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ECHT - TOOLS FOR TRACEABILITY

Chemicals Traceabiliy Canvas

Interreg
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ECHT

Imprint

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For more information visit: https://echt.nweurope.eu/

INSTRUCTIONS ON HOW TO USE IT...

The "Chemicals Traceability Canvas for Textiles" is a structured framework that outlines the key stages and fields to address in the process of implemnting chemicals traceability along textile value chains. This tool is largely based on the well established business model canvas. However, in this case, the Chemicals Traceability Canvas (CTC) is divided into four sub-canvas that allow for deeped elaboration of critical aspects to be addressed.

The four sub-canvas are:

1. ESTABLISHING A ROBUST FOUNDATION

This first canvas focuses on the key parameter and conceptual starting points such as the identification of relevant stakeholders, the definition of a traceability problem and necessary roles and capacities.

2. DATA REGISTER AND QUALIFICATION

The second canvas deep-dives into the type and quality of data necessary for your organisation. It highlights key processes such as data collection and quality verification.

3. INTEROPERABILITY STAGE

The third canvas addresses the interrelatedness of different markets, sectors and organisational entities in the context of chemicals traceability.

4. IMPLEMENTATION STAGE

Finally, the fourth canvas deals with specific steps to actually implement and continuously monitor and improve tracebility in your organisation and value chains incl. KPIs.

The Chemicals Traceability Canvas is not meant as a strict checklist or one-size-fits-all manual to implement traceabilty. Instead, it aims at highlighting key aspects to consider and shedding light on issues that until now might have been overlooked in your organisation. Specific impulse questions in each box help to address the various aspects in an actionable manner.

The format as a simple poster with boxes allows to answer and reclect on the impulse questions in any way that fits the organisational processes of your team. Sticky-notes and schematic skechtes are just as suitable as full written text blocks.

It is recommended to use the canvas as an explorative tool to gain an overview before deep-diving into the individual tasks and topics using other methods. This is best done in an iterative way across teams and departments in an organisation.

Chemicals Traceability Canvas

PHASE 1 | ESTABLISHING A ROBUST FOUNDATION

Designed by:	Project:	Iteration No.:	Date:

Problem Framing

What specific chemical traceability challenges exist within your textile supply chain?

What regulatory frameworks govern chemicals in your key markets (REACH, TSCA, etc.)?

What type of information are you currently lacking?

Chemicals throughout Supply Chain

Where are the critical control points for chemical verification?

What chemical inputs and outputs exist at each production stage?

How do chemicals interact with materials throughout the product lifecycle?

How can you track chemical transformations from raw material to finished product?

Stakeholder

What are the key stakeholders in you supply chain?

How does chemical information currently flow between stakeholders?

What barriers exist to transparently share chemical information?

Roles Definition in Organisation and beyond

What functional roles are essential within your organisation and broader traceability ecosystem?

How can complementary expertise be leveraged to solve chemical traceability challenges?

What are the individual capabilities and intersections of roles?

▶ For comprehensive Role Definition see **ECHT RACI Matrix Tool**

Setting up a Chemical Data Team

What expertise areas are essential for comprehensive chemical traceability?

Who possesses the necessary knowledge (e.g. chemistry, data management)?

What external expertise might be needed for your chemical data team?

How will the team interface with existing organizational structures?

What resources will the team need to effectively implement traceability systems?

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Chemicals Traceability Canvas

PHASE 2 | DATA REGISTER AND QUALIFICATION

Designed by:	Project:	Iteration No.:	Date:

Chemical Data Gaps Assessment

What specific chemical information is currently missing from your inventory?

Which hazardous substances lack complete characterization in your data?

What strategies can effectively address identified data gaps without disrupting production?

Chemical Due Diligence

What industry standards and regulatory requirements must be incorporated into your due diligence monitoring schemes?

What documentation standards will you implement to demonstrate compliance?

What potential future regulatory changes should be forseen?

Chemical Data Collection

What standardized templates will you implement for gathering chemical information?

How will you design efficient processes for chemical safety data collection?

What automated capture methods can streamline the data collection process?

Chemical Data Quality Verification

What parameters define acceptable quality for chemical auditing results?

How will you implement verification procedures for supplier chemical content claims?

What systems will identify and flag data inconsistencies or errors?

How will you establish verification hierarchies for different types of chemical information?

What corrective action protocols will address identified data quality issues?

How will you document data quality verification procedures to demonstrate due diligence?

Chemical Data Processing Standardization

What standardized approaches will you implement for chemical data management and interoperability with the existing system?

How will you establish consistent naming conventions for chemical substances across your supply chain?

What classification systems will organize your chemical inventory data?

How will you automate the identification of potential compliance issues?

How will standardized data processing facilitate effective sourcing, procurement decision-making and reporting?

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PHASE 3 | INTEROPERABILITY STAGE

Designed by:	Project:	Iteration No.:	Date:

Chemical Data Sharing

What specific types of chemical information can be safely and legally shared across different stakeholders?

How will we establish secure and authenticated channels for chemical data transmission?

What are the precise consent and transparency protocols for sharing chemical information?

How will we balance confidentiality with the need for comprehensive information exchange?

What technological infrastructure is required to support secure and efficient chemical data sharing?

Chemical Compliance

How do we create a mapping of current chemical management regulations across different regions and markets in our operations?

What are the specific escalation procedures for addressing identified compliance gaps?

How will we continuously monitor and adapt to evolving regulatory requirements?

What training and communication strategies will ensure consistent understanding of compliance protocols across the organization?

Chemical Risk Analysis

What criteria will guide your decision-making process for chemical substitutions?

How will risk analysis insights be integrated into product conception and design processes?

How can you develop a dynamic risk assessment approach that anticipates emerging chemical challenges?

Cross-Block Integration

How do these three blocks create a cohesive and dynamic chemical management approach?

What governance structure will oversee the implementation and evolution of these blocks?

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PHASE 4 | IMPLEMENTATION STAGE

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Chemical Management in Product Development

How will chemical data directly influence your product development decisions?

Which teams need to be involved in applying chemical data across different stages of product creation and what training is needed?

Chemical Traceability KPI

What specific, measurable metrics will you use to track chemical management performance?

What baseline measurements do you currently have to compare future improvements against?

What mechanisms will you put in place to transparently report on these KPIs?

How do your KPIs align with broader sustainability and health safety goals?

▶ See also **ECHT Recommended Traceability KPIs**

Chemical Environmental Impact Measurement

What comprehensive criteria will you use to assess environmental and health impacts?

How will we quantify the long-term consequences of your chemical choices?

What external standards or frameworks will you use to validate our impact assessments?

Chemical Management Scalability Plan

How can your current chemical traceability approach be adapted across different product lines?

What potential regulatory changes should you anticipate and prepare for?

What resources, infrastructure and new technologies will you need to scale your chemical traceability efforts?

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Additional Canvas Version

based on Consortium Meeting

Chemicals Traceability Canvas

First Steps on how to implement chemicals traceability in organisations from the textile apparel value chains

Designed by:	Project:	Iteration No.:	Date:

Conceptual Setup

Mapping relevant Stakeholder, Service Provider and Value Chain Actors

Who are the relevant people and organisations in your supply chains?

Establish Communication Pathways & Responsibilities

How can you communicate information and data along the supply chain?

What might be the biggest barriers for communication?

Value Chain integration and Management

Establish Cooperation and Trust along Value Chains

How can you build trustworthy horizontal and vertical collaborations along your supply chains?

Regulatory Framework & Legal Requirements

What are current and future regulatory requirements you have to address in the context of chemical management?

Information Requirements & Formats

What type and format of chemical data and related information do you need from your supply chain actors - and what do you have to provide?

Physical and technical infrastructure

Capacity Building along Value Chain

What type of knowledge, skills and know-how do people in your organisation and along your supply chain need to implement traceability?

Technical implementation - Hardware (incl. emerging technologies)

What kind of physical technical infrastructure (e.g. servers, scanning tools, data storage) do you need to implement traceability in your organisation and supply chains?

IT infrastructure (incl. emerging technologies)

What kind of digital infrastructure (e.g. data platforms, sharing technology) do you need to implement traceability in your organisation and supply chains?

Business Model

Cost Structures

What costs can you anticipate for implementing traceability (incl. opportunity costs, capacity building, infrastructure, etc.)?

Benefits (immediate and long-term)

What financial benefits can you anticipate for implementing traceability (incl. legal compliance issues and USP as business opportunities)?

Business Case based on Profit and Loss

Looking at the costs and benefits outlined above - can you think of a valid business case for implementing traceability in your organisation and supply chains?

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