

GS1 Sweden

Building a Sustainable Foundation that Link Products and Certifications



A challenging environment

As digital markets expand, the demand for product transparency has grown significantly, particularly in areas such as sustainability and ESG-related certifications and claims. Consumers and purchasing organisations are increasingly shifting their spending toward products that align with their values, while new regulations are mandating clearer labelling and traceability.

While this presents opportunities for businesses to meet these expectations, it also introduces complex challenges related to:

- Outdated systems: Many certification bodies operate on legacy systems that lack scalability and digital readiness.
 Certificates are often shared in non-digital formats like PDFs, which are prone to fraud and difficult to verify.
- Unstructured data: The data format used to prove compliance according to a certification scheme is often unharmonised, requiring labour-intensive, manual, nonscalable validation processes.
- Lack of standardisation: Less than 10% of certification schemes use unique identifiers like the GS1 Global Trade Item Number* (GTIN*) or Global Location Number (GLN), making it hard to consistently link certifications to products and creating significant inefficiencies for marketplaces and retailers.

These issues have created a fragmented system that undermines trust, increases operational burdens across the ecosystem, and makes it more difficult to reliably identify more sustainable products in the marketplace. Addressing these gaps is crucial for building a seamless, reliable framework for managing and sharing certification data.

Taking the lead

GS1 Sweden collaborated with TCO Development, the not-for-profit organisation behind TCO Certified, to integrate the GS1 GTIN into their certification process, establishing a critical link between GS1 product identifiers and certificates. TCO Certified is a global leader as the world's only sustainability certification for IT products. This foundational step has paved the way for further collaboration in which GS1 Registries could provide trusted certification data through Verified by GS1.

In today's certification process, certificates are many times issued before the product has started to be manufactured with testing done on engineering samples, documentation and supply chain audit reports. This means that at the time a certificate is issued, usually no GTIN has been assigned to the product, which makes it difficult to use as identification for certified products. However, if certification agencies require GTINs at the time of certification, then this will no longer be an issue.

That's why TCO Certified's criteria is now going beyond legislative requirements by establishing a firm, yet fair playing field for brand owners that are serious about sustainability. GS1 has created standards that are needed for sustainability, and TCO Certified is making it mandatory for brand owners to implement GS1 identification keys in a standardised way that will, in turn, lead to more sustainable practices.

What GS1 standards are integrated into TCO Certified?

TCO Certified mandates the use of the GS1 GTIN and a URL-based unique product identifier, which TCO Certified strongly recommends the use of GS1 Digital Link.

By requiring brand owners to submit GTINs for their certified products, TCO Certified aims to:

- Enhance traceability of certified products.
- Ensure accurate linkage between the product and its certification.
- Facilitate the identification of certified products in databases and procurement systems.

GTIN is a global standard for product identification, widely used across supply chains to enhance clarity and efficiency in product flows. GS1 Digital Link is a standard that connects physical products to digital information. When combined with a two-dimensional carrier such as a QR Code, it allows for rich product information to be shared across the value chain.



Key learnings from GS1 Sweden

To fully integrate GS1 GTINs into certification processes, GS1 Sweden recommends:

- 1. Collect one or multiple GTINs for every product certification. This step ensures that each certified product can be individually identified and tracked.
- 2. Connect the GTIN to all certificates. By doing this, each certificate will clearly show which product it belongs to, making it easier to check and verify.
- 3. Make GTIN information publicly available when sharing a certificate. This helps everyone who uses or checks the certificate—like retailers, online marketplaces or buyers—to quickly identify the product.

"Learning about GS1 standards such as Digital Link, and establishing the collaboration with GS1 Sweden was one of the most valuable outcomes of the many Digital Product Passport research projects that we have taken part in throughout the years."

Hannes Mäki,

Digital Strategy Manager, TCO Development

Unlocking benefits

By using GTINs on products that can be linked to certifications, brand owners can experience a wide range of benefits. They can increase their marketplace exposure and reputation as credible providers of sustainable products as well as operational efficiencies, including:

- Seamless information sharing: Enables easy sharing of certification data across all platforms.
- **Enhanced integration:** Facilitates streamlined connections with regulators and e-commerce platforms.
- Improved visibility: Simplifies and accelerates the onboarding of certifications on marketplaces and retailers, increasing their visibility to consumers.
- Efficient information management: Provides a smoother, more accurate system for managing product information over time.



Brand owners: Improved brand reputation and regulatory compliance.



Retailers: Enhanced trust and transparency in sourcing.



Certification agencies: Simplified certification data management and accessibility.



Consumers: Greater visibility into product certifications and sustainability claims.



Professional buyers: Streamlined decision-making, reduced risk and support of ethical and regulatory standards.

Committed to a sustainable world

The TCO Certified use of GS1 solutions in its certification process offers other certification schemes and GS1 Member Organisations an opportunity to learn from this leader's experiences. It offers a major opportunity for GS1 and other certification schemes to visibly demonstrate renewed commitment to a more sustainable world.



About TCO Development and TCO Certified

TCO Development is the organisation behind TCO Certified, the world's only global sustainability certification for IT products. Its international team is headquartered in Stockholm, Sweden, and across several continents, working for a future where all IT products have a sustainable life cycle. For more information, visit tcocertified.com.

