

Annual Procurement Report

2025

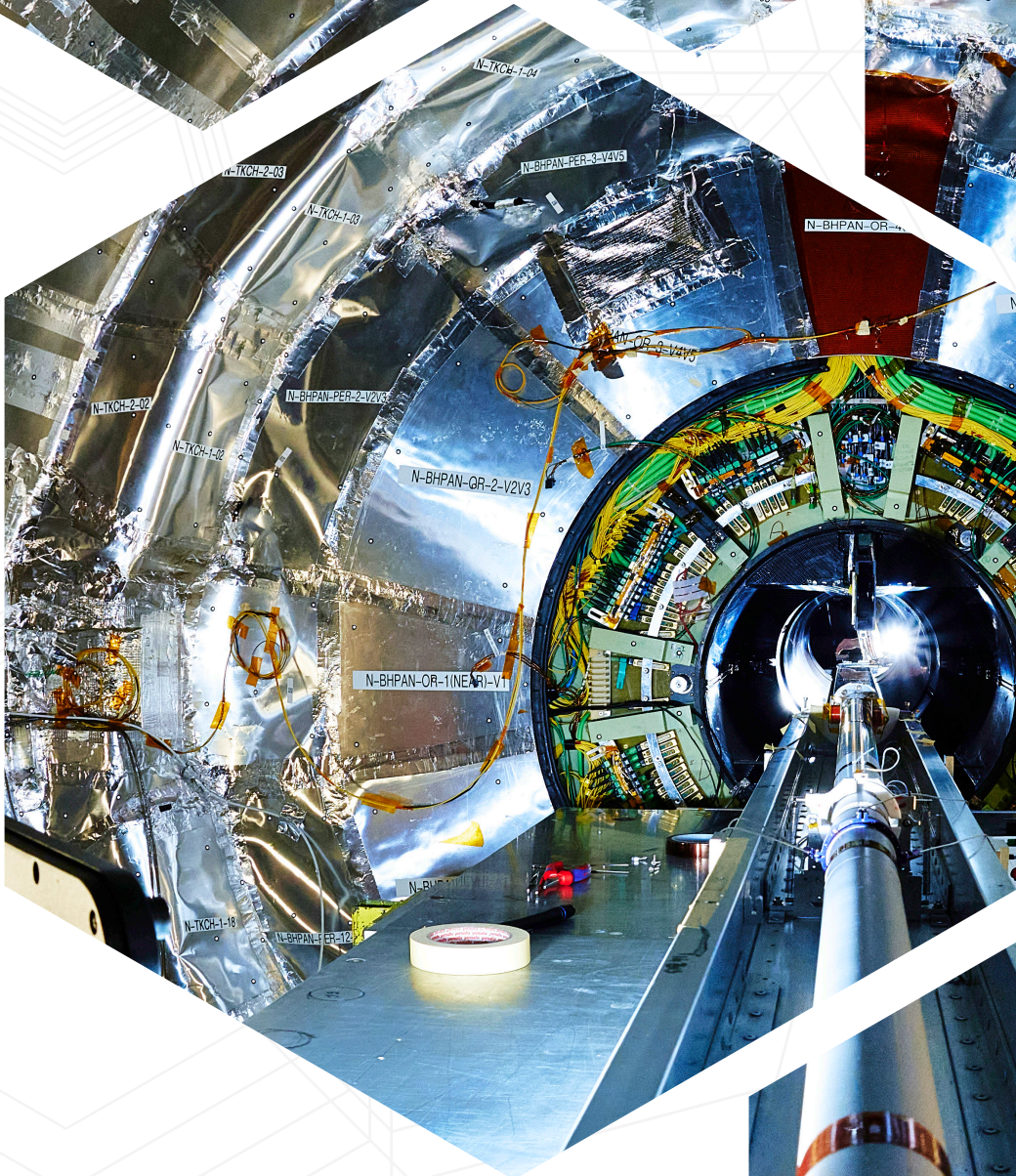
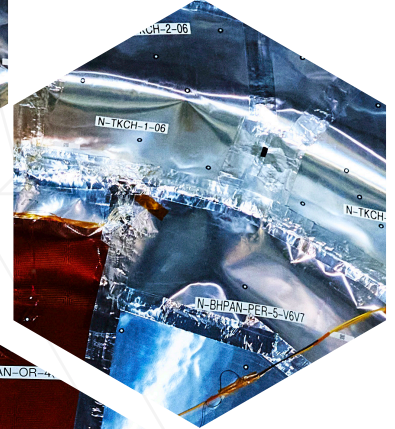
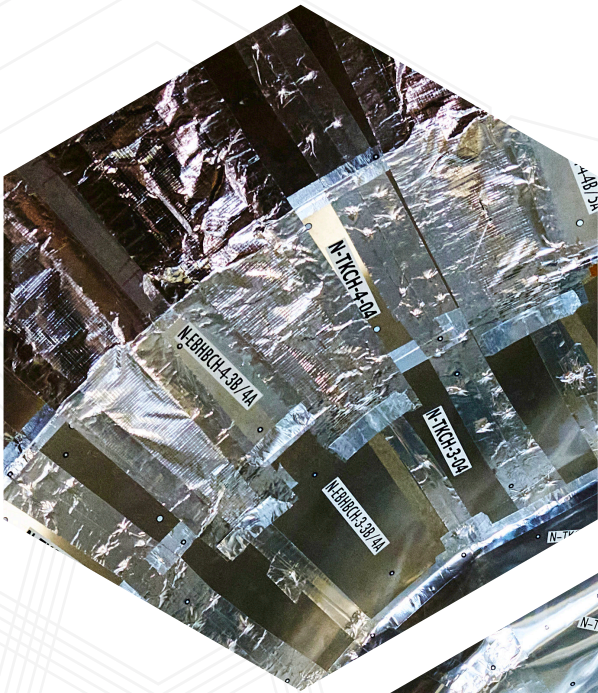




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INTRODUCTION

The 2025 CERN Procurement Report provides a comprehensive overview of CERN's procurement activities and achievements for the year. It outlines key milestones and presents detailed data on procurement activities and industrial return for all Member and Associate Member States.

A standout achievement in 2025 was CERN's success in meeting its industrial return objective for the second consecutive year, with only two Member States registering an average industrial return coefficient below 0.4 over the past four years.

The report also highlights key projects that were implemented in 2025 in line with the five pillars of the 2025-2030 Procurement Strategy. These projects include:

- The introduction of new procurement policies, reinforcing the Procurement Service's commitment to talent development excellence, sustainability, and effective contract and supplier management;
- The introduction of new PunchOut catalogues to simplify the management of low-value orders;
- The creation of category manager roles, which promote specialisation and enable a more strategic approach across procurement;
- Continued responsible procurement efforts, aimed at reducing the environmental impact of CERN's procurement activities;
- Communication and outreach events, resulting in a significant increase in supplier engagement activities.



2025 IN NUMBERS

25 000
Active suppliers



29 300
Orders placed



32 900
Additional orders placed
in the CERN stores



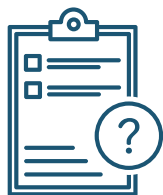
340
Contracts signed



29
R&D collaborations



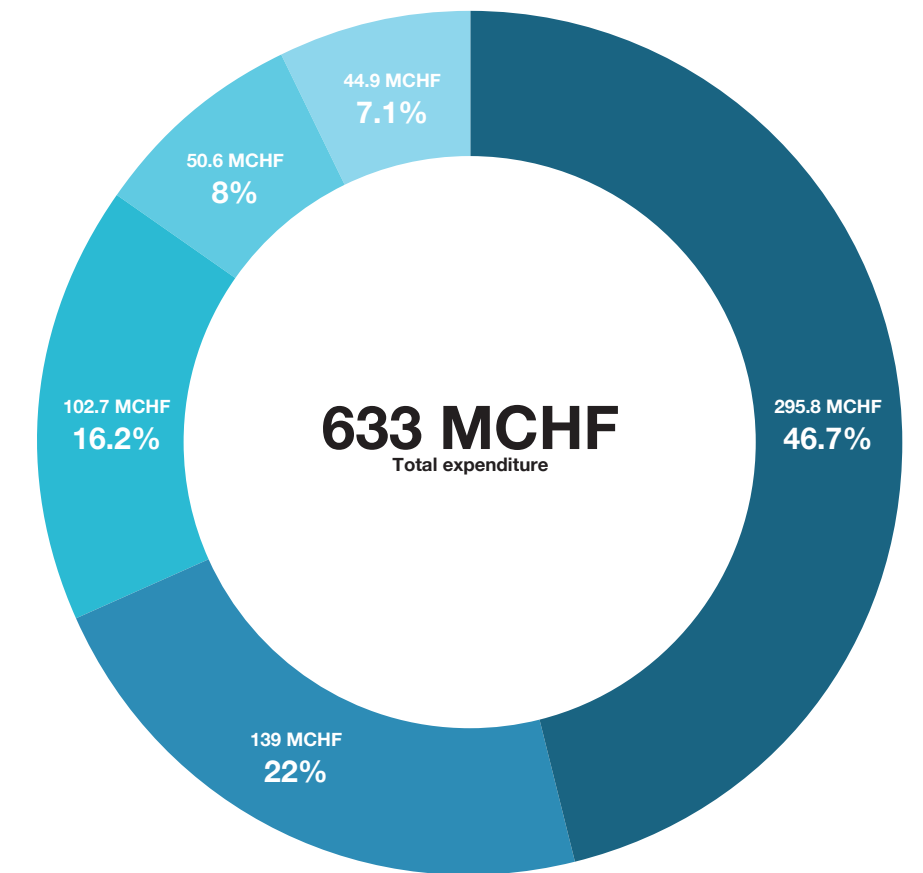
191
Price enquiries
above 50 kCHF



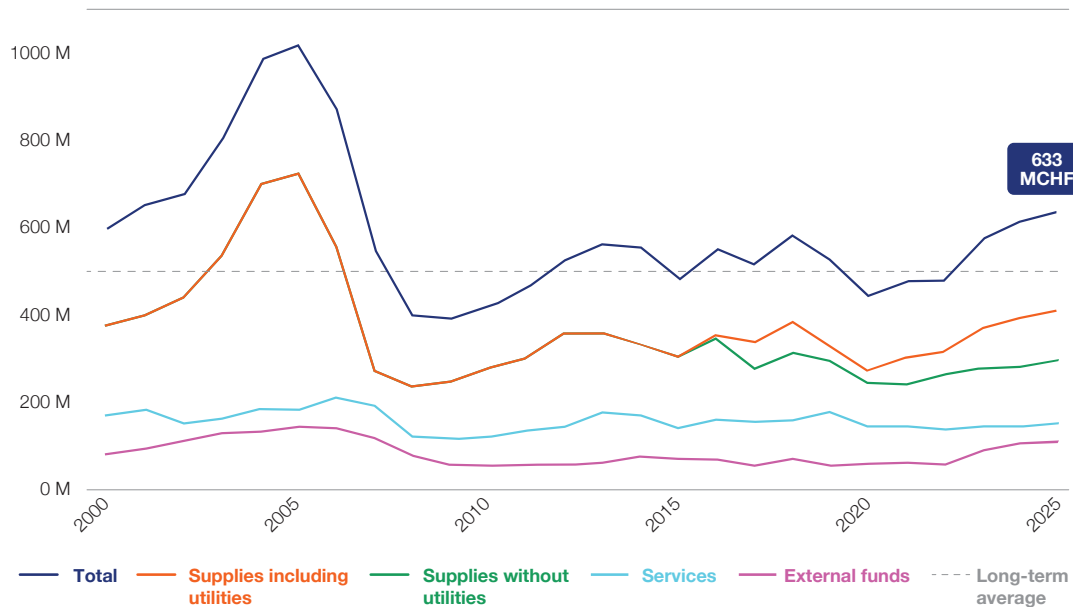
106
Invitations to tender



EXPENDITURE IN FIGURES



2025 TOTAL EXPENDITURE (MCHF)



PROCUREMENT EXPENDITURE 2000-2025

PROCUREMENT ACTIVITIES



Defined in the 2025-2030 strategy, the vision of CERN's Procurement Service is to be a first-class, innovative and trusted procurement partner delivering the best value for the Organization and its stakeholders.

To implement this vision, the Procurement Service pursues the following objectives, which contribute to CERN's strategic objectives:

- Deliver a best-in-class Procurement Service;
- Promote fair competition and better-balanced industrial return to the Member and Associate Member States;
- Support the Organization in its sustainability objectives and initiatives.

In order to achieve these objectives, the Procurement Service's strategy is built on five pillars:

- Our people;
- Innovation and excellence;
- Supplier and contract management;
- Responsible procurement;
- Communication and outreach.

The following section outlines the activities undertaken by the Procurement Service in 2025 related to the five pillars.

INNOVATION AND EXCELLENCE

NEW PROCUREMENT POLICIES

In 2025, the Procurement Service approved five policies. These policies are designed to strengthen CERN's procurement framework, ensure operational excellence and align procurement activities with the Organization's strategic objectives.

i. Procurement Talent Management Policy

This policy establishes guidelines for recruiting, retaining and developing talent within the Procurement Service. It emphasises continuous learning, performance monitoring and succession planning to foster a skilled, diverse and engaged team capable of delivering best-in-class procurement services.

ii. Supplier Management Policy

The policy sets out key principles for managing suppliers across all stages of the supplier relationship, including segmentation, risk management and performance monitoring. It focuses on strengthening supplier relationships, enhancing competition and ensuring balanced industrial return across the Member States.

iii. Procurement Contract Management Policy

This policy provides a framework for managing contracts effectively, from governance and performance monitoring to risk and claim management. It ensures compliance with contractual terms, optimises resources and fosters robust supplier relationships to support CERN's operational and strategic needs.

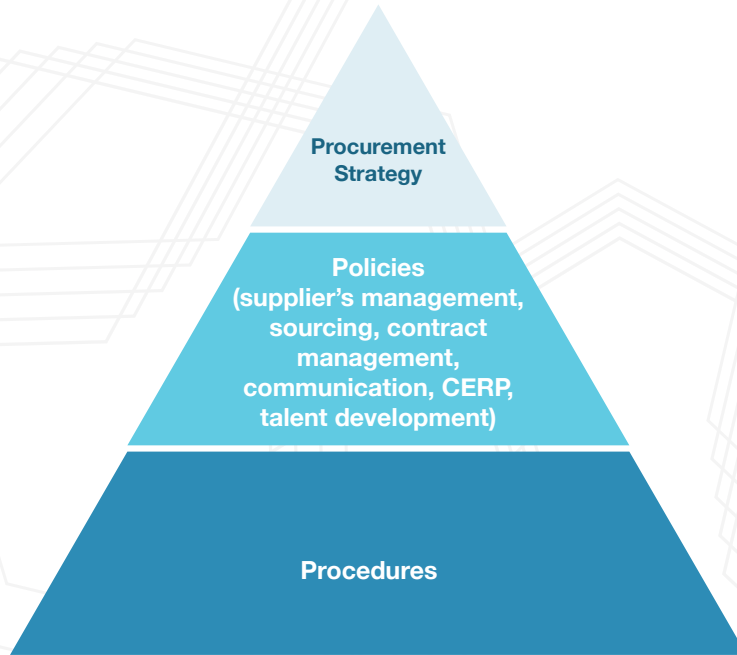
iv. Environmentally Responsible Procurement Policy

This policy integrates sustainability into procurement practices, emphasising responsible sourcing, lifecycle impact reduction and collaboration with suppliers to minimise environmental footprints. It aligns procurement activities with CERN's broader sustainability goals and reinforces the Organization's commitment to responsible procurement.

v. Procurement Communication Policy

This policy defines clear guidelines for internal and external communication, ensuring transparency, consistency and compliance with CERN's standards. Its goal is to enhance stakeholder trust, improve understanding of procurement processes and increase CERN's visibility among suppliers and Member States.

Procurement Service's strategic objectives (2025-2030)



EFFICIENCY GAINS RESULTING FROM THE THRESHOLD CHANGES IN 2024

In June 2024, the CERN Council unanimously approved amendments to the Procurement Rules, following a benchmarking exercise that highlighted that CERN's financial thresholds for procurement procedures were substantially lower than those of peer organisations. The updated thresholds, as outlined below, were introduced to streamline processes, reduce the administrative burden and enhance operational efficiency, without compromising transparency or oversight for the Member States.

These adjustments optimised resource allocation for CERN and its suppliers and reduced procurement lifecycle times for the tenders concerned. For example, in 2025, 65 price enquiries, typically processed in three months, would otherwise have required a full market survey and invitation to tender procedure, which takes nine months on average. As a result, these changes reduced time to contract, encouraged greater participation by firms in CERN tenders and ensured that procurement processes and approval chains remain efficient and aligned with best practices in public and scientific organisations.

	New threshold in CHF
Orders handled without the intervention of a Procurement Officer up to	2000
Three bids required as from	10 000
Market survey/invitation to tender required as from	400 000
Competitive tender subject to Finance Committee approval as from	1 500 000

EXPANDING PUNCHOUT CATALOGUES

The strategy to expand CERN's PunchOut catalogues simplifies the management of tail spend by directly connecting the requester to the appropriate supplier catalogues, which reduces administrative effort and increases process transparency. Currently, 20 catalogues are in operation, including five new additions in 2025, covering a broad range of products such as tooling, IT equipment, office supplies and industrial consumables.

In 2025 alone, these catalogues handled 32 900 orders worth 9.3 MCHF, representing a 33% increase compared to 2024. The PunchOut system enables users to place orders in minutes, automating the whole procurement process from purchase-order creation to invoicing. This not only reduces manual work and potential errors but also ensures average delivery times of just two to three days. Additionally, centralised management guarantees negotiated discounts and consolidates invoices, reducing accounting tasks and improving cost predictability.

Beyond efficiency, PunchOut contributes to sustainability by optimising delivery schedules and minimising shipments, which helps to lower CO₂ emissions. As CERN continues to expand this approach, PunchOut remains a practical tool for making procurement more efficient, cost-effective and environmentally responsible.

SUPPLIER AND CONTRACT MANAGEMENT

CATEGORY MANAGEMENT APPROACH










In line with CERN's 2025-2030 Procurement Strategy and its Contract and Supplier Management Policies, the Procurement Service has introduced dedicated Category Manager roles. The aim of this initiative is to enhance specialisation, deepen market knowledge, improve risk management and strengthen strategic sourcing and supplier relationship management.

Category Managers are tasked with proactively analysing market trends, identifying risks and opportunities and developing tailored strategies for their assigned categories, such as civil engineering, electronics, IT or cryogenics. Their mandate includes category profiling, demand forecasting, supplier segmentation and performance monitoring, ensuring a structured and data-driven approach to procurement. By fostering early engagement with technical teams and industry stakeholders, they help anticipate needs, optimise sourcing decisions and mitigate supply chain risks, ultimately supporting CERN's operational and strategic goals.

Category managers will contribute to cost efficiency, sustainability and resilience in CERN's supply chain, reinforcing the Organization's ability to deliver world-class scientific projects while maximising value for the Member States.

Through this structured approach, CERN ensures informed decision making, stronger supplier partnerships and alignment with broader organisational objectives, solidifying procurement as a strategic enabler for the Organization.

A detailed overview of the main categories can be found in the 'Category Overview' section.

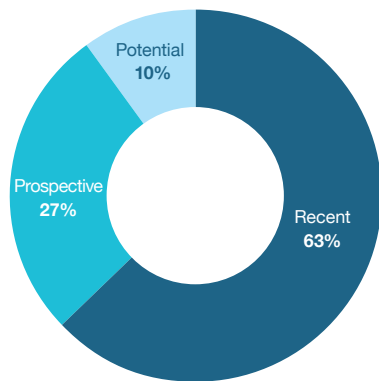
	Category Managers	Generalist Procurement Officers
 Expertise	Deep knowledge of a specific market	Broad knowledge across many categories
 Strategic Role	Develops category strategies, aligns procurement with the Organization and Procurement Strategy	Typically transactional; ensures procurement processes follow Procurement Rules, always in the interest of the Organization
 Value for Money	Can aggregate demand, leverage expertise, negotiate stronger contracts, brings added value	May miss opportunities for economies of scale or better deals
 Supplier Management	Builds strong, long-term relationships and manages supplier performance	Focus on fair competition rather than relationship building
 Risk Management	Identifies and mitigates category-specific risks (e.g. supply chain, innovation gaps)	Applies generic risk processes, may overlook sector-specific risks
 Efficiency & Consistency	Standardises specs, contracts, and frameworks within category	Handles diverse procurements, but less standardisation possible
 Professionalisation	Encourages procurement as a specialist, strategic discipline	Compliance-focused
 Flexibility	Best for large/high-value/high-risk categories	More adaptable to varied or low-value procurements
 Client perception	Business partner	Project-based

SUPPLIER DATABASE MANAGEMENT

The CERN supplier database includes over 25 000 active suppliers, with approximately 5000 new suppliers added each year.

Registered suppliers are categorised as follows:

- Recent suppliers: firms awarded a contract or an order within the past eight years;
- Prospective suppliers: firms contacted by CERN within the last eight years but without any orders placed;
- Potential suppliers: firms registered within the past five years but not yet contacted.



Supplier distribution

Maintaining an up-to-date supplier base is essential for procurement activities: it enables CERN to quickly identify qualified suppliers for tenders and contracts, while minimising risks such as errors in payments or communication.

To achieve this, CERN's Procurement Service conducts an annual communication campaign to invite registered suppliers to review and update their details, while encouraging unregistered suppliers to create an account on the e-procurement platform. In parallel, CERN conducts an annual database clean-up, deactivating approximately 7,000 suppliers each year due to inactivity.

Together, these efforts keep the supplier database accurate, reliable and aligned with operational needs, ensuring that procurement processes remain efficient and effective.

RESPONSIBLE PROCUREMENT

OVERVIEW

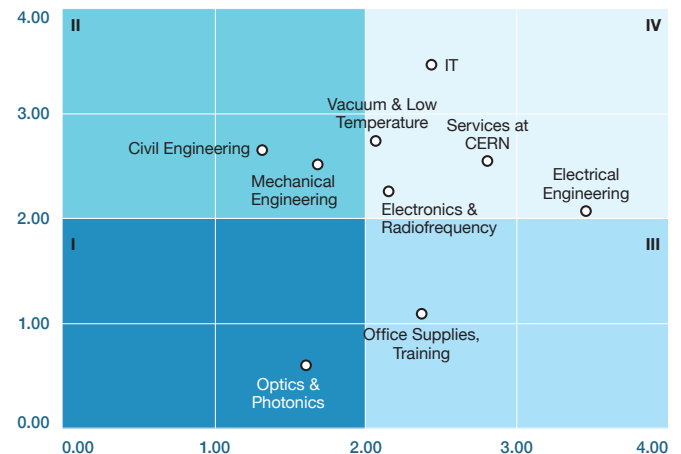
2025 marks the second year of the kick-off phase of the implementation of the CERN Environmentally Responsible Procurement (CERP) project, which was adopted to integrate environmental considerations across the entire procurement process and support CERN's 2030 environmental objectives.

During this two-year kick-off phase, CERN intentionally focused on challenging and testing the policy in practice. A trial-and-learn approach was adopted, engaging technical departments, suppliers and internal stakeholders through workshops, training, exchanges and pilot tenders.

At the end of 2025, a comprehensive implementation review was carried out to consolidate lessons learned, assess progress, identify gaps and define what is required for full deployment as of 2026. This review aligned with CERN's environmental objectives and CERN's first sustainability report, which is planned for 2027.

SUPPLIER ENGAGEMENT

As part of CERN's efforts to better understand the environmental performance of its supply chain, the CERP team conducted a supplier sustainability engagement survey. The survey assessed in the sustainability maturity of specific suppliers and their willingness to engage in improving their environmental performance. Based on their responses, suppliers were evaluated using a scoring methodology and placed within a four-quadrant matrix reflecting both their maturity and their level of engagement.



Mapping of suppliers according to their maturity level (horizontal axis) and willingness to engage (vertical axis).

The resulting matrix provides a clear overview of the current landscape, distinguishing markets and suppliers who are not yet mature or willing to engage from those who are already demonstrating strong commitment to sustainability. This classification enables the CERP team to tailor its approach by developing targeted engagement and sustainability action plans adapted to the specific needs and readiness of each supplier group.

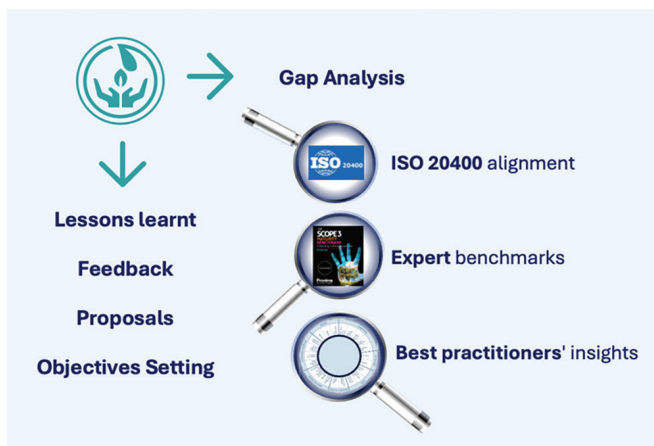
TWO-YEAR POLICY IMPLEMENTATION REVIEW

In December 2025, the CERP project reached an important milestone with the completion of its two-year implementation review, which was presented to the CERP project steering committee. To evaluate the status, maturity and impact of environmentally responsible procurement at CERN, the review assessed the implementation of the CERP Policy from three perspectives:

- The ISO 20400:2017 sustainable procurement standard focusing on governance, policy integration and supplier engagement;
- An external expert benchmarking exercise focusing on gaps versus peers, operational key performance indicators (KPIs) and supplier data quality;
- An external community of practice benchmark focusing on culture, organisation and peer learning.

This diversified approach provided a holistic understanding of the project's strengths and achievements and areas where further development is possible. The review showed that environmental criteria can be successfully integrated into procurement but that their effectiveness depends strongly on early collaboration between technical, procurement officers and the CERP sustainability team. The supplier engagement programme proved highly valuable.

Finally, the policy's implementation phase generated first success stories that confirm its potential, including responsible award decisions, increased interest from technical departments in sustainable design choices, improved supplier transparency and positive recognition of CERN's responsible procurement leadership among Big Science organisations.



COMMUNICATION AND OUTREACH

EXTERNAL COMMUNICATION

Since its launch in September 2024, the Procurement Service's "Business with CERN" LinkedIn channel has established itself as a highly successful communication tool, attracting a rapidly growing audience of industry professionals, suppliers and stakeholders from across CERN's Member States. The channel features targeted content, including procurement opportunities, success stories, details of upcoming webinars and updates on CERN's industrial partnerships, designed to engage small and medium-sized enterprises (SMEs), large companies and Industrial Liaison Officers alike. By showcasing CERN's commitment to transparency, innovation and balanced industrial return, the channel has become a vital platform for demystifying procurement at CERN, fostering competition and ensuring equitable opportunities for suppliers in all Member States. With the account now exceeding 6000 followers, its fast-expanding reach reflects strong engagement and interest from the global business community. This success aligns seamlessly with CERN's procurement objectives of attracting a diverse range of suppliers, stimulating competition and promoting a more balanced industrial return across all Member States, thereby reinforcing the Organization's mission of collaboration and excellence.



Visuals of the 'Business with CERN' LinkedIn channel posts

INDUSTRY EVENTS AND OUTREACH

To maintain engagement with industry and further develop expertise in specific fields, the Procurement Service participated in several conferences in 2025.

22 MAY
FCC Week in Vienna



18 SEPTEMBER
STFC UK - Big Science
"Meet the Buyer" event
in Oxfordshire



1 OCTOBER
F4E - BSO Collaboration
Workshop in Barcelona



7 OCTOBER
DPW Amsterdam



20 OCTOBER
Helium Super Summit in Austin



4 NOVEMBER
Word Nuclear Exhibition
in Paris

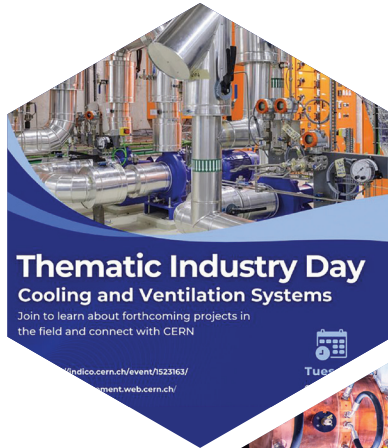


3 DECEMBER
BSBF 2025 in Madrid



In parallel, the Procurement Service organised a series of webinars, including both "Doing Business with CERN" sessions – generic events attracting hundreds of participants from across all Member States – and thematic or pre-market survey events. These webinars have proven highly successful, drawing significantly larger audiences than traditional in-person country events while offering a more efficient and sustainable way to engage a broader range of stakeholders.

6 MAY
Thematic Day - Cooling and Ventilation Systems



Thematic Industry Day
Cooling and Ventilation Systems
Join to learn about forthcoming projects in the field and connect with CERN

<https://indico.cern.ch/event/1523163/>
procurement.web.cern.ch

Tue

12 MAY
MS webinar
Radiofrequency Systems



Webinar
Radiofrequency Systems
Join to learn how your expertise can contribute to these CERN projects.

<https://indico.cern.ch/event/1537776/>
procurement.web.cern.ch

5 JUNE
MS webinar - Occupational Medicine services



Webinar
Occupational medicine services at CERN
Join to learn how your expertise can contribute to this business opportunity

<https://indico.cern.ch/event/1550777/>
procurement.web.cern.ch

24 JUNE
2nd CERN Industry Webinar

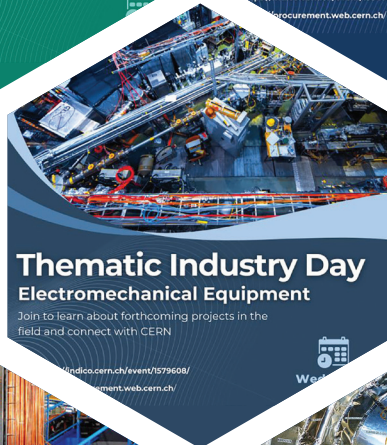


CERN Industry Webinar
Learn about how to do business with CERN, explore upcoming opportunities, and boost your visibility.

<https://indico.cern.ch/event/1554766/>
procurement.web.cern.ch

Tue

15 OCTOBER
Thematic Day - Electromechanical Power Supply Equipment



Thematic Industry Day
Electromechanical Equipment
Join to learn about forthcoming projects in the field and connect with CERN

<https://indico.cern.ch/event/1579608/>
procurement.web.cern.ch

Wed

22 NOVEMBER
Thematic Day - Precision Machining webinar



Webinar
Electrical Installation Works at CERN - MS-5140/EN
Join to learn how your expertise can contribute to this business opportunity

<https://indico.cern.ch/event/1603293/>
procurement.web.cern.ch

Wednesd
19/11/2021

27 NOVEMBER
3rd CERN Industry Webinar



CERN Industry Webinar
Learn about how to do business with CERN, explore upcoming opportunities, and boost your visibility.

<https://indico.cern.ch/event/1602953/>
procurement.web.cern.ch

Thursd
27/11/2021

CATEGORY OVERVIEW

This section provides an overview of the main contracts awarded and the contract management activities across the most relevant procurement categories.





B72 and B100 refurbishment.

CIVIL ENGINEERING

In 2025, CERN undertook its first Best-Value-For-Money (BVM) adjudications for construction contracts, integrating technical, methodological and sustainability criteria into the contract award process.

Following the first of these adjudications, in July, a contract was signed for the construction of 28 vertical cores at Point 1 and Point 5, which will enable new powering and control systems installed in the HL-LHC galleries to be connected with components operating in the LHC tunnel. The works will be executed during the forthcoming Long Shutdown 3 (LS3).

In September, a contract was signed for the construction of Building 777. This new flagship tertiary building will provide mixed office and laboratory space for CERN's Accelerators and Technology sector. It will also house a large restaurant replacing the current Restaurant 3 and is designed to be a new service hub for the Prévessin site. Building 777 will be an environmentally friendly, state-of-the-art building with a total gross surface area of approximately 13 000 m², aligned with CERN's Masterplan 2040 objectives. The design places a distinct focus on sustainability, including a mass timber structure, with the aim of achieving a net zero carbon building and high energy efficiency.

In September and October, four contracts were also signed covering four work packages (electrical, civil engineering, heating and ventilation, and sanitary) for the renovation and extension of CERN's central workshop. The workshop is located in Buildings 72 and 100 on CERN's Meyrin site and is operated by over sixty technicians and engineers, providing critical machining, sheet metal work and welding services for the Organization.

From a contract management perspective, 2025 saw the successful completion of the extensive renovation of CERN's Main Building. This renovation was highly technical and sensitive in nature owing to the building's classified status, based on its exceptional architectural value, having been originally designed by esteemed Swiss architects Peter and Rudolph Steiger and constructed in 1959.

Finally, 2025 marked another significant milestone with the completion of the first contract for FCC site investigations. This campaign established crucial information about the ground conditions in the areas of geological uncertainty along the projected alignment of the proposed FCC tunnel, which was an important component of the FCC Feasibility Study.



Top: Environmental survey for the FCC Feasibility Study
Bottom: FCC site investigations



Ventilation ducts

COOLING AND VENTILATION

In preparation for the LS3, the cooling and ventilation portfolio has expanded significantly, with further high-value procurements still anticipated. To manage the increased workload, new framework agreements have been established.

Major procurements include:

- Installation of cooling and ventilation systems for the new SRF building and its clean rooms;
- Framework agreements for ventilation infrastructure.

In February 2025, CERN also awarded two key contracts:

- Supply, installation and commissioning of heating, ventilation and electrical equipment for a new centralised heating plant on the Meyrin site, which is designed to meet a significant portion of the Meyrin site's heating needs using heat recovered from the accelerator complex;
- Extension of the heat recovery network linking the Point 1 cooling towers to the plant.

In parallel, the manufacturing and installation of the new centralised heating plant on the Prévessin site were completed to meet all the heating requirements of this site.

These upgrades support CERN's sustainability goals, reducing both carbon emissions and energy consumption.

Given the scale and complexity of these high-value tenders, CERN is actively monitoring contractors' workloads to ensure timely project completion.



Cooling towers



A power transformer in the BE2 electrical substation.

ELECTRICAL ENGINEERING AND MAGNETS

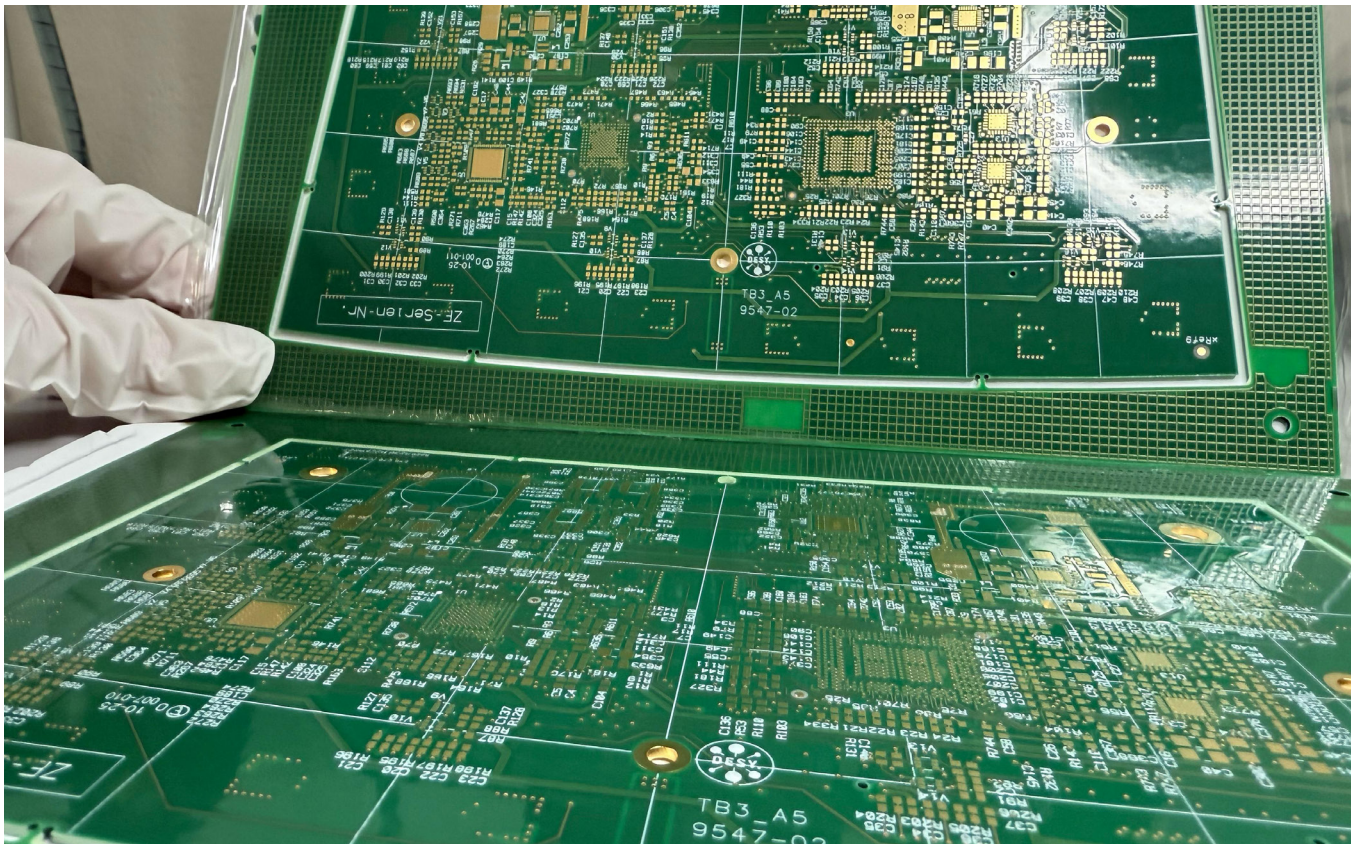
The electrical engineering category at CERN continues to drive sustainability and innovation, with a focus on upgrading critical infrastructure for the LHC and the HL-LHC project. A key contract awarded in July 2025 covers the design and supply of 18 kV cast-resin transformers for the radiofrequency LHC power converters. These new dry-type transformers replace oil-filled units, eliminating environmental risks associated with mineral oil while maintaining high performance.

Meanwhile, the full series production of CLIQ (Coupling-Loss Induced Quench) units, a novel protection system developed at CERN for the HL-LHC superconducting magnets, has been completed. The CLIQ system, which ensures rapid and reliable quench protection by injecting controlled currents into magnet coils, saw 10 units delivered in May 2025 and a final batch of 14 units in August 2025. After successful factory acceptance tests, site acceptance is now under way, with installation planned in the technical galleries of the accelerator complex during LS3. These advancements underscore CERN's commitment to operational reliability, environmental responsibility and cutting-edge engineering in preparation for the HL-LHC era.

Most of the procurement for the superconducting magnets has already been completed. Significant contracts were also awarded for the supply of yokes and coils for the North Area consolidation project.



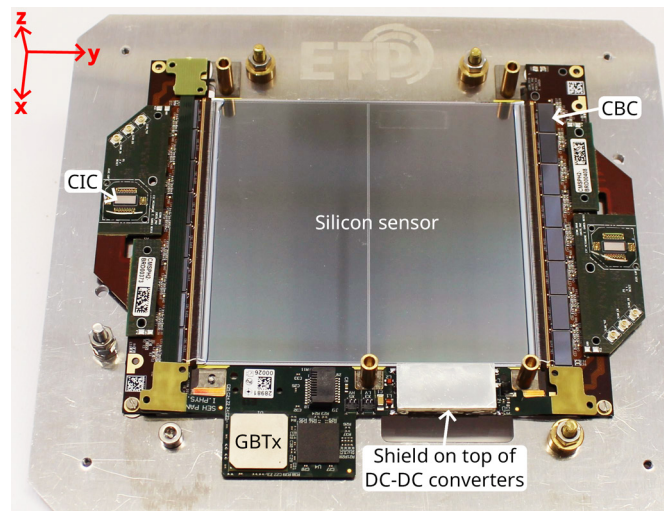
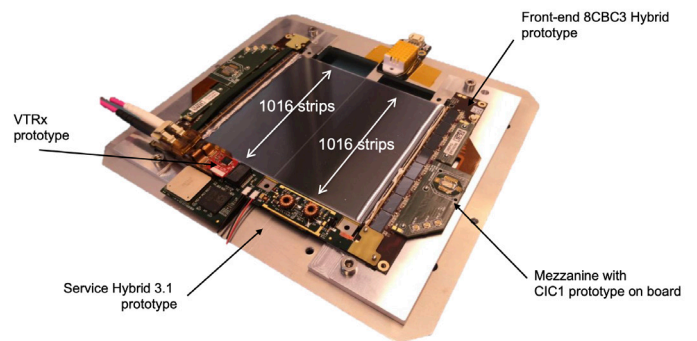
CLIQ units



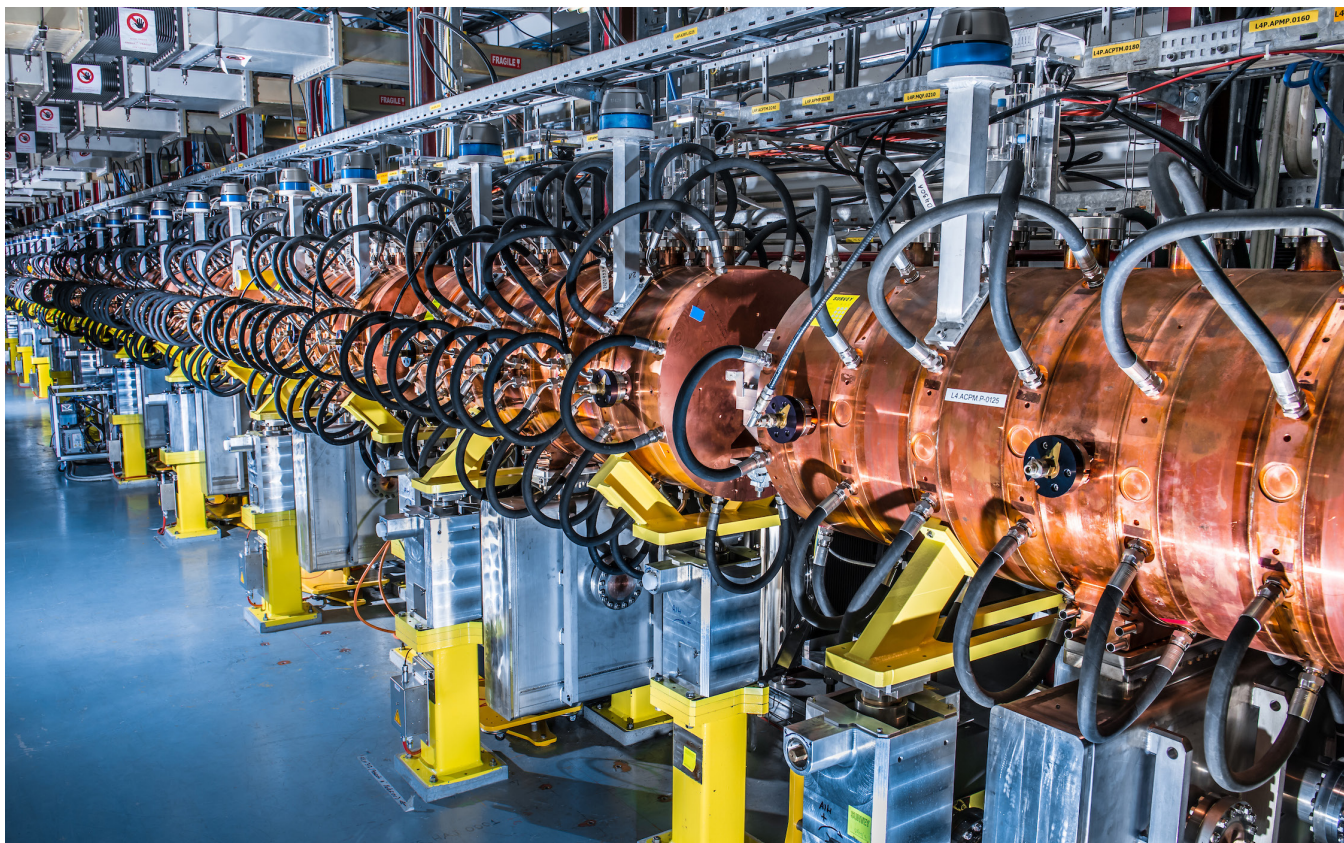
A tileboard PCB, which will be placed in the CE-H section of the CMS HGAL detector.

ELECTRONICS

Procurement in this category requires rigorous risk management, supplier stability and adaptability in order to mitigate challenges and ensure the seamless progress of CERN's upgrade projects. In 2025, CERN managed three framework contracts for printed circuit boards (PCBs) in collaboration with its in-house electronics workshop. Meanwhile, the production of tailor-made, radiation-tolerant connectors for the experiments was completed, although intensive follow-up was required to guarantee timely delivery. However, the interruption of the activity of the supplier responsible for assembling the highly complex hybrid circuits, which are critical components for the CMS upgrade as part of the HL-LHC, demanded immediate action. CERN engaged directly with the contractor's PCB subcontractor and secured alternative suppliers for assembly. The transition remains subject to strict oversight to prevent disruptions and safeguard the project timeline.



CMS' Outer Tracker 2S and PS hybrid modules

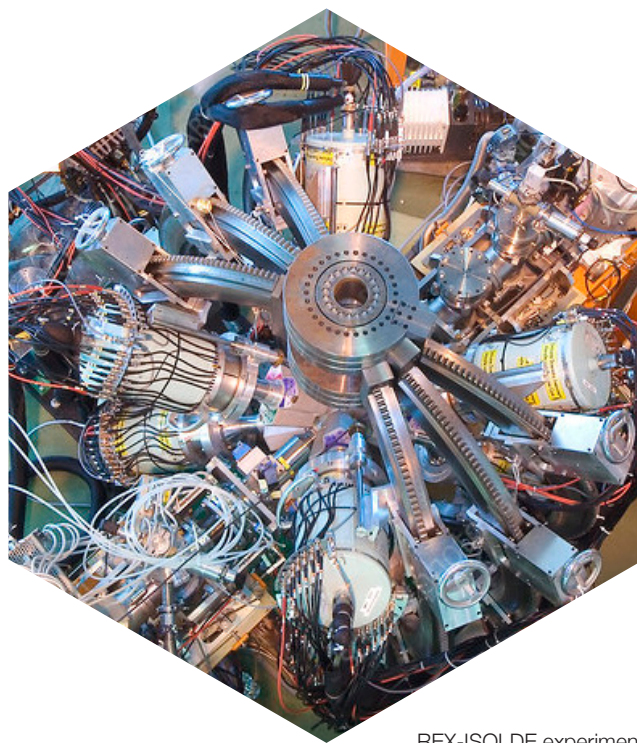


CERN Linear Accelerator 4 (LINAC4)

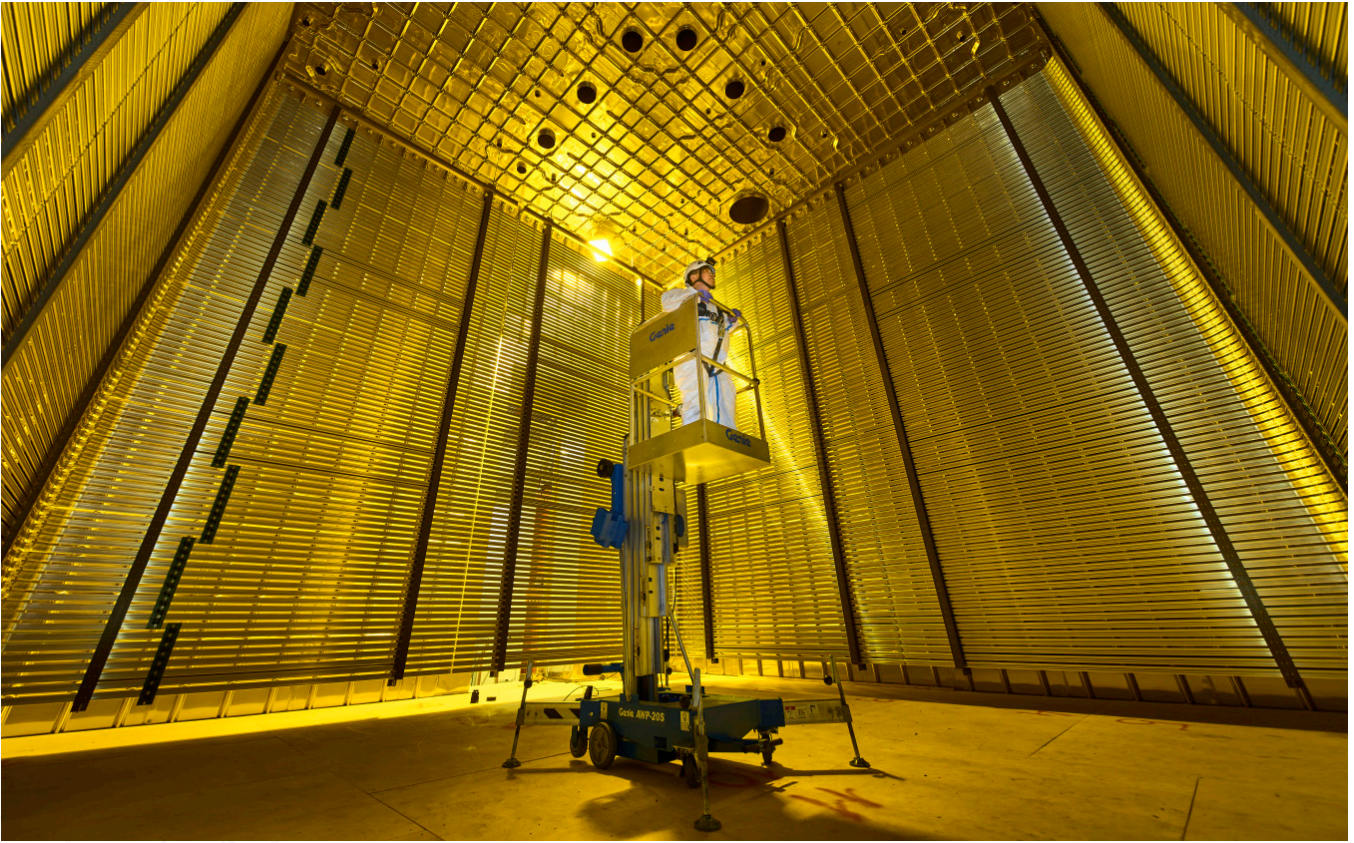
RADIOFREQUENCY

In 2025, the radiofrequency (RF) category saw significant activity to support CERN's evolving infrastructure needs, particularly for the HL-LHC and LINAC 4 upgrades. Several new contracts were initiated to secure critical components, including turnkey high-power radiofrequency systems, transmitters for high-power RF systems, waveguide junction circulators and ferrite loads, and solid-state RF amplifiers for REX-ISOLDE. Additionally, contracts were awarded for high-efficiency and 352 MHz klystrons.

This category is characterised by highly specialised, niche-market technologies, where supplier options are often limited due to the advanced technical requirements and limited competition in the Member States. To address these challenges, CERN focused on strategic sourcing and capacity-building efforts, including R&D orders, to foster a more competitive supplier base. These initiatives were designed to ensure long-term reliability, innovation and cost effectiveness while maintaining the stringent performance standards required for CERN's accelerator complex.



REX-ISOLDE experiment



The DUNE Experiment prototype in Prévessin

MECHANICAL ENGINEERING

The mechanical engineering category is greatly influenced by global material price volatility, particularly in the case of key metals such as stainless steel, copper and aluminium. Factors such as supply chain disruptions, trade restrictions and rising demand from the green energy and electric vehicle sectors kept prices elevated in 2025, although inflation slowed down compared to previous years. CERN actively monitors relevant material indices to anticipate cost fluctuations and secure stable procurement for its critical projects; this is an essential practice as the demand for high-precision components has increased, in particular for the HL-LHC project.

In 2025, CERN closely tracked several major contracts, including the production of collimators for the HL-LHC. A new framework contract was also established for the supply of 316LN 3D forged blanks, ensuring a reliable source for future needs. Additionally, CERN placed a significant mechanical assembly contract for the DUNE project in the United States, coordinating complex logistics and quality requirements for the experiment.



Double beam collimator for HL-LHC



CERN's Data Centre

INFORMATION AND TECHNOLOGY

Within the IT category, networking equipment is essential for ensuring the reliability and performance of CERN's technical network, which underpins accelerator operations, power distribution and critical campus services. Recent procurements included the replacement of ethernet switches, providing connectivity to over 13 000 devices across the accelerator complex and the CERN campus.

In 2025, CERN also expanded its computing and storage capabilities to support the increasing demands of LHC data processing. This involved acquiring additional central processing unit (CPU) servers and storage expansion units, reinforcing an infrastructure that already comprises over 10 000 servers. The focus of these procurements remained on reliability, energy efficiency and seamless integration with existing systems in order to guarantee high availability and scalability.

The software category requires strong emphasis on long-term sustainability, flexibility and interoperability, as strategic decisions in this area often have a direct impact on CERN's operations. Recent developments highlight this dynamic: CERN was notified of the discontinuity of its on-premise ERP system in 2029, prompting extensive strategic discussions about potential options, such as maintaining

the existing system as a Software as a Service (SaaS) solution or transitioning to a new ERP system. Regardless of the option chosen, this decision will have a structuring impact on CERN's operations. In these procurements, CERN is prioritising risk mitigation and adaptability to technological evolution, ensuring that the solutions chosen align with operational needs and future requirements.



Installation of the compressor stations of the HL-LHC helium liquefiers

VACUUM AND LOW TEMPERATURE

In 2022 and 2023, CERN awarded critical contracts for the design, manufacturing, installation and commissioning of helium refrigerators at LHC Points 1 (ATLAS) and 5 (CMS), as well as a contract for the design, manufacturing and installation of the related cryogenic lines. This new equipment is essential for providing cooling between 1.9 K and 80 K to superconducting magnets, crab cavities, beam screens, thermal shields and current leads as part of the HL-LHC project. Each system comprises four main sub-systems: a warm compressor station, a refrigerator cold box, a cold compressor box and a cryogenic transfer line, all designed for high-purity helium and for robust performance.

The contract for the supply of the refrigerators has proceeded as planned, with the main components already delivered. However, the contract for the cryogenic lines has faced some delays. To mitigate risks to the project timeline, CERN has issued an invitation to tender for additional contracts to supplement production capacity. This approach, combined with continuous monitoring of ongoing production, is essential to maintaining progress and addressing challenges promptly.



HL-LHC helium liquefier and compressor stations being installed.



North Area gas infrastructure consolidation

GASES

In 2025, the gases category saw several notable developments. A strategic discussion was initiated regarding the virtual management of the helium (He) stock, as the planned LS3 will temporarily reduce demand. For nitrogen (N₂), no major changes occurred, although the discontinuation of France's ARENH (Accès Régulé à l'Électricité Nucléaire Historique) mechanism introduced potential market volatility, given nitrogen production's sensitivity to electricity prices. CERN is closely monitoring this situation in order to mitigate risks. Meanwhile, preparation began for the retendering of a significant number of specialised gases that, although procured in small volumes, are critical to for the experiments. Additionally, the renovation of the North Area gas infrastructure advanced, with two significant contracts awarded to modernise and streamline gas distribution for the future operational needs of four different buildings.



The ATLAS ITk detector integration

DETECTOR TECHNOLOGIES

The detector technologies category encompasses critical components such as wafers, sensors, integrated circuits (ICs) and module assembly, all of which are essential for the forthcoming upgrades of the ATLAS and CMS experiments. In this regard, the purchases made by CERN in this category are mostly financed by the collaborations.

A prime example is the ATLAS ITk silicon detector, an all-silicon detector designed to replace the current inner detector and handle the increased luminosity expected during the HL-LHC upgrade. This complex system is composed of three main elements:

- The front-end chips, which are manufactured using advanced 65-nm CMOS technology. These readout chips are produced in high-volume commercial semiconductor foundries, ensuring the high-precision, radiation-hard integrated circuits required for the detector's performance;
- The silicon sensors, which detect particle hits, are supplied by specialised partners. These suppliers deliver fully tested wafers or diced sensors that meet ATLAS's stringent technical specifications;
- Module hybridisation, the assembly of sensors and readout chips into functional units, is carried out by several industrial partners. This process involves under-bump metallisation, flip-chip assembly, electrical connection and rigorous quality control, resulting in fully

assembled modules that are ready for integration into the detector. Pre-production of these modules has been completed, and final-production deliveries are currently under way.

From a procurement perspective, this category presents unique challenges and priorities. The geopolitical situation, particularly concerning the Taiwanese manufacturer TSMC, is being closely monitored due to its critical impact on chip production. Additionally, contracts for module assemblies for both ATLAS and CMS are under intense scrutiny as the projects are approaching the combined production capacities of vendors. Given the extremely high technical and quality requirements, any risk of delay or non-compliance could have a significant impact on the projects. To mitigate these risks, the contracts in place allow flexible reallocation of volumes between contractors, ensuring resilience in the supply chain and maintaining project continuity even if a single supplier faces challenges in meeting quality or schedule demands.



CONSULTANCY

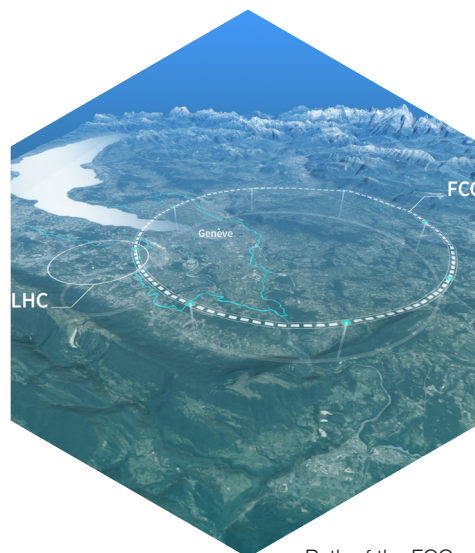
The consultancy category at CERN is experiencing notable growth, driven by increasing needs, particularly those related to the Future Circular Collider (FCC). This expansion is notable in key initiatives such as the socio-economic assessment of the FCC, assistance for public consultations and the organisation of public debates in France and Switzerland to engage stakeholders. As part of the FCC studies, CERN has launched new invitations to tender for the provision of consultancy services related to civil engineering, including civil engineering design, material excavation and disposal and preparations for upcoming site investigation campaigns.

This category also includes consultancy services to define the technical requirements to support CERN in defining the strategy for the Enterprise Resource Planning (ERP) software, to provide advice on sustainability matters, and to conduct impact studies.

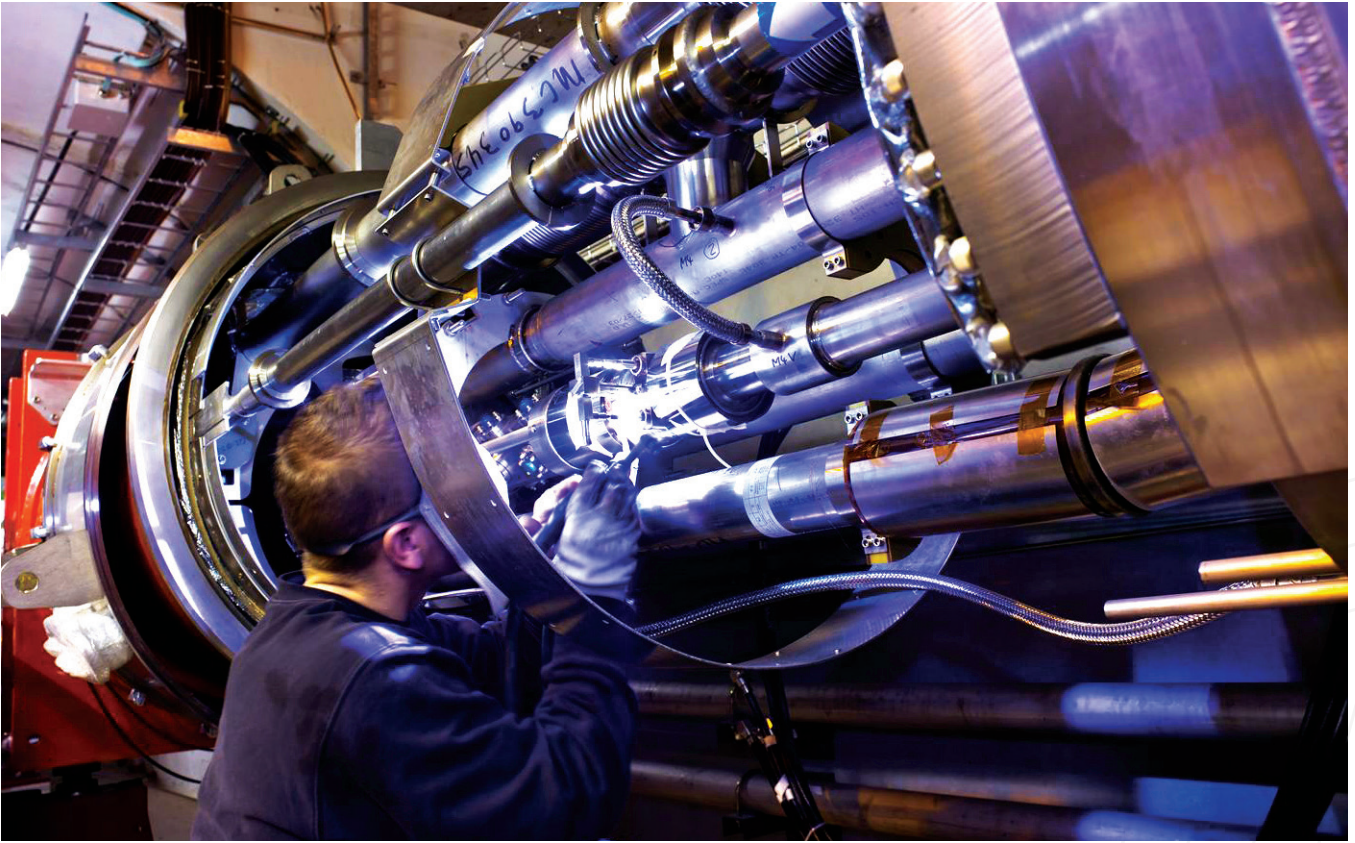
Historically, this category has been characterised by a large number of small, specialised and fragmented contracts. It also typically allows a wide distribution of contracts among the Member States. CERN is now moving towards a consolidation strategy to improve efficiency and coherence, while leveraging the category's potential to support balanced industrial return among the Member States.

A standout example of success in this area is the implementation of five agile IT development contracts, which performed well in 2025 and featured the involvement of several Member and Associate Member States, including Greece, Portugal, Spain, Belgium and India.

The rising demand for specialised services underscores the importance of ongoing consolidation and strategic planning to ensure that CERN remains adaptable and responsive to new challenges.



Path of the FCC



Welding works on the CERN site

MULTI-YEAR ONSITE CONTINUOUS SERVICES (MOCS)

The overall activity in this category remained consistent in 2025, with some variations across individual contracts. A minor increase in the overall volume of the contracts was observed, primarily due to the inclusion of new activities, such as decontamination services, radiological dismantling and sanitary works, which were not previously covered under MOCS contracts. Notably, the volume of temporary labour contracts also increased significantly, both in preparation for LS3 and to address gaps, including for language courses.

Several critical contracts were also initiated in 2025, as three new agreements were signed for the maintenance and operation of CERN's cooling and ventilation installations in accelerator facilities and tertiary buildings.

A high number of new contracts were also awarded, including cleaning services for the French part of the CERN site, operation of the Mobility Centre, reception services for the Science Gateway, transportation services, painting, sanitary works, boring and coring works, the installation of scaffolding, mechanical engineering services, and the supply and installation of mechanical structures.

The start of LS3 is expected to drive a significant increase in overall expenses, particularly in maintenance, works and transport activities. For instance, there will be a substantial

rise in demand for electrical works. A tendering process for a new contract has been initiated to support CERN's needs in this field, in addition to the existing contract. To ensure the successful start of LS3, the Procurement Service and technical departments are closely monitoring critical contract performance and workloads, addressing any challenges that arise as proactively as possible.



Electrical works on the CERN site



ELECTRICITY

The electricity category is undergoing a significant strategic shift, following the discontinuation of the ARENH (Accès Régulé à l'Électricité Nucléaire Historique) mechanism, which had previously allowed CERN to purchase electricity at stable, subsidised rates from France's nuclear power plants. This mechanism was particularly valuable for CERN, as it provided more predictable pricing and supply security, partially shielding the Organization from market volatility and enabling long-term budget planning for its energy-intensive operations. The end of ARENH forced CERN to revise its procurement strategy for the future in order to maintain cost efficiency and reliability.

In 2025, key milestones included the successful renewal of ISO 50001 certification, confirmed by an audit in November 2025. ISO 50001 provides a structured framework for systematically improving energy performance and efficiency, which is critical for CERN, given its status as one of the world's most energy-intensive research facilities. The certification helps to identify inefficiencies, set measurable targets and implement best practices in order to limit energy consumption, have a positive impact on the environment and make significant cost savings.

By the end of 2025, all mechanical works for the Corporate Power Purchase Agreement (CPPA) known as "Terres Salées" had been completed, while concrete works for the second CPPA, "Séranon", were finalised. Terres Salées is expected

to start electricity production in early 2026, while Séranon is due to begin production during the second quarter of 2026. Following a separate price enquiry, CERN signed a contract in December 2025 for the aggregation of the two CPPAs, enabling the integration of their electricity generation into the main supply.

In parallel, CERN conducted a tender for the supply of electricity for 2027–2028, which included aggregation as an optional component. As 2027 and 2028 are shutdown years with relatively stable consumption, the inclusion of maximum consumption flexibility was deemed unnecessary. This approach was designed to enhance competition. The future contract will follow a "block + spot" structure.

Procurement efforts concentrated on navigating market volatility, mitigating risks and integrating renewable energy sources to support CERN's energy resilience and long-term sustainability goals, ensuring a smooth transition in the post-ARENH era.

INDUSTRIAL RETURN COEFFICIENTS



The **industrial return coefficient** of a Member State for **supply contracts**, from 1 March 2026 to 28 February 2027, is the ratio between that Member State’s percentage share of CERN’s expenditure on all types of purchases excluding:

- purchases of on-site services for a multi-year period and on a continuous basis (MOCS);
- purchases of utilities;
- any part of the purchases funded by external funds;
- any part of the purchases where the country of origin is a non-Member State;
- individual purchase orders of an amount below 2000 CHF;

during the preceding four calendar years, on the one hand, and that Member State’s percentage contribution to the Budget over the same period on the other hand.

For supply contracts, a Member State is considered well balanced if its average return coefficient for supply contracts for the preceding four years is equal to or exceeds 1.0; additionally an Associate Member State is considered well balanced once it reaches its “ceiling”.

The **industrial return coefficient** of a Member State for **MOCS contracts**, from 1 March 2026 to 28 February 2027, is defined as the ratio between that Member State’s percentage share of CERN’s expenditure on all purchases of MOCS, excluding:

- purchases for supply contracts;
- purchases of utilities;

- any part of the purchases funded by external funds;
- any part of the purchases where the country of origin is a non-Member State;

during the preceding four calendar years, on the one hand, and that Member State’s percentage contribution to the Budget over the same period on the other hand.

For MOCS contracts, a Member State is considered well balanced if its average return coefficient for MOCS contracts for the preceding four years is equal to or exceeds 0.4; additionally an Associate Member State is considered well balanced once it reaches its “ceiling”.

In 2025, three Associate Member States reached their ceilings, namely Croatia, Lithuania and Ukraine, and therefore are considered as well-balanced countries. Finally, the average return coefficient for the last four years for Brazil and Ireland could not be calculated as the two countries joined CERN on 13 March 2024 and 22 October 2025 respectively.

The Organization’s objective of reducing the number of very poorly balanced countries for supply contracts to three or fewer by the end of 2025 was achieved for the second consecutive year. As of 2025, 11 Member States are well balanced compared to 10 in 2024, and only 2 countries, Norway and Israel, have an industrial return coefficient below 0.4.

