



Verified by GS1 case study

## Brazil's Tax Administration knows the importance of valid product identification

By using Verified by GS1 to authenticate with confidence the GS1 GTINs used to identify products on e-invoices, SEFAZ has seen a range of benefits for their own teams, for Brazilian businesses and for the country's citizens as a whole.



### Challenge

Calculating the right tax rate to apply to products is a complex affair for SEFAZ, the tax administration for Brazil's states. To do it accurately, they need to know exactly what each product on an invoice is.

### Solution

SEFAZ uses GS1 Brazil's Verified by GS1 database to authenticate Global Trade Item Numbers (GTINs) on the e-invoices they manage, demonstrating yet again that trust and efficiency start with a valid ID.

### Benefits

The global, unique and persistent product identification made possible by GS1 has made the e-invoicing process faster and more accurate, reduced uncertainty across Brazil's businesses, added pricing transparency to public tenders and given ordinary citizens a way to find the best prices for the products they love.

“The GTIN is really well suited to our needs”, said Vinicius Pimentel de Freitas, Deputy Coordinator of Brazilian e-invoicing programs, “because to determine VAT, we really must know exactly what the product is. Knowing only the product’s class or category is just not enough”.

Brazilian businesses are required by law to issue electronic invoices authorised by tax authorities before the occurrence of any B2B transaction in order to provide an official auditable record of commercial transactions. Items listed on Brazilian e-invoices are always linked to their GS1 GTIN, if they have one.

Each Brazilian state has a Secretaria da Fazenda (State Tax Administration), commonly known as the SEFAZ. These SEFAZ handle a combined total of 45 to 50 million e-invoices every day. Before goods that have been purchased can be dispatched, their associated e-invoice first goes to the SEFAZ to be checked. The SEFAZ uses Brazil’s Verified by GS1 service to authenticate that GTINs are legitimate. If a GTIN is not validated, the e-invoice in question is rejected and the sale is blocked.



### The added value of unique identification

E-invoices are also used by the SEFAZ to calculate value-added taxes.

In Brazil, there are state taxes whose rate depends on the type of purchase and the state, and there are federal taxes that can result in credits or surplus payments depending on a rather long list of cases and exceptions.

Suffice it to say it’s complicated! And indeed, this complexity is why the SEFAZ must be able to identify exactly and unequivocally each product on an invoice: it’s the only way to accurately calculate the taxes that are due.

“The ability to uniquely identify product items on invoices had long been a challenge for us. But then we learned about the GS1 GTIN and we met with people from GS1 Brazil”, said Alvaro Bahia, Coordinator of Brazilian e-invoicing programs, “and we realised that none of the other possible product codes we were considering was as comprehensive or as unequivocal as the GTIN”.

ENCAT, the national committee of Brazilian state tax coordinators and administrators, initially received some pushback on their plan to use the GTIN as the product identifier for e-invoices. Some felt it was the government forcing the use of GS1’s identifier in a free market. But the committee was able to explain that they only needed GTIN information if a company already used the GTIN. ENCAT never required any company to use any type of code, in fact, GTIN or otherwise.

“Some other countries created their own product identification tables”, added Bahia. “But at ENCAT, we did not think this was the right path for Brazil, because of how complicated, costly and time-consuming it would be to manage a database of that size and complexity on our own”.

It’s the GTIN’s ability to provide global, unique and persistent product identification that makes it right for the SEFAZ.



### The macro benefits of reducing uncertainty

Being certain that products on e-invoices are exactly what they say they are simplifies tax compliance

processes for businesses and improves the accuracy of VAT calculations for the SEFAZ—but there are benefits to Brazilian society on the macro level, too.

“Tax rules are complicated here. Taxation rates depend on a product’s origin, its destination, who buys, who sells, who is the final customer. There is a lot of room for uncertainty”, noted Vinicius Pimentel de Freitas.

“And uncertainty creates risk, and risks create costs, and costs decrease the efficiency of economic activity and increase the insecurity of potential investors”, added Ricardo Neves Pereira, Undersecretary of Revenue of Rio Grande do Sul.

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— Alvaro Bahia, Tax Auditor, Bahia State Tax Administration Technical Coordinator, ENCAT



# Having your products in Verified by GS1 will be advantageous for your business”.

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But because GS1 GTINs identify products quite precisely, and because Verified by GS1 brings confidence that these GTINs are authentic, taxation rates are clear and sure. So perhaps the greatest advantage of using Verified by GS1 is the certainty it brings to the entire system. Confidence in each product’s identification creates a positive environment that is more likely to stimulate economic development.

## Better public procurement processes

Beyond assessing and collecting taxes and ensuring compliance, the SEFAZ is also in charge of public tenders—and it turns out that having a database of verified, authentic GS1 GTINs can help here, too.

In Brazil, all the prices ever charged for any given item are on record in the SEFAZ’s collection of e-invoices. This means that states can determine the average national market price for every product with a GTIN.

Before this was possible, administrations might have paid manufacturers an absurdly high price during a tender. But since the arrival of e-invoicing based on authenticated GTINs, administrations have been able to optimise the prices paid in public tenders, which is good for taxpayers and for the entire value chain.

## Consumers can benefit, too

Taxpayers, too, can benefit from this knowledge base of average market prices, because the SEFAZ has created an “app” for smartphones. Ordinary citizens can use the app to scan the barcode of a product they want to buy and see the actual practised prices for that item in a given radius around where they are. The data is updated in real time, using prices on e-invoices for items sold to end consumers. The app can even be used to send a message to friends, for example: Look, I’m here in store X, and product Y costs Z here.

## Ultimately good for everyone

In addition to making their work more accurate, the members of ENCAT have seen that uploading the product ID in Verified by GS1 is a way for brand owners to improve sales and help the entire Brazilian economy.

“It’s quite clear from our point of view”, said Bahia. “Having your products in Verified by GS1 will be advantageous for your business. Your company will sell more, you will be able to control the description and the photo that are associated with your product. But you will also be contributing positively to the Brazilian economy by helping us fight inflation, offering the best prices to everyone and democratising information access for all citizens”.

## Benefits of Verified by GS1

### For Brands



Simplified listing process and faster time to market

### For Retailers



Reduced time and costs to gather and verify data

### For Consumers



More reliable product information



Data quality visibility and insights



Optimised business processes



Increased satisfaction and fewer returns

## About ENCAT

ENCAT, *Encontro Nacional de Coordenadores e Administradores Tributários Estaduais* (National Committee of State Tax Coordinators and Administrators), is a working group responsible for the coordination at the national level of all electronic tax document projects in Brazil. The scope of their work covers electronic invoices, electronic consumer tickets, electronic bills of lading, intermunicipal passenger tickets and cargo manifests.

## About GS1

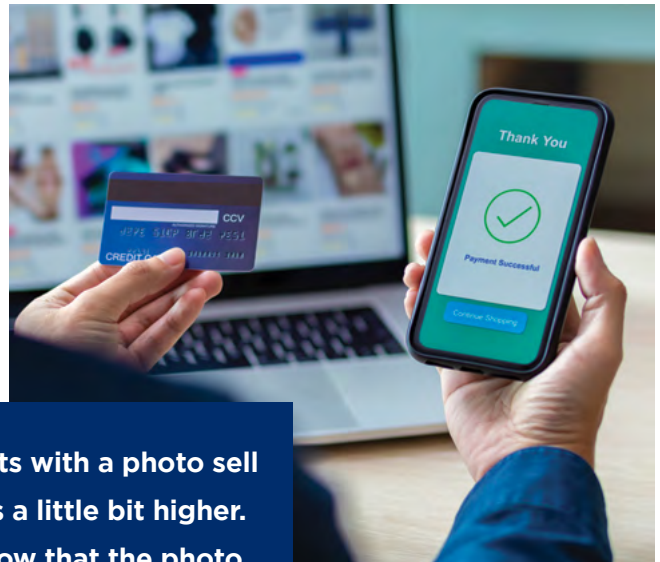
GS1 is a neutral, not-for-profit organisation that develops and maintains the most widely used global standards for efficient business communication. We are best known for the barcode, named by the BBC as one of “the 50 things that made the world economy.” GS1 standards improve the efficiency, safety and visibility of supply chains across physical and digital channels in 25 sectors. Our scale and reach—local Member Organisations in 115 countries, 2 million user companies and 6 billion transactions every day—help ensure that GS1 standards create a common language that supports systems and processes across the globe.

[www.gs1.org](http://www.gs1.org)

## About Verified by GS1

Verified by GS1 is a repository of product data that helps organisations answer the question: “Is this the product that I think it is?” Brand owners use Verified by GS1 to associate seven core attributes with each of their products: the product’s GTIN, brand name, description, a URL of a product image, its GS1 Global Product Category (GPC) code, the net content and unit of measure, and the country of sale. With the help of Verified by GS1, brand owners, retailers and marketplaces can build rich consumer experiences that deliver trusted, brand-sourced product data, which drives confidence, satisfaction, loyalty—and ultimately, increased efficiency and growth for their businesses.

[www.gs1.org/verified-by-gs1](http://www.gs1.org/verified-by-gs1)



**“We’ve seen that products with a photo sell more, even if the price is a little bit higher. Brand owners should know that the photo really makes a difference!”**

— Alvaro Bahia, Tax Auditor, Bahia State Tax Administration Technical Coordinator, ENCAT



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