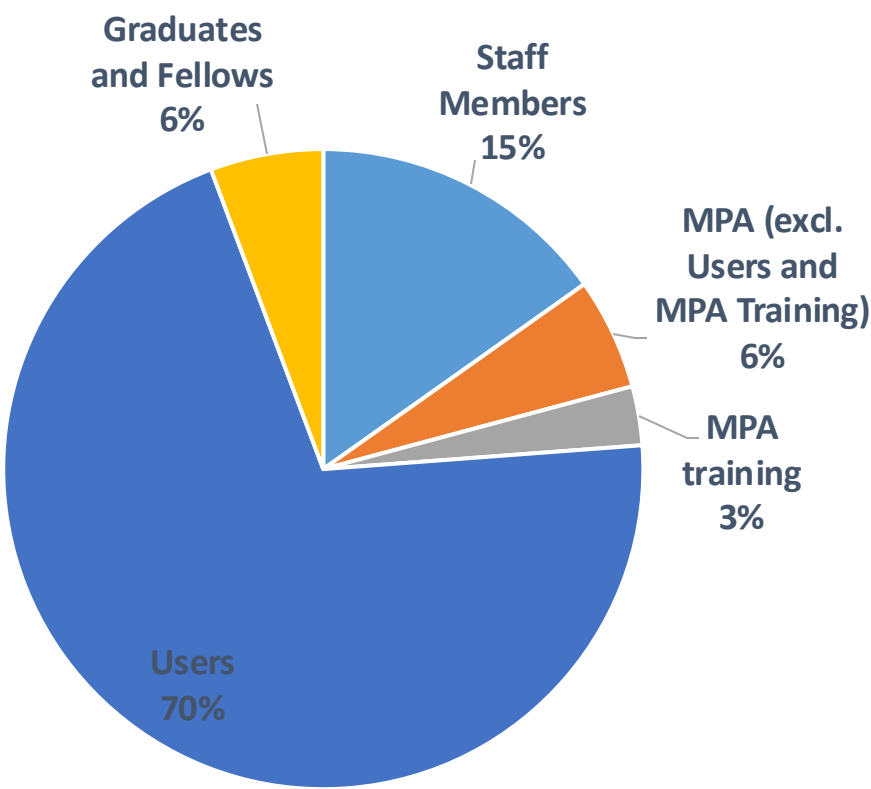


Personnel evolution

Evolution of the Members of the Personnel

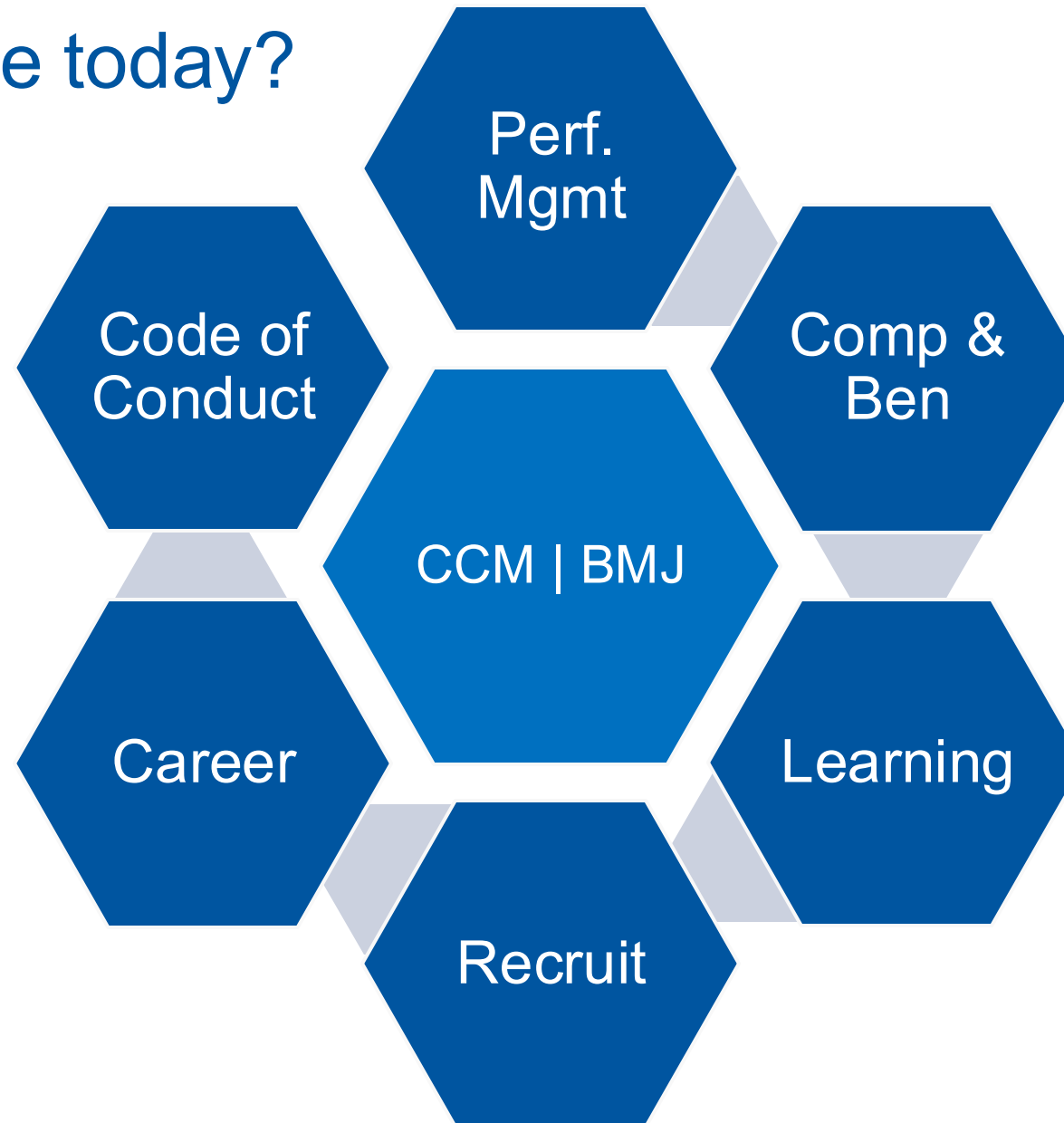


Members of the Personnel by Status, 31.12.2023



II. Where are we today?

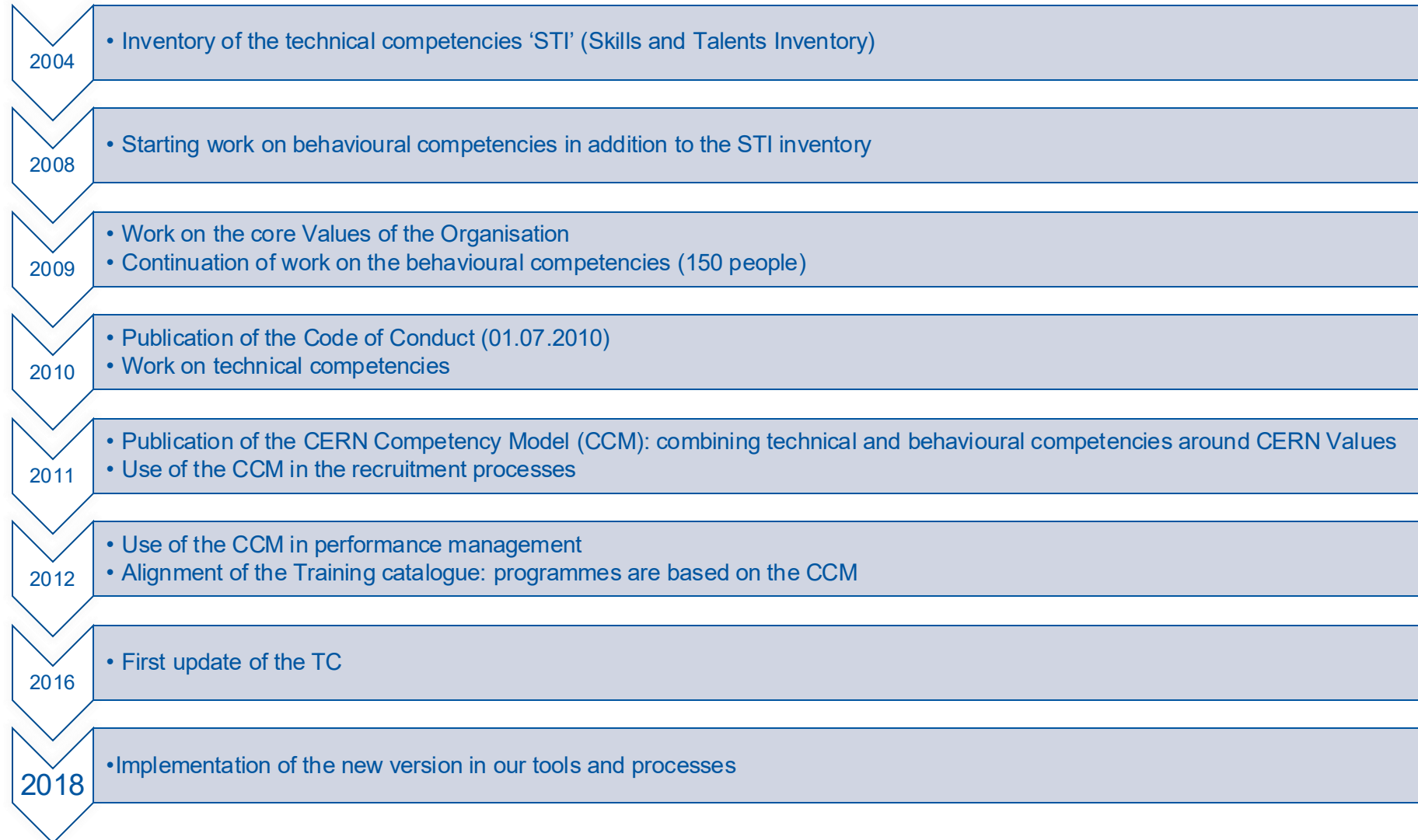
Integration of
reference systems
("référentiel") and
HR processes



CCM: CERN
Competency Model

BMJ: Benchmark
Jobs

CCM – Historical perspective



TECHNICAL COMPETENCIES

have been identified from the main domains of expertise of our Organization. Each domain is further divided into sub-domains with a corresponding list of competencies attached to it.



BEHAVIOURAL COMPETENCIES

have been defined as the way in which work is carried out and each competency has been illustrated with indicators of effective and ineffective behaviour. The behavioural competencies identified for our Organization consist of ten core competencies applicable to all staff members and five leadership competencies applicable to staff members in corresponding roles. Details can be consulted at cern.ch/competencies.



CERN Competency Model (CCM)

BMJ through CERN terminology

- Customized definition of a BMJ:
“a grouping of individual work situations with the same productive role”
- Project led by HR but final validation of the list by Department Heads

BMJ – Not that new in the Organization...

3. Career path E – Engineer / Applied Physicist

research, development or professional work. Including academic study and/or supervisory responsibility.

Major responsibilities

1. Designs and develops complex and highly specialised equipment, apparatus and instruments.
2. Carries out or supervises their operation, maintenance, repair and modification.
3. Takes part in technical and financial planning.
4. Co-ordinates the work of physicists, engineers and/or technicians. Represents the interests of the team.
5. Takes part in the research, development and coordination of scientific and industrial collaborations/partnerships/contracts.
6. Directs the construction of plants.
7. Designs testing equipment.
8. Draws up specifications and plans.
9. Directs construction work and installation work.
10. Presents work in conferences.

Immediate supervisor

- Senior Engineer, Senior Applied Physicist

Supervisory responsibility

- May supervise other members of the team
- May take part in managing the team

Essential qualifications

- University degree or doctorate
- About 15 years of experience
- Good knowledge of English or French

CAREER PATH DESCRIPTIONS - BENCHMARK JOB

Job	Job Code	Career path	Statutory definition
Technician/Technical Assistant/Senior Technical Assistant (General)	300	C	Technical work involving the study of complex and highly specialised problems; or responsibility for a unit
Educational requirement on recruitment Guide Ref. A.1	Higher technical training (e.g. higher technical diploma)		
Example job summary (covering the entire career path)	1. Studies and develops major components of large view to obtaining specified performances and make new construction techniques and ways of using new tests, interprets the results and carries out the necessary installation. Uses and creates computerised process 2. Plans, organises and directs the operation, maintenance, medium-term development of installations. Studies activities. Carries out urgent routine repairs whenever computerised processes. May supervise other members of the team		
Functional competencies Guide Ref. B. (a)- (c)	Ca (Entry level) Performs the tasks specified in the Vacancy Notice. Demonstrates a genuine willingness to develop functional competencies		
Specific evaluation factors Guide Ref. C. 1 -9	Guide Ref. (d).....Co-ordination in professional field (a).....Personal contributions (c).....Services/interactions (d).....Interpolation (d).....Proposals/tests/ introduction (d).....Deadlines/instructions/urgent tasks (c).....Processing (b).....The Division (b).....Use in routine situations		
1. Integration..... 2. Getting results with/through others... 3. Management of relationships/communication 4. Problem complexity..... 5. Change and innovation 6. Responsibility for the results..... 7. Information management 8. CERN rules & relationships..... 9. Official (foreign) languages.....			

CODE	BAND	DOMAINE	TITRE	FIELD	TITLE
468	Aa Ab-c/Ba-b Bc	Liquéfacteurs	Assistant opérateur (liquéfacteurs) Opérateur (liquéfacteurs) Principal opérateur (liquéfacteurs)	Liquéfacteurs	Assistant operator (liquifiers) Operator (liquifiers) Senior operator (liquifiers)
470*	Aa	Développement de films	Opérateur (Développement de films)	Film development	Operator (Film development)
495	Aa-c/Ba	Conduite de véhicules légers/lourds	Chauffeur VL Chauffeur PL	Light/Heavy vehicle driving	LV Driver HV Driver
497	Aa Ab-c/Ba-b	Magasins	Réceptionnaire Aide-magasinier Réceptionnaire principal Magasinier	Stores	Receiving clerk Assistant storekeeper Senior receiving clerk Storekeeper
498	Aa Ab/Ba	Engins de génie civil / Manutention	Opérateur d'engins (manutention) Opérateur d'engins (génie civil) Grutier	Civil engineering equipment / Materials handling	Equipment operator (materials handling) Equipment operator (civil engineering) Crane operator
499*	Aa-b/Ba Ac/Ba-b Bc	Evaluation des données expérimentales	Examineur Coordinateur (évaluation des données expérimentales) Coordinateur principal (évaluation des données expérimentales)	Evaluation of experimental events	Scanner Coordinator (evaluation of experimental events) Senior coordinator (evaluation of experimental events)

Benchmark Jobs (BMJ) mapping

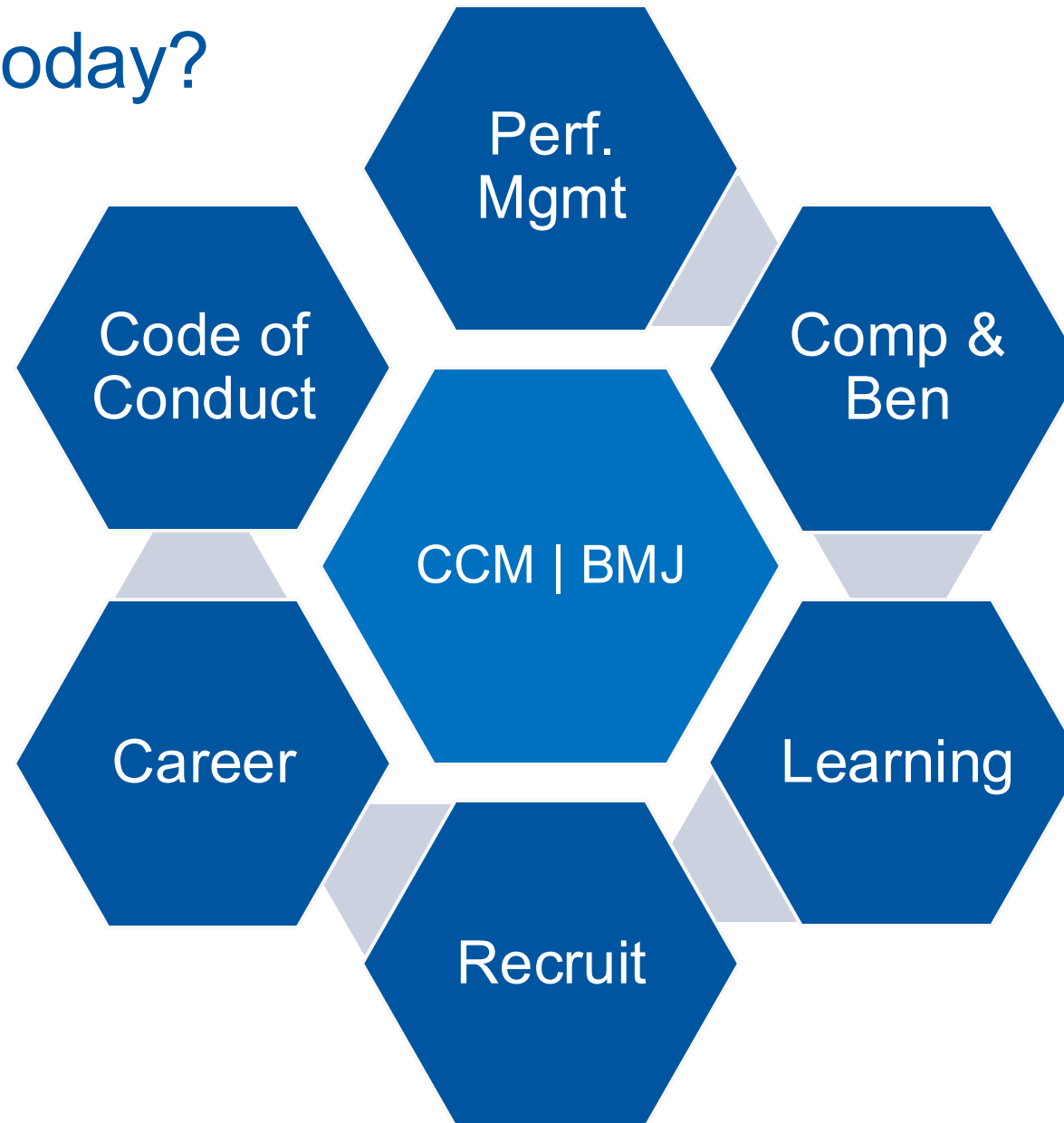
Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
		Accelerator/ Industrial Process Operations Technician							
			Accelerator/ Industrial Process Operations Technical Engineer						
		Civil Engineering Technician				Civil Engineer		Principal Civil Engineer	
			Civil Engineering Technical Engineer						
		Computing Technician				Computing Engineer		Principal Computing Engineer	
			Computing Technical Engineer						
		Electrical Technician				Electrical Engineer		Principal Electrical Engineer	
			Electrical Technical Engineer						
Electronics Craftsperson			Electronics Technical Engineer						
		Electronics Technician				Electronics Engineer		Principal Electronics Engineer	
		Electromechanical Technician				Electromechanical Engineer		Principal Electromechanical Engineer	
			Electromechanical Technical Engineer						
		Health, Safety and Environment Technician				Health, Safety and Environment Engineer		Principal Health, Safety and Environment Engineer	
			Health, Safety and Environment Technical Engineer						
Mechanical Craftsperson			Mechanical Technical Engineer						
		Material Science/Chemical Technician				Material Science/Chemical Engineer/Chemist		Principal Material Science/Chemical Engineer/Chemist	
			Material Science/Chemical Technical Engineer						
		Mechanical Technician				Mechanical Engineer		Principal Mechanical Engineer	
		Radiation Protection Technician				Radiation Protection Physicist		Principal Radiation Protection Physicist	
			Radiation Protection Technical Engineer						
						Applied Physicist		Principal Applied Physicist	
						Research Physicist		Principal Research Physicist	
						Theoretical Physicist		Principal Theoretical Physicist	

BMJ – in detail

Benchmark job title :	Financial Support Officer
Technical domain :	Finance and Procurement
Applicable post(s) :	Financial Support Officer, General Accounting Support Officer, Payroll/Pensions Support Officer, Treasury Support Officer
Definition	
The financial support officer monitors financial transactions into, out of and within the Organization.	
Qualifications and experience	
Bachelor's degree or equivalent relevant experience, in the field of finance and procurement or a related field.	
Grade(s)	
4-5-(6)	
Main Activities	
<ul style="list-style-type: none"> * Monitoring payments made by the Organization (to suppliers, members of the personnel, beneficiaries etc.) and incoming payments (Member State contributions, scientific collaborations, pension contributions etc.); * Preparing financial reports and justifying them to control and audit authorities; * Monitoring and performing bank transactions with a view to optimising cash-flow; * Taking responsibility for the monthly and quarterly book-closing and performing journal entries and book-keeping operations; * Analysing and correcting financial discrepancies; * Monitoring short-term loans and investments; * Collaborating with external stakeholders (banks, suppliers) and internal services, settling disputes and ensuring that accounts are reconciled; * Drawing up applications for VAT reimbursement; * Following up changes in financial and regulatory rules and constraints and monitoring financial markets with a view to mitigating risks; * Streamlining financial and administrative procedures; * Contributing to finance-related projects. 	
Competencies	
See CERN Competency model	
Related benchmark job(s) and/or post(s)	
Procurement Support Officer,	
Training and certification	
Will be updated according to the learning pathways	

Where are we today?

Integration of
reference systems
("référentiel") and
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What are today's challenges and tomorrow's solutions?

- Internal Mobility (gig economy)/ External Mobility
- *From posts to roles: new IT Strategy: dev opportunities and rotation principle*
- Strategic Workforce Planning
- Talent Management
- Continuous engagement
- Diversity & Inclusion (25 by '25)
- Upskilling / Re-skilling
- Remote management/leadership
- Data-Driven & Digital HR
- Artificial Intelligence
- New HCM coming
- Contract policy: attractiveness VS underperformance

It's a wrap!

From CERN's experience implementing career frameworks

- ✓ It takes time and you link it gradually to your HR processes
- ✓ It's a bottom-up approach that needs buy-in from operations
- ✓ It's never perfect: keeping consistency is sometimes at the cost of being comprehensive
- ✓ Once you are in, it's not over. Clean-up and maintenance as a routine
- ✓ You will make mistakes but it will help you

