



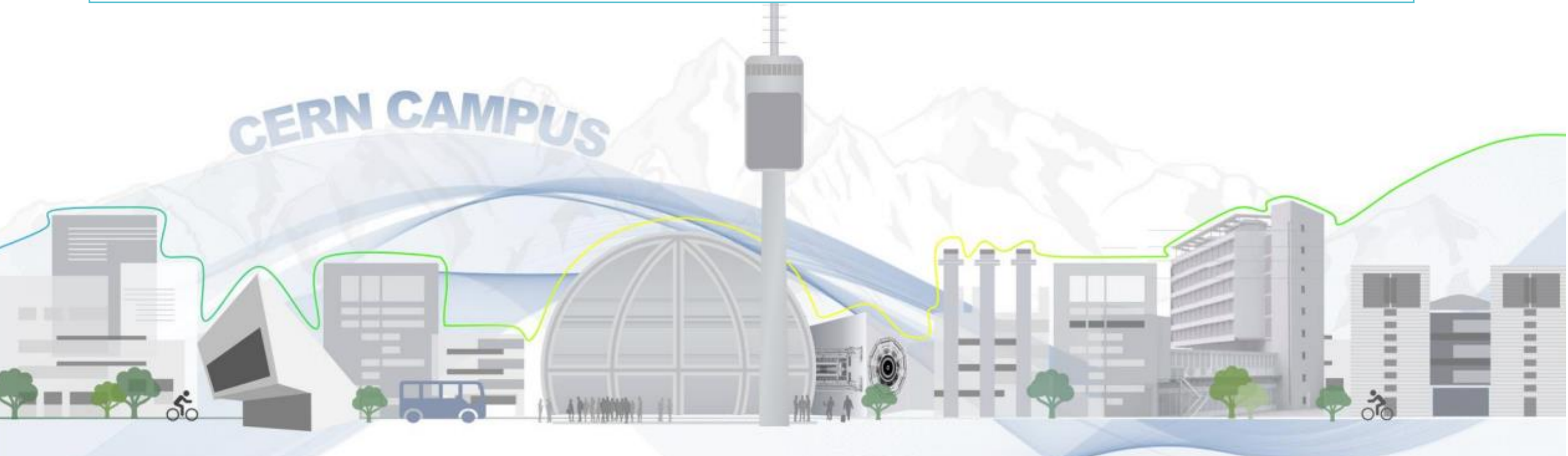
CERN Stores roadmap Vision, Objectives & Strategies

Cédric Garino (SCE-SSC)

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Context: CERN Stores as part of SCE-SSC

The Site and Civil Engineering (**SCE**) Department manages and develops CERN's real estate assets and infrastructures in agreement with CERN's scientific strategy, as well as all the services related to the caretaking and operation of the CERN site.



The Services & Supply Chain group (**SCE-SSC**) provides CERN's community with high standard campus experience and optimal industrial supply chain execution by offering a full set of rationalized, efficient, and transparent services.

667

BUILDINGS 03/1/2022

3

RESTAURANTS

450

HOTEL ROOMS

17.3km

TECHNICAL GALLERIES

64km

TUNNEL

9000

PERSONS/DAY

8500+

OFFICE WORKING STATIONS

54km

ROADS

111ha

GREEN SPACES

400ha

FIELDS & FORESTS

625ha

TOTAL AREA

Supply Chain vision

Professional and integrated Supply Chain to support all CERN's community advancing the scientific program

CERN Stores mandate

CERN Stores is responsible to provide material supply for referenced items (i.e. references with recurrent demands and a long-term interest for the Organization). This includes:

- Referencing of items based on the needs of the CERN Community through a referencing process;
- A centralized front line capturing and processing demands of referenced items. It also covers non-referenced material requests in technical areas such as raw materials if the process benefits of existing CERN Stores expertise;
- Stock management and replenishment via order management using a pre-defined contractual framework following CERN's procurement rules;
- Inbound, internal and outbound warehousing operations (reception, quality control, put-away, inventory, picking preparation).

The ultimate goal is to ensure availability, optimal lead time, traceability, quality and best value for CERN's community of items referenced in CERN Stores.

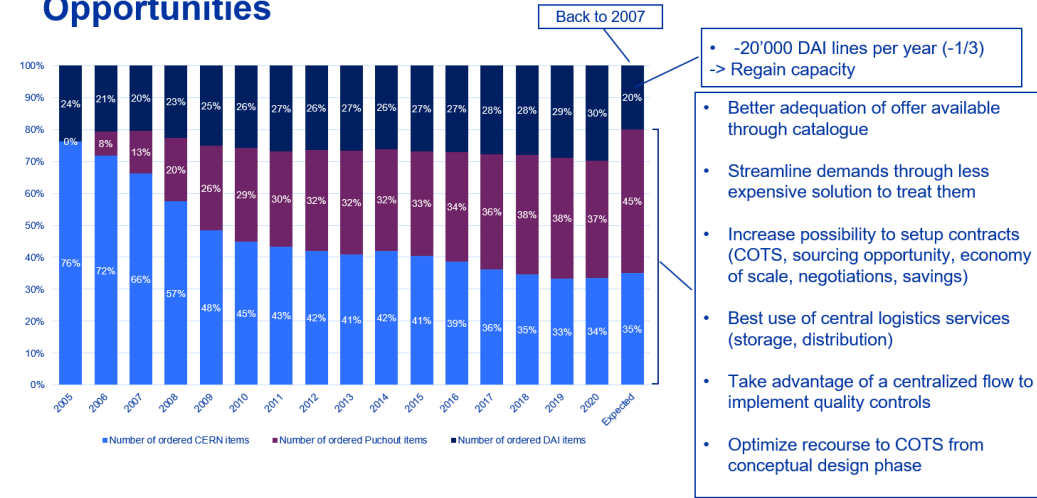
Prior to initiate any purchasing procedure, the end user shall verify whether his/her requirement is covered by CERN stores standard equipment, in which case the purchase shall be handled by the CERN stores.

The purchasing of the said items falls under the responsibility of the Purchasing Service.

Long-term objectives

- Reshape distribution of demand fulfilment routes to the values of 2007 (20% DAI, 80% PunchOut or CERN catalogue)
- Simplify material request and fulfilment experience for all CERN's community
- Reduce inventory value and contain operational costs
- Reduce environmental impact of all SC activities
- Leverage the added value of a central stores service through a higher degree of collaborative integration with key partners (internal and external with suppliers)
- Maintain a healthy, safe and pleasant working environment to sustain high team engagement

Opportunities



SCE Site and Civil Engineering IPT Industry, Procurement and Knowledge Transfer

Roadmap Objectives linked to Initiative Packages

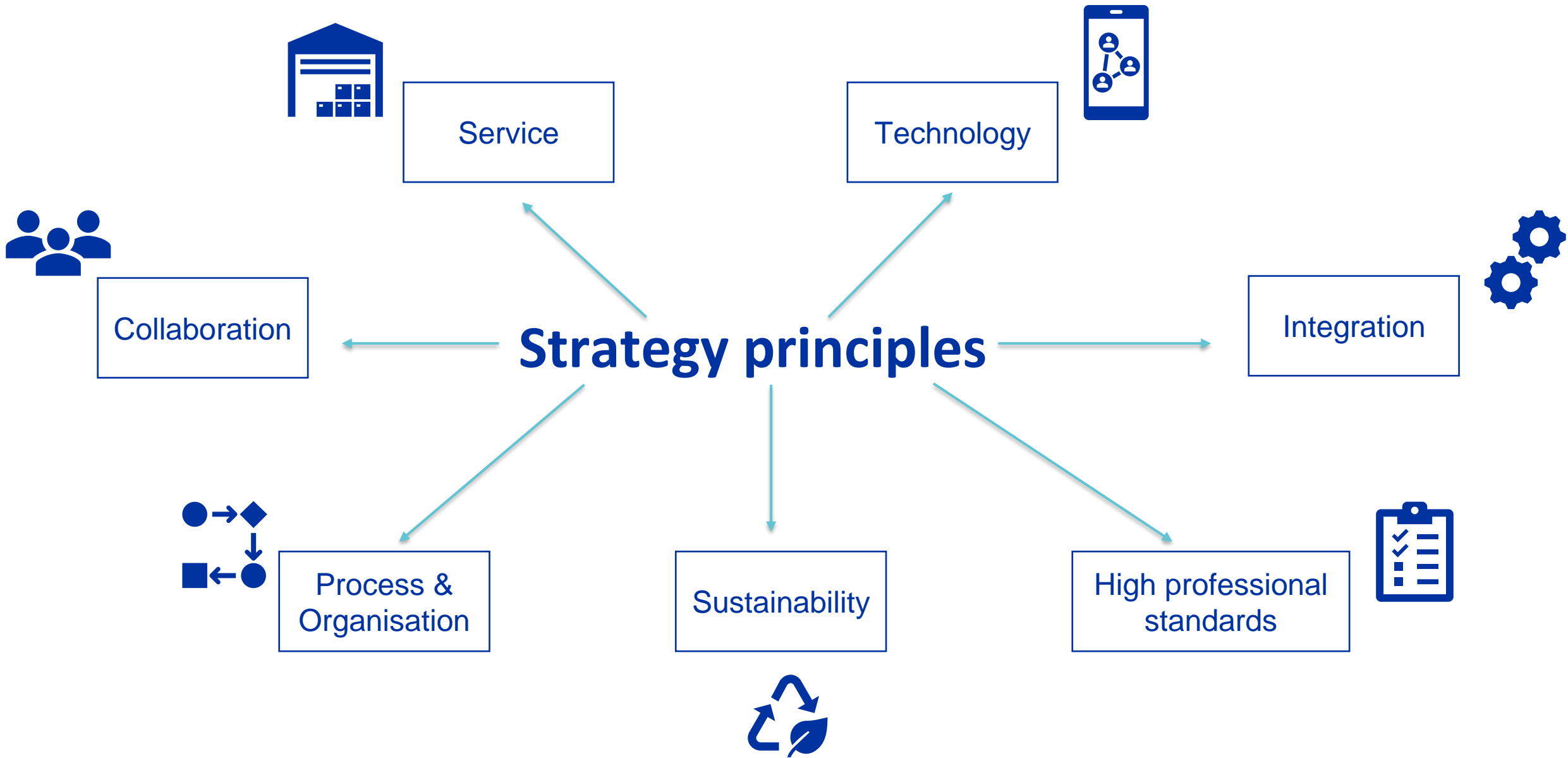
Roadmap Objectives

- Simplify material request and fulfilment experience for all CERN's community.
- Reshape distribution of demand fulfilment to what it was in 2007 (20% DAI, 80% PunchOut or CERN catalogue).
- Optimize inventory and contain operational costs.
- Reduce environmental impact of all supply chain activities.
- Maintain a healthy, safe and pleasant working environment to sustain high team engagement.
- Leverage the added value of a central stores service through a higher degree of collaborative integration with key partners (internal and external with suppliers).



KPIs

Long Term Objectives # Short	KPI Name	Calculation	Period	Target
1 Reshape distribution of fulfilment routes	Supply via CERN-Stores	Demand-lines via CERN-Stores/ total demand-lines (demand-lines are either request-lines or purchasing-lines)	Year	>= 80%
2 Simplify experience	Request process steps	Number of clicks by request process	Snap-shot year end	tbd
	OTIF (On Time In Full)	Demand-lines delivered "on-time-in-full"/ total demand-lines	Year	Increased by 20% on 2022 baseline
3 Reduce inventory & cost	Inventory value	Inventory value of in-stock items	Snap-shot year end	Reduction of 20% of end 2022 baseline
	Operational unit cost	Operational cost for key supply chain processes/ total of request-line	Year	Maintaining 2022 baseline cost
4 Sustainability	2nd hand material usage	Request-lines fulfilled by second hand materials/ total of request-lines	Year	tbd
	Inventory write-offs	Inventory write-off value	Year	tbd
	CO2 emission	Equivalent CO2 emission for all supply transports	Year	tbd
	Single-usage materials	Value of purchased single-usage materials in Supply Chain Operations	Year	zero
5 Increase collaboration	Collaboration pilots with suppliers	Number of collaboration pilot agreements put in place	Year	tbd
6 Working environment	Accident Lost Time	FTE hours lost due to an accident	Year	zero
	Team engagement	Team engagement survey results	Snap-shot year end	tbd



Collaboration

- Foster goal alignment aiming for structured collaboration and create dedicated partnerships with key stakeholders (internal clients, technical experts, CERN Standardisation Committee, Procurement, HSE, logistics, industrial support contracts).
- Develop bidirectional communication channels.

CERN Stores – Cables & Connectors activities

Referencing: CERN Standardization Technical Sub-Committee Cables & Connectors

CSTSC

What shall be referenced/dereferenced in CERN catalogue, continuous updating of technical specifications, expected quality assurance

Ownership of technical specs

CERN Stores contribution

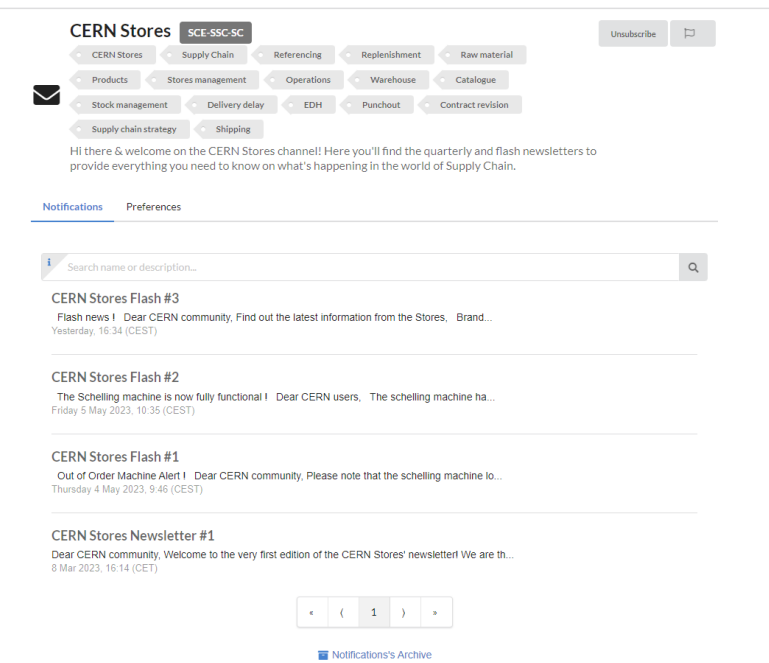

Secretary

Historical data (consumptions, suppliers, internal clients, KPIs...)

Procurement process triggering and follow-up

Logistics optimisation

Frontline for all purchases associated to covered items ("EDH material specialist")



The screenshot shows the CERN Stores channel interface. At the top, there are navigation tabs for 'CERN Stores', 'Supply Chain', 'Referencing', 'Replenishment', and 'Raw material'. Below these are more specific tabs: 'Products', 'Stores management', 'Operations', 'Warehouse', and 'Catalogue'. A search bar is present with the placeholder text 'Search name or description...'. The main content area displays a list of notifications, including 'CERN Stores Flash #3', 'CERN Stores Flash #2', 'CERN Stores Flash #1', and 'CERN Stores Newsletter #1'. At the bottom, there is a pagination control showing '1' and a link to 'Notifications's Archive'.

Process & Organisation

- Document, streamline and standardize key processes.
- Adapt the organisation supporting the service.
- Converge towards one guided and transparent process to request and obtain material at CERN.

9. Recommendation to Create One Supply Team



One Supply Team

- Supply Strategy benefits from its proximity to the STORE
- Catalogue Management (including Data Management) is close to Procurement, but manages workflows closely interacting with Supply Strategist as well
- Merging Procurement for Spares & Consumables with the STORE team to enable joint management of set of team objectives
- Keep Procurement Functional Management with Procurement working in a Matrix set-up

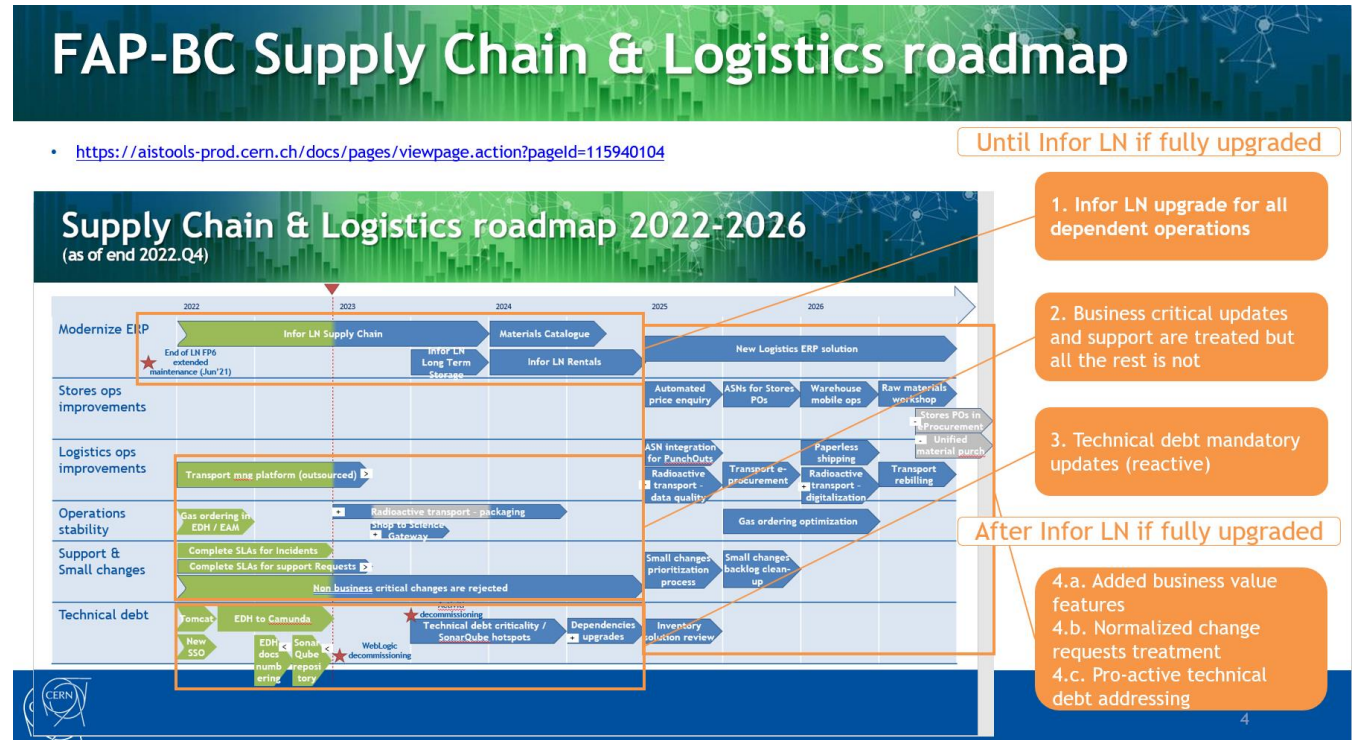
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Purchasing
Catalogue - ART Computer
Catalogue - Bossard
Catalogue - CERN Stores
Catalogue - DigiKey
Catalogue - Distrelec
Catalogue - Farnell
Catalogue - Lyreco
Catalogue - Mouser
Catalogue - Radiospares
Catalogue - SFS
Catalogue - SFS Fasteners
Contract Reference Request
DAI Pool Overview
Demand for Temporary Labour (DTEMP)
Departmental Request (DR)
Electronic Invoice
Inter Departmental Transfer (TID)
Material Request (Stores)
OSVC
Project Request Form
Purchase Requisition (DAI)

Technology

- Leverage technology and digitalization to modernize the entire SC. Support business processes evolution.
- Focus will be on enhanced data management, improved user experience, mobile ops, automations, integration, and alignment of software solutions.



Service

- Adapt and evolve the service offer to CERN's community needs (CERN catalogue offer, new PunchOut catalogs, cutting machines, storage infrastructure, SC frontline).
- Expand service offerings to equipment group: Stock holding, inventory management and warehouse operations.

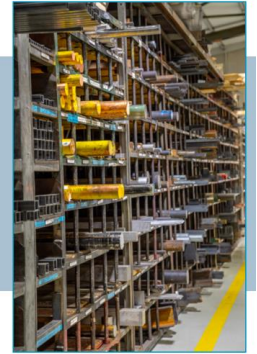
CERN Stores – Infrastructure and Equipment



B. 119 (1200m²). Urgency counter, PPEs, racks, VLMs, shop, cable, informatics...



B. 128 (470m²). Chemical containers.



B. 129 (2300m²). Raw material storage, cutting machines.

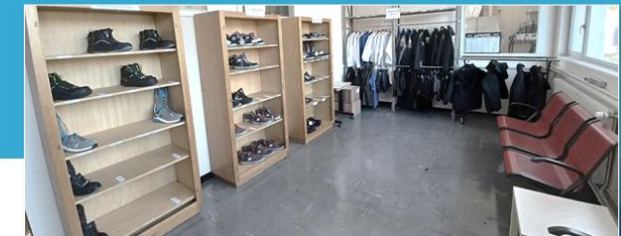
CERN Stores – Service offer



Cuttings



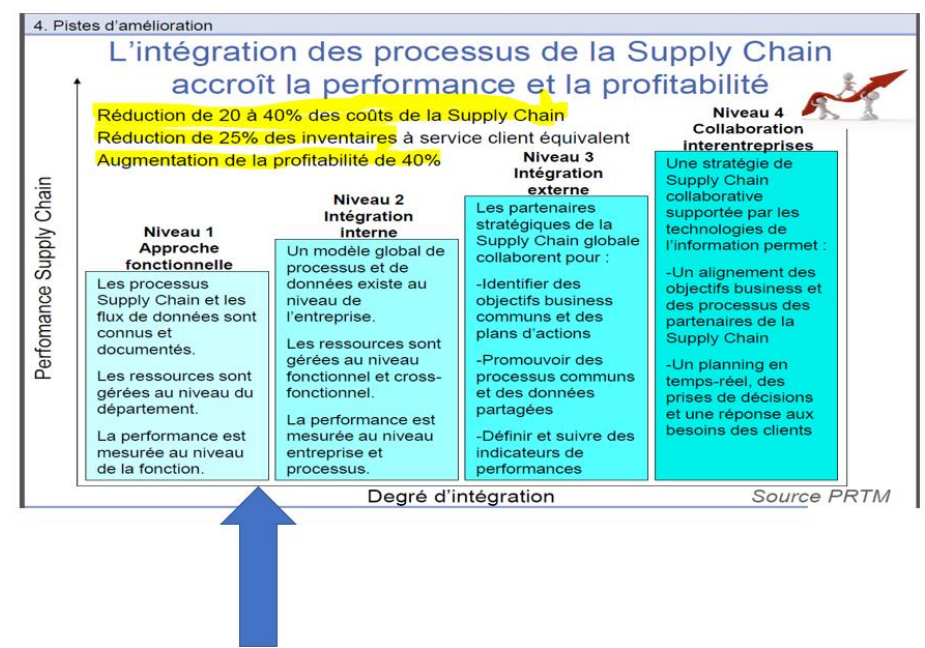
Urgency counter & PPEs



Integration

- Increase maturity of the SC integration, internally and externally.

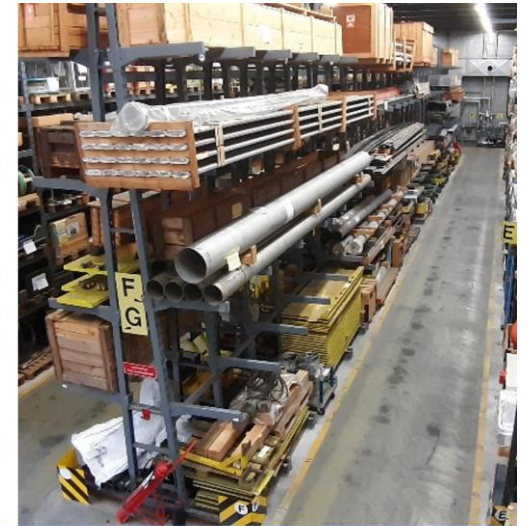
- Connect with storage management roadmap.



We are here, with some initiatives targeting the level 2

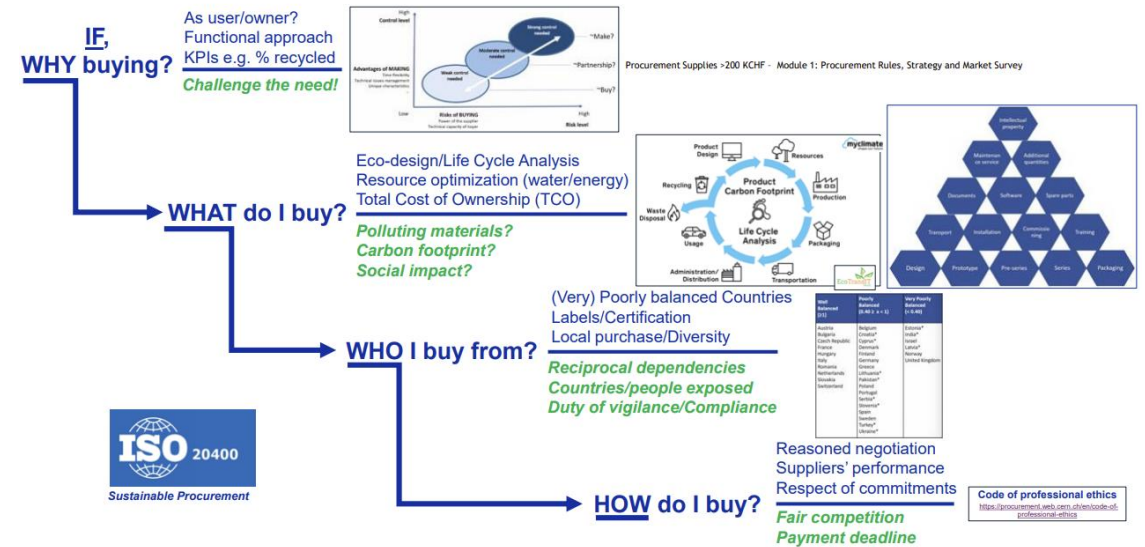
Long-term objectives

- Avoid the construction of new storage buildings in the future. Reduce over time the total surface allocated to storage
- Limit duplication of local storage service resources to target an economy of scale. Reduce associated industrial support costs.
- Feed circular economy and limit environmental impact



Sustainability

- Implement sustainable procurement and eco responsibility guidelines.
- Introduce a new set of KPIs to track CERN SC sustainability efforts and results (request-lines fulfilled by second-hand materials, inventory write-offs, eq. CO2 due to supply transports, single-usage materials in SC operations).
- Connect CERN stores roadmap with waste management roadmap.



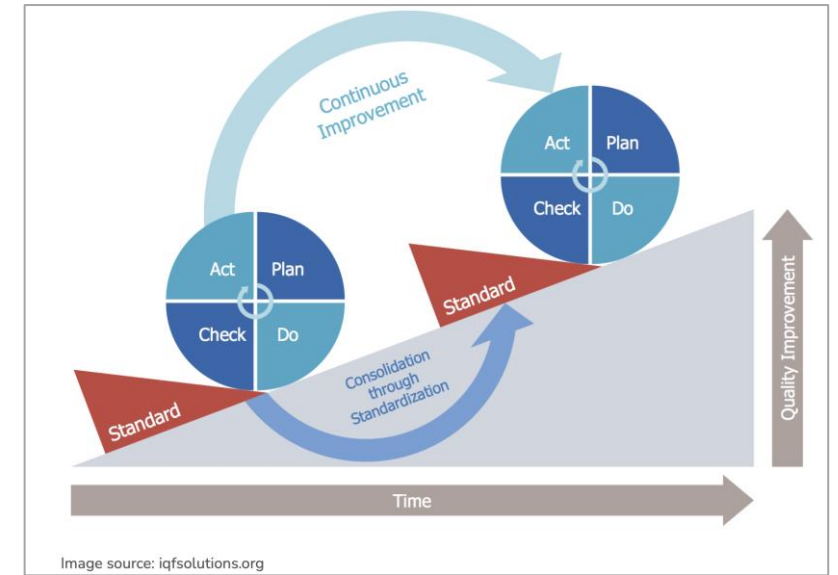
CERN Waste management- Long-term objectives

- Offer to CERN's community an **efficient and adapted waste management service**.
- **Embrace the environmental transition** laid down in CERN's Environmental Protection Strategy and CERN's Masterplan 2040, fully aligned with priorities of CERN, communities surrounding the sites and Geneva international organizations. Become an **eco-exemplary** campus.
- Maintain full **compliance** with France and Switzerland regulations while operating waste management and waste disposal. Be an **Align priorities to long-term plans of host states and local authorities**.
- Per producer category (campus, industry, work site), **reduce the total quantity of waste** generated by CERN, increase **reuse and recycling rates**.



High professional standards

- Apply industry best-practices (ex: LEAN methodology, Inventory Management, Demand Planning, Activity-Based Costing) ensuring a sustainable economic model.
- Enrol CERN stores collaborators in training programs to maintain a high level of expertise.
- Invest in pleasant and ergonomic work environment that promotes comfort, productivity, and well-being.
- Deploy team engagement methodologies and tools.



4. Professionalise Supply Route Decisions



Supply Chain Strategy:

“Create transparency and stock-manage only where a STORE-stock adds real value”

- Increase visibility (identification) of directly ordered items
- Increase number of items in catalogue (Punchout or STORE)
- Decrease and limit items in stock
 - Critical/ strategic or long lead time items (stocks unavoidable)
 - Plannable items (stocks manageable)
- Make decision criteria for Supply Route transparent
- Engage expert for Supply Route traffic management

References and Q&A

- EDMS: <https://edms.cern.ch/document/2884962/1>

Next

- Q2/23:Tasks and schedule (David, Maggie, Ralf)

Thanks for your attention.

Questions ?



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