GS1 case study

Verified by GS1 facilitates the precise implementation of China's Home Upgraded Policy

GS1 standards are assisting the China's Ministry of Commerce in implementing green consumption upgrade policy.

Challenge

The Home Upgraded Policy included the requirement to validate the accuracy of product classifications and compliance checks on energy efficiency ratings. The Ministry of Commerce needs a nationwide system to address the issue of asymmetric product information between manufacturing and trading enterprises, and to facilitate the qualified inclusion of energy-saving/intelligent products.

Solution

The GS1 solution combines the precise identification enabled by the GS1 Global Trade Item Number® (GTIN®) with the validation of product data by Verified by GS1, for a highly efficient verification system.

Benefits

The GS1 solution shows that the GTIN along with verified, structured product data are enablers of commercial efficiency and vital tools for governments to effectively execute policies and conduct transparent oversight.

In early 2025, China launched the Home Upgraded Policy that encourages consumers to purchase low-energy-consumption home appliances, digital products, and eco-friendly home furnishing and decorative items with subsidies, thereby driving a transition to "green consumption."

The Home Upgraded Policy mandated that subsidised products should be verified to prevent non-compliant items from being included. Working with **GS1 China**, the Ministry of Commerce now requires the use of the GS1 GTIN to uniquely identify subsidised products and Verified by GS1 serves as the real-time verification platform.

Preventing subsidy fraud with verification

In order to verify subsidised products, the Home Upgraded Policy included the requirement to validate the accuracy of product classifications and compliance checks on energy efficiency ratings. However, local implementation faced two core challenges that included establishing nationwide, unified auditing standards and building effective mechanisms to prevent non-compliant products from being included and individuals from repeatedly applying for subsidies.

The GTIN and Verified by GS1: A powerful combination

GS1 GTINs provide the unique identification of subsidised products combined with the Verified by GS1 system that cross-references brand product data to flag entries with missing or conflicting information. Verified by GS1 enables data interoperability across subsidy platforms in more than 20 provinces nationwide. It ensures each transaction is linked to a verified product identifier and automatically validates product attributes. With this solution in place, manual audits are no longer needed, significantly boosting efficiency.

Data quality that keeps growing

The GS1 solution provides precise identification of hundreds of thousands of products across home appliances, 3C digital products and home furnishings, eliminating risks like "multiple claims by a single person" and "duplicate subsidies." International brands (e.g., Apple, HP, IKEA) have also been swiftly included in the subsidy scope after verification.

Per policy requirements, only products passing Verified by GS1 validation are listed on the subsidy platform. In the first quarter of the campaign, GS1 China saw strong growth in GTIN registrations for home appliance and furniture products, along with significant improvements in both the completion and accuracy of the associated global product classification attribute. Concurrently, brands corrected erroneous information based on GS1 feedback, optimising supply chain management.

Local governments have gained real-time access to trusted data, strengthening confidence in policy execution. Businesses using GS1 identifiers for standardised data management can participate more efficiently in market circulation.

Government and industry can both benefit

- Transparency and implementation: GTIN from manufacturer sources, combined with trusted data verification of brand information, ensure precise implementation through information transparency.

- Efficiency revolution: Real-time digital verification replaces manual operations, reducing administrative costs.

- Resource efficiency: Direct adoption of the widely used GS1 solution effectively avoids resource waste from redundant systems, laying a solid technical foundation for precise policy implementation.

Foundation for global digital governance

The GS1 system is evolving into a new foundational service supporting the high-quality development of the digital economy. As data element marketisation reforms deepen, its characteristics of "standardised access, elastic scalability" will provide richer solutions for global digital governance.

"**Through the innovative practices of serving national green consumption policies, the GS1 standard system and verification services have not only fully demonstrated their crucial value in precise implementation and end-to-end credible supervision, but have also explored a replicable, standardised paradigm in the field of digital governance.**"

Jianhui Li,
Vice President, GS1 China

About GS1

GS1 is a neutral not-for-profit organisation that develops and maintains the most widely used global standards for efficient business communication. We are best known for the barcode, named by the BBC as one of "the 50 things that made the world economy." GS1 standards improve the efficiency, safety and visibility of supply chains across physical and digital channels in 25 sectors. Our scale and reach—local Member Organisations in 118 countries, 2 million user companies and 10 billion transactions every day—help ensure that GS1 standards create a common language that supports systems and processes across the globe.

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