Gepard

ECHA CONNECTION: STIEBEL ELTRON'S INTEGRATION JOURNEY WITH GEPARD

Driving compliance through automated product data management with SAP ↔ ECHA bidirectional flow and component-level hazardous substance declarations

Gepard ⬡ ECHA EUROPEAN CHEMICALS AGENCY   STIEBEL ELTRON

ABOUT **STIEBEL ELTRON**

Founded in Germany, STIEBEL ELTRON is a global leader in providing energy-efficient home comfort solutions, including water heaters, heat pumps, and ventilation systems. The company focuses on innovation, quality, and environmental responsibility, supporting sustainable energy solutions across markets in Europe and beyond.

To maintain regulatory compliance with the European Chemicals Agency (ECHA) and enhance the product data management process, STIEBEL ELTRON partnered with Gepard. They use SAP as the system of record for product master data and BOM/components, which serves as the authoritative source for ECHA submissions.
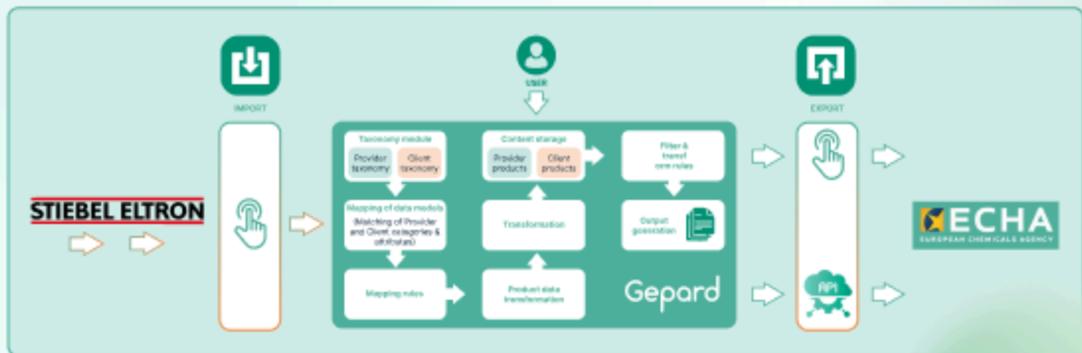
PROJECT **OBJECTIVES**

STIEBEL ELTRON set out to automate and simplify the delivery of product data to the ECHA platform, ensuring submissions were complete, accurate, and compliant. The central technical challenge was component-level hazardous/toxic substance declarations, not just product-level mapping. We send toxic/hazardous materials data from components (not finished goods) to ECHA, and this is technically challenging.

This required building integration logic that could declare hazardous/toxic substances at the component → substance level and seamlessly return ECHA confirmation fields back into SAP.

KEY OBJECTIVES INCLUDED:

- ECHA-specific schema mapping aligned to STIEBEL ELTRON's existing SAP taxonomy.

- Automated mapping and transformation that can handle complex component → substance relationships, guaranteeing even toxic or hazardous materials are accurately traced at the component level, not just the finished product. This provides compliance certainty while solving one of the toughest data-management challenges.

- Use Gepard as the operational integration layer between SAP and ECHA, eliminating spreadsheets.

- Ensure precise, single-language submissions as required by ECHA.

- Capture ECHA response fields (e.g., submission/registration IDs, verification metadata) and write them back to SAP for auditability.

HOW **IT WORKS** (Technical Approach)

SAP as Source and Target:
In this case, SAP is both the starting point and the return system. Gepard ingests product master data and BOM/component structures from SAP, transforms them for ECHA submission, and then writes ECHA confirmation fields (e.g., registration IDs) back into SAP, closing the compliance loop in a single system of record.

1

Mapping & Transformation:
Gepard applies mapping rules to align SAP taxonomy/BOM with the ECHA data model, including nested, component-level hazardous/toxic substance declarations (component → substance), which is more complex than flat attribute mapping.

2

Content Storage & Enrichment:
Products are stored and enriched within Gepard PIM with role-based permissions and governance tuned for compliance workflows.

3

Validation & Submission:
Data is validated against ECHA rules and submitted in required formats (API/file as applicable).

4

Bidirectional Response Handling:
ECHA return fields (e.g., confirmation/registration identifiers) are captured and written back to SAP, closing the loop for compliance and reporting.

5

Collaboration Overview

Challenges	Solution	Value Delivered
Manual effort in preparing product data for ECHA compliance.	**Eliminating Duplicate Entry via Seamless SAP Ingestion.** Gepard ingests product master data and BOM/component structures directly from SAP, ensuring a single source of truth and removing the need for manual re-entry.	**Regulatory/Compliance Risk Avoided** Every submission meets ECHA's strict standards, from GTIN and SKU alignment to hazardous/toxic substance declarations at the component level, ensuring regulatory accuracy and audit readiness.
Mapping from SAP's standardized schema and BOM structures to ECHA's strict compliance schema, with any field enrichment or adjustments performed solely to satisfy regulatory requirements, not to remedy gaps in STIEBEL ELTRON's data standards.	**Ensuring Compliance via Automated Transformation.** Data is mapped from SAP's standardized taxonomy and BOM to ECHA's strict compliance model, including complex component → substance declarations, reducing the risk of non-compliance.	**Significant Resource Savings** Automated mapping replaces manual, error-prone work. Specialists spend less time on repetitive tasks and more on high-value activities, while complex component → substance relationships are handled automatically.
Single-language, technically precise submissions per ECHA specifications.	**Reducing Errors via Built-In Validation & Submission.** Gepard validates all data against ECHA rules before submission, preventing rejections and ensuring smooth, accurate regulatory reporting.	**Stronger Governance & Control** Role-based permissions and ECHA-aligned language/formatting streamline approvals and ensure the right data is submitted the first time, minimizing bottlenecks and reducing rework.
Tracking validation status and ECHA return fields within SAP for end-to-end traceability.	**Simplifying Audits via Closed-Loop SAP Integration.** ECHA responses (IDs, confirmations, statuses) are automatically written back into SAP, giving STIEBEL ELTRON a complete audit trail inside its core system.	**Faster Time-to-Market** With product data enriched, validated, and centralized in Gepard PIM, and compliance confirmations written back to SAP, new SKUs can be launched more quickly, with fewer delays from regulatory checks.
	Minimizing Manual Adjustments via Targeted Enrichment. Where ECHA requires fields not present in SAP, Gepard enriches the data in a controlled, auditable way, reducing manual corrections while keeping compliance intact.	

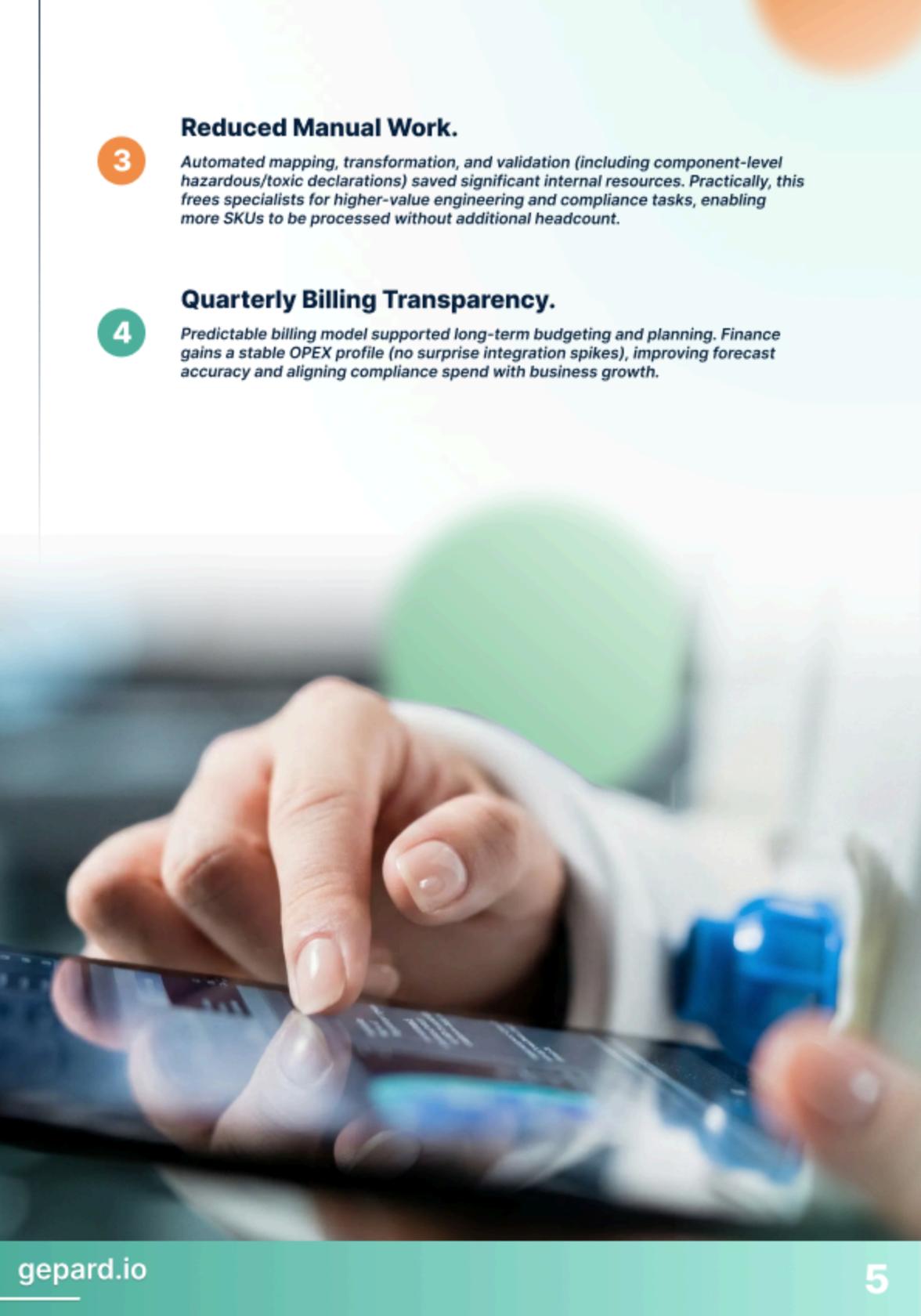## Business Values Our Customer Received

1

Lower Fines Risk & Faster Time-to-Market.

By automating and guaranteeing ECHA compliance directly in SAP, Gepard makes submissions correct the first time, reducing the risk of penalties, cutting manual reviews and resubmissions, and speeding product onboarding and EU launches.

2

Single Data Source of Truth.

Delivered a bidirectional integration aligned with ECHA: Gepard submits declarations and, in response, writes the following specific ECHA fields directly back into SAP (Confirmation ID, Registration Number, Submission Status(e.g., received/accepted/ rejected), and Timestamps (submission and acknowledgment). These are stored against the relevant product/component records, creating a complete compliance trail.

Reduced Manual Work.

3

Automated mapping, transformation, and validation (including component-level hazardous/toxic declarations) saved significant internal resources. Practically, this frees specialists for higher-value engineering and compliance tasks, enabling more SKUs to be processed without additional headcount.

Quarterly Billing Transparency.

4

Predictable billing model supported long-term budgeting and planning. Finance gains a stable OPEX profile (no surprise integration spikes), improving forecast accuracy and aligning compliance spend with business growth.

Gepard

ABOUT **GEPARD**

Gepard is an independent turn-key eCommerce platform that automates work with product data. For more than 15 years the Gepard team of 150+ dedicated specialists has been working on product information management solutions for clients around the globe.

GEPARD **BENEFITS**

- Enable product data syndication with Gepard to automate manual data entry;
- Keep your product information high quality and constantly updated;
- Adjust your product data to the requirements of various marketplaces;
- Automate your product content distribution to multiple retail platforms with AI mappings;
- Entrust Gepard's experienced specialists with your data maintenance;
- Optimize your user experience with retailer-specific content;
- Spend less time on data-related tasks and increase your team's productivity.

To learn more about
Gepard, visit
gepard.io
or send an email to
info@gepard.io.