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The Global Language of Business

115 local Member Organisations

Neutral & not-for-profit

User-driven & governed

Global & local

Inclusive & collaborative

GS1 believes in the power of standards to transform the way we work and live.
Key industries served

- Healthcare
- Retail
- General Merchandise
- Apparel
- CPG/Grocery
- Fresh Foods
- Transport & Logistics
- Marketplaces
- Foodservice
- Technical Industries

6 billion GS1 barcodes scanned daily

100 million products carry GS1 barcodes

More than 2 million companies use GS1 standards
It would be difficult to properly put into words how strange, challenging and disruptive these past months have been for every person, business and organisation. Everyone’s lives were turned upside down, changing just about everything about how we lived, worked, interacted, raised our families and supported our loved ones. But as daily life and business became more complex, our priorities here at GS1 remained unchanged: to protect the health and safety of our GS1 family—and to support our more than two million members worldwide.

**Supply chains in the spotlight**

The pandemic really shined a light on the importance of global supply chains for making critical products available. As the months passed in early 2020, many supply chains were stretched to their limits. In this context, digitalised supply chains become vital because they bring visibility and traceability in a way that spreadsheet-powered or ERP-dependent supply chains simply cannot. “Greater clarity invites greater insight into options and opportunities,” notes digital economy expert Michael Schrage in a July 2020 article for MIT/Sloan Management Review.

At GS1, we have known the relevance and power of enabling unique identity and creating visibility in supply chains for forty-five years and counting. COVID-19 has only solidified our sense of purpose, responsibility and commitment to bringing solutions to industry in pursuit of serving consumers and patients. Whether to enable disaster response actions, to keep store shelves stocked, to allow online shopping and delivery or to ensure an efficient and seamless flow of vital healthcare supplies, products need to be uniquely identified to reach their destinations and accurate data about them must be shared openly and efficiently. GS1 standards help make this possible. As a neutral, not-for-profit organisation, GS1 can bring together stakeholders from across the entire supply chain around the world in order to develop and implement interoperable, global standards. Every day, we are witness to industries, governments and organisations collaborating to create and use the global language of business.
Online more than ever before

COVID-19 lockdowns and work-from-home orders led to a dramatic increase in online communications. A true digital transformation is happening at a much faster pace than anyone could have imagined. We are well known for the sound of the “beeps” at store registers and for the ubiquitous GS1 barcode that powers them. This foundational activity remains extremely relevant, and we are proud of the work that we do to help create trust and efficiencies for brands, manufacturers, retailers and marketplaces; and to enable safer, more efficient healthcare.

But those “beeps” are rapidly turning into “clicks.” When we emerge from the COVID-19 crisis, people will have acquired new habits that involve virtual gatherings, remote work and distance learning. Shoppers who have come to rely on home delivery and online services are likely to continue to use them. This digital transformation has unlimited potential, but only if we can trust that the data driving it is visible, accurate and up to date. Or, as Michael Schrage puts it: “The importance of accessible and actionable data is the organizing principle for supply chain transformation. Data first, not digital first, is the key that unlocks anticipatory, agile and resilient supply chains.”

A new GS1 strategy

Just before COVID-19 struck, we announced a new strategy designed to foster the adoption of GS1 standards in the digital world in order to empower industry’s transformation and ultimately benefit consumers and patients. The pandemic has reaffirmed that our strategy is on track. We can already see that our strategic pivot is supporting the exponential needs for identification, traceability, supply chain performance, online selling and marketplaces. We know we must support the accelerating pace of change that is already underway at GS1 member companies ranging from start-ups to multinationals in B2B, B2C and healthcare.

To achieve this quickly and successfully: We are investing in the transformation of our own standards and services. We are strengthening our industry communities, our user-driven governance and our delivery performance. And we are working to raise awareness of the value GS1 brings to our five targeted sectors: healthcare, retail & consumer goods, online marketplaces, transport & logistics and technical industries.
The first pillar of our new strategy is to **deliver value to industry** by continuing to enable collaborative communities of users to solve shared challenges. We also intend to boost the adoption of GS1 standards by companies of all sizes—including small enterprises. These efforts will enable consumers to make better and more informed decisions about what and where to buy the things they want. They will help sellers list their products faster on marketplaces, and let those marketplaces offer an even better consumer experience. In the healthcare sector, our efforts will boost patient safety and help fight the spread of counterfeit medicines. GS1 Healthcare is celebrating its 15th anniversary this year, which has given us the opportunity to remember and celebrate how much we have accomplished and the outstanding impact we have made across healthcare.

The second pillar is embodied by our work to achieve ubiquity and the integrity of GS1-powered identification and to enable the efficient capture and sharing of high-quality data in order to **bridge the physical and digital worlds**. The foundation of GS1’s support for industry’s digital transformation, the GS1 Registry Platform, is in place. The first uploads of data have successfully occurred, and as a result, the Registry already contains almost 50 million GS1 Global Trade Item Numbers®, or GTINs®. Retailers and marketplaces are already retrieving and using this rich information—and as a result, they are on their way to driving greater consumer confidence, satisfaction and brand loyalty by improving the shopping experience.

The third and final pillar of our new strategy is to continue building a **federation of trust and innovation**. We know we must move at the speed of business. To do that, we will continue to evolve our governance and the culture of our organisation while growing the competencies of our people. We believe in our global/local model, where, under the umbrella of one global mission and brand, our 115 Member Organisations engage and support their communities thanks to their understanding of local business opportunities and their ability to spot new market needs.

**Joint efforts, solidarity and doing things as One**

We would like to end this missive by recognizing the unwavering commitment of our 115 GS1 Member Organisations around the world as well as all the user organisations who partner with us. Thank you all for your knowledge, your insight, your effort, your engagement and most importantly, your passion. Our “global language of business” has been helping supply chains work smoothly and invisibly for 45 years. Our foundational principles of trust and collaboration are as essential today as they ever were. Indeed, the benefits of an interdependent federation with both global reach and local expertise have never been clearer. For years, we have known the vital importance of **Seeing One Vision, Speaking with One Voice and Acting as One Organisation**. Across the uniquely difficult past twelve months in particular, we have proven that with collaboration, alignment and focus, nothing is impossible. It is thanks to you that we will meet our challenges going forward.

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**Introduction**

Kathryn E. Wengel  
Executive Vice President &  
Chief Global Supply Chain Officer  
and Executive Committee Member,  
Johnson & Johnson  
Chair, GS1 Management Board

Timothy P. Smucker  
Chairman Emeritus,  
The J.M. Smucker Company  
Chair Emeritus,  
GS1 Management Board

Miguel A. Lopera  
President & Chief Executive Officer, GS1
Growing business and transforming lives

“As a retailer, it is great to think about how to work jointly with manufacturers. GS1 creates this wonderful link for collaboration, today and for the future. We want to drive a positive change in our industry—and our shoppers and consumers expect this from us. The integrity of product data is more important than ever, especially with the new challenges of online commerce channel and all the different digital solutions within the store.”

Özgür Tort
CEO, Migros Ticaret
Co-Chair, Consumer Goods Forum
Retail

We are working to enable the identification of everything, making anything possible and ultimately boosting transparency and improving the shopping experience for consumers.

Whether you are a farmer, retailer, brand, regulator or stakeholder—or even simply a consumer shopping online or in a store—you know that the landscape in retail is transforming. Across the past year, GS1 has been there to help navigate these changes.

Our teams devoted to the consumer packaged goods sector have spent most of these past twelve months working on our organisation’s global efforts to enable the digital transformation of businesses up and down the supply chain. In particular, we’ve been actively contributing to work on Verified by GS1 (see page 21) and on the GS1 Global Data Model (see page 22).

In fresh foods, we continued to ensure GS1 standards meet the needs of industry and consumers now and into the future, thanks in great part to the efforts of our GS1 Member Organisation (MO) Fresh Food Interest Group. We successfully piloted two-dimensional GS1 barcodes on fresh foods at the case and consumer unit levels, and we are developing implementation guidance for using GS1 DataMatrix and GS1 QR Codes on variable measure fresh foods at retail points of sale. We are also actively involved in cross-GS1 efforts on the future of on-pack coding (see pages 28-29).

To enhance our work in the sectors of apparel and general merchandise, we launched a dedicated GS1 MO Interest Group, and GS1 MOs of all sizes from all regions now engage in monthly calls to share knowledge, best practices and insights about the business needs from their industry members. Through these interactions, we are seeing a growing interest in the apparel industry to improve their online listings, by using the GS1 Global Model Number to replace the inefficient proprietary solution currently in use to reference a product model.

We also kicked off a Digital Signatures work group to develop an open, standards-based solution to address the increasing needs and requirements from industry in this area. Digital signatures are another element in industry’s ongoing efforts to fight counterfeiting, a problem that jeopardises the reputations of brands and can create health and safety issues. By helping provide trusted data from trusted sources, digital signatures are helping retail businesses across the globe and across the supply chain achieve visibility and agility with greater resilience.
signatures help ensure legitimacy and improve the overall security of the supply chain.

The COVID-19 crisis created unprecedented challenges for all business sectors, but retail was particularly impacted. In recent years, the retail supply chain had adopted “just-in-time” inventory management methods. The pandemic changed consumer shopping habits so radically—and in many cases literally overnight—that the tools used in demand planning were rendered almost useless. GS1’s neutral, global standards can help restore resiliency without sacrificing efficiency. Particularly in times of uncertainty, supply chain visibility from source to consumer is critical—and that is what GS1 makes possible.

We cannot predict the medium- to long-term impacts of the coronavirus pandemic, but one thing is certain: our organisation will be there to help everyone in the supply chain with the tools, systems, processes and strategies needed to get through the challenges and seize the opportunities. Though we do not know exactly what’s ahead, we do know that the GS1 global language of business will always be needed.

To stay up to date on our latest actions and accomplishments, visit www.gs1.org/retail
Marketplaces

Marketplaces rely on an entirely digital shelf, so they need high-quality, accurate and unique product data to provide a successful consumer experience.

Don’t let the name mislead you: Marketplaces are not the online versions of bricks-and-mortar shops. For one, they don’t own any inventory. In the simplest terms, marketplaces are technology platforms that connect buyers to sellers with a wide range of goods—much wider, in fact, than any physical store could ever carry.

Alibaba, Amazon, bol.com, eBay, Google, Mercado Libre, METRO Markets and many other marketplaces like them have a set of requirements that they must meet in order to provide shoppers with a robust experience. Their foundational need: access to data that is unique, accurate, searchable, sharable and consistently available.

Global, unique, persistent product identification—the kind that can best be provided by a GS1 GTIN—brings real value to the marketplace ecosystem. Unique identification helps streamline catalogue and listing processes, reducing duplicates for a better buying experience. Sellers can add their products more quickly and with less friction. It also reduces the risk of counterfeiting and IP infringement.

In 2018-2019, a core work team with representatives from the GS1 Global Office and GS1 Member Organisations in Brazil, China, France, Germany, India, Netherlands, UAE, UK and US developed a global strategy to engage the marketplace ecosystem. We’ve now welcomed GS1 Australia and GS1 Canada to this team and obtained the support and alignment of our GS1 Member Organisations (MOs) around the world on our role as the trusted neutral advisor for the marketplace sector. It is clear to all of us how GS1 standards, used with industry tools, can deliver positive outcomes for the stakeholders in this fast-growing sector.

Marketplaces around the world have seen substantial growth as a result of the pandemic lockdown, which drove more people to shop online and meaningfully increased average basket sizes. For most of the major marketplaces, sales surged 25% to 30%.
Among other accomplishments of our past year: We are sharing on-boarding best practices with GS1 MOs who are seeing requests for GTINs from sellers, including small businesses. We have begun work on a marketplace engagement kit for our MO community. And we are now engaging directly with marketplace integrators, an important group that serves marketplaces in a range of ways, including acting as trusted partners with a shared interest in encouraging the use of standards.

GS1 is at a critical inflection point on how to serve the digital world. Just as we have done across our 45-year history with other industries, we will engage with marketplaces in a manner that ensures their opinions and priorities contribute to our roadmap. GS1 has always helped communities come together to nurture a free exchange of ideas, and we will apply our experience in doing so to this burgeoning business sector.

Interested in learning more? Visit [www.gs1.org](http://www.gs1.org)
For fifteen years and counting, GS1 Healthcare has been helping the global healthcare community achieve greater accuracy, visibility and traceability, all with the aim of improving patient safety worldwide.

GS1 Healthcare has accomplished so much in the past year. We continued our foundational work of developing standards and guidelines to help industry implementation. Our flagship achievement: ratifying a major update to the Healthcare GTIN Allocation Rules that clarifies the decision-making processes for GTIN allocation and use with an easy-to-follow format created by the healthcare community, for the healthcare community. This was followed by releasing the GS1 Pharmaceutical Clinical Trial Electronic Messaging Standard Implementation Guideline, a complement to last year’s Clinical Trials AIDC standard.

In 2020, GS1 Healthcare became chair of the Joint Initiative Council. This group of leading healthcare standards development organisations collaborates to enable a coordinated, non-competitive approach to standards.

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Healthcare is, of course, a strongly regulated sector. With national requirements co-existing with a globalised supply chain, collaboration and access to information is critical—and that’s where our community shines. We translated into Chinese, French and Spanish the GS1 Regulatory Roadmap on Traceability of Medicinal Products. As part of the work of the International Coalition of Medicines Regulatory Authorities, we led the development of a guidance on interoperability of medicine traceability systems, which will be part of the policy of the World Health Organisation. In June, GS1 was designated as a UDI issuing entity for Europe.

Our virtual reality training module, showing how to use GS1 standards for bedside scanning, made it even easier for people to understand this simple way to provide safer and more efficient patient care. We also provided online or remote training supporting our work with Unique Device Identification, clinical trials and EDI guidelines.

In the year ahead, our community will continue our work to help transform the global healthcare supply chain for the benefit and safety of patients around the world.

Interested in learning more?
Read about all our initiatives, learn about GS1 standards in action in the latest edition of the GS1 Healthcare Reference Book, celebrate our 15th anniversary with us and more—all at www.gs1.org/healthcare
“Industry and GS1 can work together to better serve people and organisations all around the world. Standards do matter. The industry already relies extensively on the GS1 GTIN to understand what products a retailer carries. Now, Verified by GS1 will allow companies all around the world to ensure that the products they get from other parties are the products they are looking for, and it will allow consumers to be much more confident in what they are buying online.”

Bhanu Narasimhan
Director, Product Management
Google Shopping
GS1 Registry Platform

The GS1 Registry Platform has had a prolific first year of operations. It is a key driver of our new strategy to empower industry’s digital transformation.

GS1 is here to serve its user community, and in recent years we’ve heard from industry stakeholders that they were spending too much time uploading product information into various data services—only then to repeatedly verify and manage the quality and completeness of the very same data.

This is why we built the GS1 Registry Platform, a foundational technology that will enable GS1 member companies to access reliable product data in order to verify global product identity. The platform also provides access to an ecosystem of services built on open standards that are simple to integrate into the existing systems of our global community of users.

We learned a lot during the first year the GS1 Registry Platform was in operation—most importantly that our technological choices were sound and that our solution is valid. We are confident the GS1 Registry Platform will help satisfy the demands of the industries that GS1 serves. Brand owners and other users have already uploaded tens of millions of their GS1 identifiers and core product attributes via their local GS1 Member Organisations.

New GS1 services and solutions are already being built on the GS1 Registry Platform. Verified by GS1 (see page 21) is one of these.

We are strengthening the infrastructure behind the GS1 Registry Platform to ensure it is robust and secure enough to meet the demands of all the business solutions it enables.

It allows retailers and marketplaces to verify local product information by checking it against trusted product information that was entered directly into platform by the brand owner.

During the first months of live operations, we identified some areas of opportunity that will allow the GS1 Registry Platform to scale, in order to serve the entire global GS1 community. The platform is being strengthened to properly support an increased usage of Verified by GS1, integration with GS1’s resolver (see page 29) and the addition of other services.

Interested in learning more?
Contact your local GS1 Member Organisation: www.gs1.org/contact
Activate

Unique identification of products, places and things is the cornerstone of what we do at GS1. Our Activate data services are a foundational part of our effort to make identification truly global and ubiquitous.

Accurate data is essential across the supply chain in a time where online commerce is truly global. Inaccuracies and discrepancies in product identification are simply not acceptable anymore.

That is why, in 2018, GS1 committed to creating a global infrastructure for industry that would ensure all products have a valid GS1 Global Trade Item Number (GTIN). Historically, GTINs were generated locally—directly by our user community—under the umbrella of their GS1 Company Prefix. Unfortunately, this model made it impossible for GS1 to know which GTINs were assigned to which products.

This is where Activate comes in. GS1 Member Organisations (MOs) certified as “Activate-grade” will be able to offer their users an easy, fast and globally consistent range of data services, including the issuance and management of GTINs and other GS1 keys.

Thanks to these Activate-grade services, businesses everywhere can be certain that their products have a properly assigned GTIN that is fully compliant with GS1 global standards.

They can also be sure that accurate and complete information about their product is uploaded to the GS1 Registry Platform (see page 19), making it verifiable (see page 21) at any time to help build trust between retailers, marketplaces, brand owners and consumers.

In the past year, we have run pilots, developed a self-certification process for MOs, launched and analysed surveys, and held almost one hundred webinars and workshops. Many GS1 MOs are already offering Activate-grade GTIN issuance services and all of GS1 will do so by June 2023. Our entire organisation is on board with this strategically important programme, which will allow us to keep our promise to industry to ensure all products, everywhere, have a valid GTIN.

Thanks to their local Activate-grade data services, GS1 MOs around the world will be able to issue GS1 GTINs and other GS1 Identification Keys in a fast, easy and consistent way, in full respect of GS1 standards.

Interested in learning more?
Contact your local GS1 Member Organisation: www.gs1.org/contact
Verified by GS1

Brand owners, retailers, marketplaces and solution providers are starting to see how Verified by GS1 helps improve the shopping experience—driving greater consumer confidence, satisfaction and brand loyalty.

We live in a world where data drives business—and yet, it is still not possible for a retailer or marketplace to confidently verify the products they sell using a single source of trusted product information.

Verified by GS1 is the solution, because it enables GS1 member companies to authenticate the identity of a product by validating seven pieces of information: its GS1 Global Trade Item Number (GTIN) and six other core product attributes.

The project work team is made of people from GS1 Member Organisations (MOs) in Belgium-Luxembourg, Brazil, France, Germany, India, Mexico, the Netherlands, the US and the GS1 Global Office, representing functions including community engagement, standards development, IT, legal, training, customer service and marketing.

These eight GS1 MOs rolled-out the solution from July to November 2019 with the support of over 30 multinational companies. The lessons they learned and the best practices they established were the basis for the next wave of country rollouts which began in April 2020. We aim to have Verified by GS1 available globally by December 2023.

Our work this year also benefitted from the strong support of the Consumer Goods Forum’s Product Data Coalition of Action Sub-Group, whose members committed to attributing a GTIN to 100% of the items in their portfolios; to implementing the GS1 Global Data Model (see page 22); and to participating in Verified by GS1 by both uploading and retrieving product data.

We still have a lot of work to do, but the numbers are already promising: almost 50 million GTIN records have been uploaded, covering 40 product categories more than 130 countries—and already about 60% of the GTINs added by well-known brands and retailers in the CGF Product Data Group contain all seven core product attributes.

Interested in learning more?
Visit www.gs1.org/verified-by-gs1 or contact your local GS1 Member Organisation: www.gs1.org/contact

Trust and efficiency start with a valid ID. Get product identity right with Verified by GS1.
The Global Data Model

Companies need to meet demands from consumers, trading partners and regulators for richer and better product data. The Global Data Model will help by improving data timeliness, completeness, transparency and accuracy.

With the support of GS1 Member Organisations in Belgium & Luxembourg, Colombia, the Czech Republic, Germany, Netherlands, Turkey and the US, we piloted the Global Data Model with brand owners, retailers and solution providers in the food and near-food sectors. These pilots provided valuable learnings that we used to improve the model and understand what it will take to ensure successful implementation. Pilot companies were supportive—and eager to move ahead with a full roll-out.

Our most significant accomplishment: in April 2020, Version 1.0 of the Global Data Model, with attribute definitions for Food & Near-Food, Alcoholic Beverages, Tobacco and Pet Food, was officially ratified as a GS1 Standard. It is used already to improve communication between trading partners.

Interested in learning more?
Visit www.gs1.org/globaldatamodel or contact your local GS1 Member Organisation: www.gs1.org/contact

One product. 
One experience. 
Every channel.
The GS1 Global Data Synchronisation Network

In a challenging year where trading partners were under pressure, the stable and robust GDSN kept successfully powering the global supply chain. We have never been prouder of GS1’s largest active service.

By allowing high-quality product content to be uploaded, maintained and shared automatically, GDSN®, the world’s largest product data network, ensures trading partners have immediate access to the current and complete information they need to do business in local and global markets.

With fifteen years of operations behind us and active users in 245 countries, GDSN didn’t miss a beat in a year when the supply chain faced intense challenges. As soon as the impact of the pandemic became clear, we reached out to our users to be sure we were serving them as they needed. Their responses were clear: GDSN has been and remains mission-critical; a vitally important foundation to their efforts to get products to consumers and medicines to patients.

Across the entire year—before COVID-19 and since—we sustained robust service levels, deployed maintenance releases on schedule and continued to serve our global community of trading partners.

Going forward, we intend to continue to provide a neutral, standards-based environment for reliable and efficient exchange of quality data across industry sectors, regions and markets.

We envision a world where this continuous synchronisation of product information among trading partners enables the sustainable growth of global value chains.

To make that vision a reality, we are working to strengthen the foundation of our Network through transparency and compliance; to enable data quality and integrity through implementation, measuring and monitoring of standards; to simplify GDSN with modernised technology and processes; and to amplify the notoriety of the GDSN brand to better ensure growth and adoption—and always for the benefit of consumers and patients around the world.

Learn more, find a certified Data Pool and access standards & guidelines at www.gs1.org/gdsn

When product information is accessible and accurate, your business wins.
“Many developing countries are suffering because of falsified and sub-standard medicines. Enabling the traceability of pharmaceuticals can be the difference between life and death. The potential benefits to patient safety and to strengthening the overall healthcare system are enormous. Everybody wins when there is traceability in healthcare.”

Tom Woods
Chairman, Global Steering Committee for Quality Assurance
The World Bank
GSMP: The GS1 Global Standards Management Process

GSMP, the engine that powers the collaborative development of GS1 global standards, has never been more robust and interest in our work groups has never been greater.

Industry representatives from almost 60 companies in the Digital Signatures Group are developing a GS1 standard solution approach to help fight counterfeiting and enable traceability. And thanks to the work of participants from 72 companies in the Global Data Model Group, version 1.0 of that standard was ratified. We also updated the GTIN Allocation Rules for Healthcare.

These are only a few examples. Across the year, a total of 36 standards and guidelines were ratified or updated by our GSMP community—all part of our ongoing efforts to meet the needs of GS1 users around the world.

The GS1 Global Standards Management Process (GSMP) is a collaborative forum where GS1 standards and guidelines are created and maintained, by industry, for industry.

We had a very productive year, with participation in GSMP activities remaining strong in a challenging global context. In fact, we had more work groups than last year, steady participation at work group meetings and a solid stream of work requests. Overall membership is also up. It’s possible this uptick in interest and engagement is because of the COVID-19 pandemic and not despite it. If anything has become more clear, it is the value and importance of smooth global collaboration to ensure a robust supply chain and improve patient safety.

During the year, we launched several new work groups. In our Images, Digital, & Electronic Assets Group, GSMP community members representing more than 60 companies have been working to develop standards and provide guidelines for storing, sharing and using images, videos and other digital assets for online retail websites, business-to-business systems and more.

Interested in learning more?
Visit www.gs1.org/gsmp

We were not able to meet in person this year—but staying connected and informed is important. That’s why our June 2020 GS1 Standards Event was held virtually.

From their homes and offices across 52 countries, 403 participants saw keynote speakers, joined breakout work group sessions and listened to “flash” talks.
GS1 and public policy stakeholders

Globally harmonised regulations that take advantage of ubiquitous, worldwide, interoperable product identification increase safety and reduce complexity, inefficiency and costs for everyone.

In every region, new government initiatives for monitoring and enhancing supply chains are being created. These local regulations necessitate changes in business processes that can be difficult to implement in a global supply chain. As a neutral facilitator between industry and regulators, GS1 plays an important role by enabling the harmonised implementation of regulatory requirements around the world. This is in everyone’s best interest, because globally consistent policy frameworks supported by GS1 standards are good for consumer safety, patient safety, the circular economy and other sustainability efforts, fighting illicit trade, combatting counterfeits, streamlining border processes and meeting the increasing demand for product data that comes with digitalisation.

In the past year, our public policy teams have seen a meaningful uptick in interest from authorities, industry, non-governmental organisations, intergovernmental organisations, trade associations and other public policy stakeholders, all seeking to better understand how GS1 standards can help increase safety and reduce complexity, inefficiency and costs.

Our goal is to help authorities better understand the role GS1 plays in the supply chain and better see how we can work together to achieve their mission. We are raising awareness, building alliances, strengthening cooperation and encouraging information-sharing. We are consulting industry to understand their needs and foster alignment. We have been monitoring technology developments and engaging with innovators to support authorities’ own digital transformation. And we have been working with our 115 GS1 Member Organisations to ensure they have the tools, materials and expertise they need to successfully engage with their local authorities.

About 70 of the world’s economies already require or allow the use of GS1 standards to implement healthcare regulatory requirements.

Interested in learning more? Visit www.gs1.org/public-policy
Enabling traceability

GS1 is developing the global standards that industry needs to enable tangible, pragmatic traceability, as well as resources and guidelines to support their implementation.

GS1 standards, solutions and services support traceability by making it easier to share information about a product’s identity, its provenance and its movements across any value chain anywhere in the world.

In 2018-2019, we created a global traceability strategy to raise awareness about traceability with GS1 standards, build resources to support implementation and develop best practices for solution provider engagement.

We are now executing on this traceability strategy. We compiled case studies of real-world implementations of GS1-powered traceability solutions: viewing any of them makes clear how GS1 can help provide pathway to interoperability, all while allowing trading partners to choose the market solution that best meets their specific needs. Our “Traceability Business Benefits” video explains the wide range of benefits acquired when traceability is implemented using GS1 standards for maximum interoperability.

Blockchain continues to be of strong interest to industry as a means to enable traceability. GS1 supports users pursuing blockchain in this way and believes standards are critical to generating value. Our “Traceability and Blockchain” white paper provides a range of important considerations to help industry choose amongst the technologies available.

In the year ahead, we will work to create a pragmatic, curriculum-based approach to training and educating stakeholders across the supply chain on the importance of global standards for interoperability and efficiency. We are also launching efforts to get the GS1 Global Location Number (GLN) fit for use with our traceability standards, in anticipation of adding GLNs to the GS1 Registry Platform. GLNs support farm-to-fork traceability because they can be used to identify specific places.

View our case studies at www.gs1.org/traceability-case-study-library and then contact your local GS1 MO to learn more: www.gs1.org/contact

GS1 standards provide a common global language for traceability solutions, improving efficiency and visibility in the supply chain.
Innovating to empower industry
digital transformation

The future of barcodes on products can be simplified dramatically by leveraging the power of existing standards, serving consumers who want to seamlessly connect physical things to relevant experiences in the digital world.

As is surely clear by now in this annual report, at GS1 we are working hard to bridge the physical and digital worlds. The foundational elements of our efforts to enable this digital transformation are already in place: the Global Data Model, the GS1 Registry Platform, Activate and Verified by GS1. But those are simply the beginning. Because we want to do more; and because we know that GS1 standards can do more.

Take the GS1 barcode, for instance. In the not-too-distant past, products had just one barcode that served its purpose as soon as it beeped at the checkout. But today, product packaging often contains a multitude of symbols and codes, some intended for the point of sale, some for the consumer and others internal symbols only readable by the manufacturer or even the label printer.

This proliferation of symbols can confuse consumers and trading partners. That’s why we have been working with industry to fix it. We believe that on-pack identifiers can be dramatically simplified and improved by leveraging the power of existing GS1 standards. We know that one data carrier can serve multiple functions and enable access to rich data.

Our work across the past year in this domain has been meaningful. We know that for product packaging, less is more, so we aim to reduce the number of symbols needed to accomplish business objectives. We have seen that on-pack codes and symbols must be interoperable to unlock the benefits of accurate product information for industry and consumers. We see that flexibility will be necessary to address different business needs and manage the rapidly changing technology landscape. GS1 standards can ensure all of this.

As a result, GS1 will provide an informed, forward-looking approach to consistently and efficiently implement on-pack coding in a way that enables products or objects to serve as unambiguous sources of information, built on top of foundational standards for continued interoperability.
Our recent accomplishments with the GS1 Digital Link standard are perfectly in line with this vision. The GS1 Digital Link standard and its Implementation Guidelines were ratified in February 2020. Similar to the way a web address (URL) points to a specific website, GS1 Digital Link enables connections to all types of B2B and B2C information. It works with barcodes, QR codes, radio-frequency identification (RFID), GS1 DataMatrix tags and near-field communication (NFC). In healthcare, it helps reinforce the one-barcode initiative.

GS1’s resolver service was launched on 1 July 2020. Without a resolver, a Web address can only ever point to one thing at a time. Our resolver allows a brand owner to associate multiple resources with a single GS1 identifier. This makes it possible to link one barcode to, say, a patient information leaflet, an instruction manual in different languages, a recall status report and a basic product information page.

Going forward, we will also add Verifiable Credentials to our data services offerings: a way to truly prove that some authorised and respected third party has certified that a given product is, for example, vegan, or organic, or kosher, or halal, or gluten-free.

At GS1, we have long been at the forefront of evaluating emerging technologies and partnering with industry to accelerate into the future. Our recent work on innovative solutions and services has put GS1 on a path toward convergence, driving us toward a single unified portfolio that can serve our community of users.

As businesses look to do more with barcodes and symbols, GS1 is here to help lead the way.

Read about the barcode [r]evolution: www.gs1.org/The-Barcode-r-Evolution.pdf
Stay up to date on our work: www.gs1.org
GS1 Chinese Taipei: A smart medical system for Kaohsiung Armed Forces General Hospital

Deploying GS1 standards for Unique Device Identification resulted in 6.9% lower hospital costs, 1.829kg lower CO₂ emissions, 0.9% fewer near-miss errors, full traceability and more.

All sixteen of KAFGH’s surgical operating rooms are now connected. More than 90% of materials and devices can be identified simply by scanning their UDI barcodes. The hospital has increased patient safety by greatly reducing the risk of human error. Implanted medical devices can more easily be traced to the patients who received them. The hospital has also greatly reduced their use of paper, which is good for the environment and for their budget. Perhaps most importantly, KAFGH’s healthcare professionals can now spend more time on patient care, because they are spending 90% less time than before on administrative tasks related to device management. The hospital has seen other benefits too, including improved inventory management, better assessment of device performance and better protection against counterfeit devices.

Kaohsiung Armed Forces General Hospital (KAFGH) in Chinese Taipei uses GS1 standards for their inventory, distribution and supply chain processes. In 2013, the country’s Food and Drug Administration recommended Unique Device Identification (UDI) to improve patient safety and benefit business processes. This led KAFGH to launch a project to use GS1 standards for UDI in order to improve and modernise their medical device record-keeping procedures.

KAFGH began by upgrading their information system to one that could enable “one-scan” automation of processes, all while remaining compatible with existing tools and procedures. At the same time, KAFGH promoted the benefits of GS1 standards and UDI labeling guidelines with their suppliers and trained these partners about how to use the real-time online stock management interface. The UDI system was then connected to systems across the hospital, as well as to a public database which provided product authentication.

Record-keeping for medical materials and devices can now be accomplished with a simple scan.

Interested in learning more?
GS1 Chinese Taipei: www.gs1tw.org
GS1 Healthcare: www.gs1.org/healthcare
GS1 India: One of the first GS1 MOs to go live with Verified by GS1

Indian retailers and marketplaces see a steadily increasing quantity of products from non-Indian brands. They need a trusted way to verify GTINs and validate information for these products. DataKart to the rescue!

In 2016, after a first experience with a more basic GTIN validation solution, GS1 India launched DataKart, a service enabling Indian sellers and brand owners to assign GTINs to products and share product data with trading partners. Just a few years later, retailers and marketplaces in India were using DataKart to validate GTINs and list products.

However, DataKart could only validate GTINs that had been attributed by GS1 India, and about 15% of all queries returned a GTIN that had been allocated by some other GS1 Member Organisation (MO). GS1 India’s users—and in particular marketplaces for whom accurate, verifiable product information is vital—were not fully satisfied. So when the GS1 Global Office announced the project that would later become Verified by GS1 (see page 21), GS1 India was one of the first GS1 MOs to offer to help. Here was the answer to their members’ demands: a service that could authenticate GTINs and provide information about products, no matter where in the world the GS1 GTIN had been issued.

To certify DataKart as compliant with Verified by GS1, GS1 India only had to make a few technical enhancements and get their members’ authorisation to share data globally. DataKart connected to Verified by GS1 in June 2019, ahead of target. Because data quality is of utmost importance, 99% of uploaded product data contains all seven of Verified by GS1’s targeted core attributes. Almost 10,000 Indian companies across 36 product categories are now present on Verified by GS1.

Today, DataKart is being used by Indian retailers, marketplaces, point-of-sale application providers and market research companies to validate GTINs, check ownership of brands, get product updates from brand owners, analyse shopping baskets and remove inactive GTINs from their databases.

DataKart and Verified by GS1 are helping Indian brands and sellers of all sizes reach a global audience.

Interested in learning more?
GS1 India: www.gs1india.org
Verified by GS1: See page 21
Names & Numbers
Global Revenues

GS1 Member Organisations (MOs) around the world are funded by their local members through annual membership fees and sales of services. Excluding the impact of the divestiture of the 1WorldSync US business, calendar year 2019 MO revenues experienced another year of strong growth, with an increase of 5.0% in local currency. All regions show positive growth (see page 36). The growth in EURO was positively impacted by exchange rate fluctuations and amounted to 6.7%. Including the divestiture of the 1WorldSync US business, MO revenues in EURO declined by -4.2% to €419M, with the change impacting North America and Europe.

COVID-19 Crisis: Impact on revenues and expenses

GS1 Global Office (GO) main revenues are the membership fees from its Member Organisations. These fees are calculated based on the revenues of the MOs during the previous calendar year (CY). As such, GS1 Global Office (GO) revenues for our fiscal year (FY) 2019/20 were not impacted by the COVID-19 crisis since the fees were based on the MO revenues in CY 2018. We did however see significantly reduced travel and meeting costs in the final four months of the fiscal year. Looking ahead to FY 2020/21, there will still not be any meaningful impact on the GO revenues since these will be based on CY 2019 MO revenues. By the end of 2020 we will have a better understanding to what extent 2020 MO revenues will have been impacted by the COVID-19 crisis and what therefore the impact will be on the GS1 GO Budget for FY 2021/22.

Revenue evolution

In 2019-20, GS1 Global Office’s revenues amounted to €36.3M, an increase of €2.1M or 6.0% versus the year before. The 2020-21 budget foresees a decrease in Global Office revenues of €1.1M reaching €35.3M, reflecting the divestiture of 1WorldSync’s US business, while other Global Office revenues are increasing slightly.

Income statement and headcount

For 2019-20, GS1 Global Office shows a negative result of €1.2M compared to the budgeted loss of €4.0M, a positive variance of €2.8M. Higher revenues contribute €0.8M, mostly from favorable exchange rates and new GS1 Healthcare members. Expenses are €2.0M lower. In the first 9 months of the FY, significant cost savings (€1.1M) were achieved by huge efforts to reduce travel and meeting expenses and by a very diligent management of our staffing choices. Subsequently, GO also benefitted from important cost reductions (€0.9M) in the last quarter of the FY, as a result of the COVID-19-induced bans on travel and physical meetings.

Operating expenses increased by €0.8M or 2.2% versus 2018-19, due to increased investments in digital transformation projects. This is mainly reflected in: (1) a €1.4M increase in payroll expenses due to the full-year impact of the 2018-19 recruitments, the new hires of 2019-20 and inflation; and, (2) a €0.5M increase in fixed expenses mainly due to higher depreciation from the new investments in software development. These increases are partly offset by a €1.1M decrease in discretionary spending (which includes travel, consulting, marketing and meetings/events). This reflects the savings that were delivered and the impact of the COVID-19 crisis.

Both the base business (managed from the GS1 Central Office) and Data Excellence Inc. delivered a negative result. However, they both ended the year better than budget 2019-20 commitments.

The 2020-21 budget includes further increased investments in our digital transformation. Consequently, the budget 2020-21, as approved by the General Assembly in June 2020, forecasts a negative result of €6.4M. This will be funded by GO reserves and loans from a group of Member Organisations.

In terms of expense categories, our main investment remains our people, representing 63% of our operating expenses, with 107 staff members at the end of June 2020. The 2020-21 budget plans for a Global Office headcount of 114 positions, which is needed to deliver the huge project load and deliver on our core business.
Names & numbers

GS1 Member Organisation revenue: Growth by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2019/20 Loc. incl. 1WS impact**</th>
<th>2019/20 EUR incl. 1WS impact**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East/ Mediterranean/Africa</td>
<td>11.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Latin America</td>
<td>8.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>5.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>North America</td>
<td>9.5%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Europe</td>
<td>1.5%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5.0%</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

* in Local Currency, excluding Foreign Exchange Impact
** Divestiture of 1WorldSync’s US business

GS1 Member Organisation revenue: Historical perspective

<table>
<thead>
<tr>
<th>Figures in millions of euro</th>
<th>12/13 Actuals</th>
<th>13/14 Actuals</th>
<th>14/15 Actuals</th>
<th>15/16 Actuals</th>
<th>16/17 Actuals</th>
<th>17/18 Actuals</th>
<th>18/19 Actuals</th>
<th>19/20 Actuals</th>
<th>20/21 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS1 Central Office</td>
<td>25.0</td>
<td>26.2</td>
<td>26.3</td>
<td>28.4</td>
<td>28.3</td>
<td>30.5</td>
<td>32.0</td>
<td>34.0</td>
<td>32.9</td>
</tr>
<tr>
<td>EPCglobal Inc.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GS1 Data Excellence Inc.</td>
<td>2.0</td>
<td>2.0</td>
<td>2.1</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.3</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total GS1 Global Office</strong></td>
<td><strong>27.0</strong></td>
<td><strong>28.2</strong></td>
<td><strong>28.4</strong></td>
<td><strong>30.8</strong></td>
<td><strong>30.8</strong></td>
<td><strong>33.1</strong></td>
<td><strong>34.3</strong></td>
<td><strong>36.3</strong></td>
<td><strong>35.3</strong></td>
</tr>
<tr>
<td>Staff (FTEs at year end)</td>
<td>80</td>
<td>80</td>
<td>81</td>
<td>81</td>
<td>82</td>
<td>96</td>
<td>101</td>
<td>107</td>
<td>114</td>
</tr>
<tr>
<td>Accounting Reserves*</td>
<td>13.8</td>
<td>15.5</td>
<td>16.0</td>
<td>17.1</td>
<td>17.1</td>
<td>16.3</td>
<td>17.7</td>
<td>16.5</td>
<td>10.1</td>
</tr>
</tbody>
</table>

*where Reserves are defined as accumulated net results; could be invested in cash, fixed assets or receivables

GS1 consolidated fiscal year 2019/20: Actuals

<table>
<thead>
<tr>
<th>Figures in millions of euro</th>
<th>Consolidated</th>
<th>GS1 Central Office</th>
<th>GS1 Data Excellence Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>36.3</td>
<td>34.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Fixed/Recurring Expenses</td>
<td>3.5</td>
<td>3.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Discretionary Expenses</td>
<td>10.1</td>
<td>9.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Payroll Expenses</td>
<td>23.7</td>
<td>22.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>37.3</td>
<td>34.8</td>
<td>2.5</td>
</tr>
<tr>
<td>Operating Result</td>
<td>(1.0)</td>
<td>(0.8)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Other Revenue / (Expenses)</td>
<td>(0.2)</td>
<td>(0.2)</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Result for the period</strong></td>
<td>(1.2)</td>
<td>(1.0)</td>
<td>(0.2)</td>
</tr>
</tbody>
</table>

Members of the Management Board of GS1 AISBL*: 

Kathryn E. Wengel  
Executive Vice President & Chief Global Supply Chain Officer  
Executive Committee Member  
Johnson & Johnson  
Chair  
GS1 Management Board

Julio Nemeth  
Chief Product Supply Officer  
The Procter & Gamble Company  
Vice Chair  
GS1 Management Board

Bruno Aceto  
Chief Executive Officer  
GS1 Italy

Mark Batenic  
Chairman  
IGA Inc.

Bob Carpenter  
President & Chief Executive Officer  
GS1 US

François Deprey  
Chief Executive Officer  
GS1 France

Ahmed ElKalla  
Chief Executive Officer  
GS1 Egypt

Thomas Fell  
Chief Executive Officer  
GS1 Germany

Béatrice Guillaume-Grabisch  
Executive Vice President & Global Head Human Resources & Business Services  
Nestlé S.A.

Doug Gurr  
Vice President UK Country Manager  
Amazon UK

José Loaiza Herrera  
Vice President of International Business & Digital Strategy  
Grupo Exito

John Inwright  
President & Chief Executive Officer  
Wendy’s Quality Supply Chain Cooperative

Samir Ishak  
Board Advisor  
Abudawood

Xiao An Ji  
Chairman  
Beijing Hualian Group

Stéphane Lannuzel  
Operations Chief Digital Officer & Beauty Tech Project Director  
L’Oréal

Anna Lin  
Chief Executive Officer  
GS1 Hong Kong, China

Miguel A. Lopera  
President & Chief Executive Officer  
GS1 AISBL

Dr. Meinrad Lugan  
Member of the Board of Management  
B. Braun Melsungen AG

Gary Lynch  
Chief Executive Officer  
GS1 UK

Dr Susan Moffatt-Bruce  
Chief Executive Officer  
Royal College of Physicians and Surgeons of Canada

Bhanu Narasimhan  
Director, Product Management  
Google Inc.

Maria Palazzolo  
Executive Director & Chief Executive Officer  
GS1 Australia

José Antonio Parra Ashby  
Director - Global Digital Transformation  
Grupo Bimbo

Joseph Phi  
President  
LF Logistics

Dr. Martin Reintjes  
Member of the Executive Board  
Dr Oetker GmbH

Chris Resweber  
Senior Vice President, Industry Affairs  
The J.M. Smucker Company

Oscar Antonio Rubiani  
President and Chief Executive Officer  
GS1 Paraguay

N. Arthur Smith  
Chief Executive Officer  
GS1 Canada

Venkatachalam Subramaniam  
Director  
Reliance Retail Limited

Eddy Vanhille  
Chief Operating Officer  
METRO AG

Lin Wan  
President  
Cainiao (Alibaba Group)

Vincent Weijers  
Chief Operating Officer  
bol.com

Chenghai Zhang  
Chief Executive Officer  
GS1 China

* As at 30 June 2020
# Data Excellence Inc. Board of Directors

Members of the Board of Directors of GS1 Data Excellence, Inc.:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jean-Marc Klopfenstein</td>
<td>Chair, GS1 Data Excellence Inc. Board of Directors</td>
<td>Nestlé</td>
</tr>
<tr>
<td>Laurent Seroux</td>
<td>Vice Chair, GS1 Data Excellence Inc. Board of Directors</td>
<td>Procter &amp; Gamble</td>
</tr>
<tr>
<td>Nate Whitten</td>
<td>Vice Chair, GS1 Data Excellence Inc. Board of Directors</td>
<td>Lowe’s Companies, Inc.</td>
</tr>
<tr>
<td>Renaud de Barbuat</td>
<td>President, GS1 Data Excellence, Inc.</td>
<td>GS1 AISBL</td>
</tr>
<tr>
<td>Marc Blanchet</td>
<td>President</td>
<td>Viagenie</td>
</tr>
<tr>
<td>Vincent De Hertogh</td>
<td>Director of Content Acquisition</td>
<td>Ahold Delhaize Group</td>
</tr>
<tr>
<td>JP De Villiers</td>
<td>Vice President, Customer Experience</td>
<td>1WorldSync</td>
</tr>
<tr>
<td>Harris Diamand</td>
<td>Chief Operating Officer</td>
<td>Walmart</td>
</tr>
<tr>
<td>Thomas Fell</td>
<td>Chief Executive Officer</td>
<td>GS1 Germany</td>
</tr>
<tr>
<td>Rafael Flórez</td>
<td>Chief Executive Officer</td>
<td>GS1 Columbia representing LOGYCA</td>
</tr>
<tr>
<td>Marina Guegan</td>
<td>IT Master Data Director</td>
<td>Carrefour</td>
</tr>
<tr>
<td>Stefan Hesse</td>
<td>Chief Financial Officer &amp; UK Managing Director</td>
<td>Alkemics</td>
</tr>
<tr>
<td>Grant Hodgkins</td>
<td>MDR Supply Chain Franchise Lead</td>
<td>Smith &amp; Nephew</td>
</tr>
<tr>
<td>Lars Kyed</td>
<td>Chief Executive Officer</td>
<td>GS1 Denmark</td>
</tr>
<tr>
<td>Pieter Maarleveld</td>
<td>Chief Executive Officer</td>
<td>GS1 Netherlands</td>
</tr>
<tr>
<td>Vivek Nadadur</td>
<td>Senior Director, Supply Chain Visibility</td>
<td>Johnson &amp; Johnson</td>
</tr>
<tr>
<td>Mike Nickituk</td>
<td>Chief Executive Officer</td>
<td>Nielsen Brandbank</td>
</tr>
<tr>
<td>Maria Palazzolo</td>
<td>Chief Executive Officer</td>
<td>GS1 Australia</td>
</tr>
<tr>
<td>John S. Phillips</td>
<td>Senior Vice President, Customer Supply Chain &amp; Go-To-Market</td>
<td>PepsiCo Global Operations</td>
</tr>
<tr>
<td>Dave Ralph</td>
<td>President &amp; Chief Executive Officer</td>
<td>Commpornt Communications International Inc.</td>
</tr>
<tr>
<td>Paul Salay</td>
<td>Chief Executive Officer</td>
<td>Syndigo</td>
</tr>
<tr>
<td>N. Arthur Smith</td>
<td>Chief Executive Officer</td>
<td>GS1 Canada</td>
</tr>
<tr>
<td>Lori Schrop</td>
<td>Director, Enterprise Item Management &amp; Industry Engagement</td>
<td>The J.M. Smucker Company</td>
</tr>
<tr>
<td>Jan Somers</td>
<td>Chief Executive Officer</td>
<td>GS1 Belgium/Luxembourg</td>
</tr>
<tr>
<td>Markus Tkotz</td>
<td>Managing Director</td>
<td>Markant Handels-und Industriewaren-Vermittlungs AG</td>
</tr>
<tr>
<td>Anja Wiese</td>
<td>Executive Manager of Global Data Management</td>
<td>Dr. August Oetker Nahrungsmittel KG</td>
</tr>
<tr>
<td>Christian Zaeske</td>
<td>Director Master Data Management</td>
<td>METRO AG</td>
</tr>
</tbody>
</table>
GS1 Innovation Board

Members of the Board of Governors of EPCglobal, Inc.:

**Sanjay E. Sarma**
Vice President for Open Learning, Professor of Mechanical Engineering
Massachusetts Institute of Technology
Chair, GS1 Innovation Board

**Eric Ballot**
Director of the Management Science Lab and Supply Chain and Logistics Professor
MINES ParisTech - PSL

**Robert Beideman**
Chief Product Officer
GS1 Global Office
Head of EPCglobal, Inc.

**Chris Diorio**
Chief Executive Officer, Vice Chairman and Founder
Impinj

**Ahmed ElKalla**
Chief Executive Officer
GS1 Egypt

**Wendi Eriksen**
Senior Director – Data & Analytics, Innovation & Architecture
Walmart International

**Christian Floerkemeier**
Chief Technology Officer & Co-Founder
Scandit

**Marina Kotsianas**
Chief Executive Officer
Artia Strategies (University of Southern California)

**Melanie Nuce**
Senior Vice President, Corporate Development
GS1 US

**Chris Resweber**
Senior Vice President, Industry Affairs
The J. M. Smucker Company

**Bernhard Schindlholzer**
Product Manager
Google

**Pallaw Sharma**
Vice President, Supply Chain Digital
Johnson & Johnson

**Milan Turk, Jr.**
Managing Director, Global Customer Business Development, Market Strategy & Planning Innovation
The Procter & Gamble Company

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What does GS1 mean to you?
The GS1 Global Office Leadership Team is composed of the following people:

Miguel A. Lopera, President and Chief Executive Officer

Renaud de Barbuat, Chief Operating Officer

Robert Beideman, Chief Product Officer

Robyn Burke, Vice President Human Resources

Alain Jonis, Chief Marketing Officer

Marie Père, GS1 General Counsel

Marianne Timmons, President, Community Engagement

Philippe Van der Planken, Chief Financial and Administration Officer

Top row: Marie Père, Robert Beideman, Renaud de Barbuat
Middle row: Robyn Burke, Miguel A. Lopera, Marianne Timmons
Bottom row: Alain Jonis, Philippe Van der Planken
GS1 Member Organisations

The following information was correct when we went to press.

For the most up-to-date information, please visit www.gs1.org/contact.

GS1 Albania
Tirana
+ 355 4 232073
www.gs1al.org

GS1 Algeria
Algiers
+ 213 21 34 10 46
www.gs1.dz

GS1 Argentina
Buenos Aires
+ 54 11 4556 4700
www.gs1.org.ar

GS1 Armenia
Yerevan
+ 374 10 272 622
www.gs1am.org

GS1 Australia
Melbourne
+ 61 3 95589559
www.gs1au.org

GS1 Austria
Vienna
+ 43 1 505 86 01
www.gs1.at

GS1 Azerbaijan
Baku
+ 994 12 4987405
www.gs1az.org

GS1 Bahrain
Manama
+ 973 17 456330
www.gs1bh.org

GS1 Belarus
Minsk
+ 375 17 227 09 13
www.gs1by.by

GS1 Belgium & Luxembourg
Brussels
+ 32 2 229 18 80
www.gs1belu.org

GS1 Bolivia
Santa Cruz de la Sierra
+ 591 3 3383361
www.gs1.org.bo

GS1 Bosnia & Herzegovina
Sarajevo
+ 387 33 25 86 45
www.gs1bih.org

GS1 Brazil
São Paulo
+ 55 11 3068 6229
www.gs1br.org

GS1 Brunei Darussalam
Berahas
+ 673 424 0069
www.gs1bn.org

GS1 Bulgaria
Sofia
+ 359 2 8117 567
www.gs1bg.org

GS1 Cambodia
Phnom Penh
+ 855 2388 2576
www.gs1cambodia.org

GS1 Cameroon
Douala
+237 685 369 796
www.gs1cm.org

GS1 Canada
Toronto
+ 1 416 510 8039
www.gs1ca.org

GS1 China
Beijing
+ 86 40 0700 0690
www.gs1cn.org

GS1 Chinese Taipei
Taipei
+ 886 2 254 50011
www.gs1tw.org
GS1 Member Organisations

GS1 Colombia
Bogota
+ 57 1 425 4704
www.gs1co.org

GS1 Côte d’Ivoire
Abidjan
+ 225 08 48 90 59
www.gs1ci.org

GS1 Costa Rica
San José
+ 506 2507 8000
www.gs1cr.org

GS1 Croatia
Zagreb
+ 385 1 48 95 000
www.gs1hr.org

GS1 Cuba
Havana
+ 537 8353122
www.gs1cu.org

GS1 Cyprus
Nicosia
+ 357 22 889860
www.gs1cy.org

GS1 Czech Republic
Prague
+ 420 2270 31261
www.gs1cz.org

GS1 Denmark
Copenhagen
+ 45 39 27 85 27
www.gs1.dk

GS1 Dominican Republic
Santo Domingo
+ 1 809 683 4727
www.gs1rd.org.do

GS1 Ecuador
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+ 593 2 2507 580
www.gs1ec.org

GS1 Egypt
Cairo
+ 20 220 822 135
www.gs1eg.org

GS1 El Salvador
San Salvador
+ 503 2205 1000
www.gs1sv.org

GS1 Estonia
Tallinn
+ 37 2 660 5535
www.gs1.ee

GS1 Finland
Helsinki
+ 358 7 5756 3500
www.gs1.fi

GS1 France
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+ 33 1 40 22 17 00
www.gs1.fr

GS1 Georgia
Tbilisi
+ 995 32 2 96 10 19
www.gs1ge.org

GS1 Germany
Cologne
+ 49 221 947 14 - 0
www.gs1-germany.de

GS1 Ghana
Tema
+ 233 302 816 260
www.gs1gh.org

GS1 Association Greece
Argiroupoli
+ 30 210 9904260
www.gs1greece.org

GS1 Guatemala
Guatemala City
+ 502 2245 9595
www.gs1gt.org

GS1 Honduras
Tegucigalpa
+ 504 2270 7247
www.gs1hn.org

GS1 Hong Kong, China
Hong Kong
+ 852 2861 2819
www.gs1hk.org

GS1 Hungary
Budapest
+ 36 1 2377240
www.gs1hu.org

GS1 Iceland
Reykjavik
+ 354 511 3011
www.gs1.is
## GS1 Member Organisations

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<thead>
<tr>
<th>GS1 India</th>
<th>GS1 Indonesia</th>
<th>GS1 Iran</th>
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<tbody>
<tr>
<td>New Delhi</td>
<td>South Jakarta</td>
<td>Tehran</td>
</tr>
<tr>
<td>+ 91 11 42890890</td>
<td>+ 62 21 319 25 8001</td>
<td>+ 98 21 88935095</td>
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<td><a href="http://www.gs1lr.net">www.gs1lr.net</a></td>
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<tr>
<td>Dublin</td>
<td>Tel Aviv</td>
<td>Milan</td>
</tr>
<tr>
<td>+ 353 1 208 0660</td>
<td>+ 972 3 519 87 14</td>
<td>+ 39 02 777 2121</td>
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<tr>
<td>Tokyo</td>
<td>Amman</td>
<td>Almaty</td>
</tr>
<tr>
<td>+ 81 3 5414 8520</td>
<td>+ 962 6 56 200 38</td>
<td>+ 7 727 394 88 53</td>
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<tr>
<td><a href="http://www.gs1jp.org">www.gs1jp.org</a></td>
<td><a href="http://www.gs1jo.org.jo">www.gs1jo.org.jo</a></td>
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<th>GS1 Korea (DPR)</th>
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<tr>
<td>Nairobi</td>
<td>Seoul</td>
<td>Pyongyang</td>
</tr>
<tr>
<td>+ 254 20 238 5270</td>
<td>+ 82 2 6050 1400</td>
<td>+ 850 2 18111 (ext.3818989)</td>
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</tr>
<tr>
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<td>+ 996 312 900 521</td>
<td>+ 371 67830 822</td>
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<td>Vilnius</td>
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<td>+ 218 21 444 4545</td>
<td>+ 370 5 2614532</td>
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<tr>
<td>Andar</td>
<td>Skopje</td>
<td>Kuala Lumpur</td>
</tr>
<tr>
<td>+ 853 2878 2385</td>
<td>+ 389 2 32 54 250</td>
<td>+ 603 6286 7200</td>
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<td><a href="http://www.gs1mk.org">www.gs1mk.org</a></td>
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<th>GS1 Mexico</th>
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<tr>
<td>Santa Venera</td>
<td>Port Louis</td>
<td>Mexico City</td>
</tr>
<tr>
<td>+ 356 21 337 228</td>
<td>+ 230 203 4830</td>
<td>+ 52 55 5249 5249</td>
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<td><a href="http://www.gs1mu.org">www.gs1mu.org</a></td>
<td><a href="http://www.gs1mexico.org">www.gs1mexico.org</a></td>
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### GS1 Member Organisations

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<tr>
<th>Country</th>
<th>City</th>
<th>Phone Number</th>
<th>Website</th>
</tr>
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<tr>
<td>GS1 Moldova</td>
<td>Chisinau</td>
<td>+373 22 21 16 69</td>
<td><a href="http://www.gs1.md.org">www.gs1.md.org</a></td>
</tr>
<tr>
<td>GS1 Mongolia</td>
<td>Ulaanbaatar</td>
<td>+976 77000865</td>
<td><a href="http://www.gs1mn.org">www.gs1mn.org</a></td>
</tr>
<tr>
<td>GS1 Montenegro</td>
<td>Podgorica</td>
<td>+381 11 3132 312</td>
<td><a href="http://www.gs1yu.org">www.gs1yu.org</a></td>
</tr>
<tr>
<td>GS1 Morocco</td>
<td>Casablanca</td>
<td>+212 522 39 19 13</td>
<td><a href="http://www.gs1ma.org">www.gs1ma.org</a></td>
</tr>
<tr>
<td>GS1 Myanmar</td>
<td>Yangon</td>
<td>+959 5191282</td>
<td><a href="http://www.gs1mm.org">www.gs1mm.org</a></td>
</tr>
<tr>
<td>GS1 Netherlands</td>
<td>Amstelveen</td>
<td>+31 20 511 3888</td>
<td><a href="http://www.gs1.nl">www.gs1.nl</a></td>
</tr>
<tr>
<td>GS1 New Zealand</td>
<td>Wellington</td>
<td>+64 4 494 1050</td>
<td><a href="http://www.gs1nz.org">www.gs1nz.org</a></td>
</tr>
<tr>
<td>GS1 Nicaragua</td>
<td>Managua</td>
<td>+505 2266 9810</td>
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<tr>
<td>GS1 Nigeria</td>
<td>Lagos</td>
<td>+234 80 99 999 333</td>
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</tr>
<tr>
<td>GS1 Norway</td>
<td>Oslo</td>
<td>+47 22 97 13 20</td>
<td><a href="http://www.gs1.no">www.gs1.no</a></td>
</tr>
<tr>
<td>GS1 Pakistan</td>
<td>Karachi</td>
<td>+92 21 32215844</td>
<td><a href="http://www.gs1pk.org">www.gs1pk.org</a></td>
</tr>
<tr>
<td>GS1 Panama</td>
<td>Panama City</td>
<td>+507 236 7907</td>
<td><a href="http://www.gs1pa.org">www.gs1pa.org</a></td>
</tr>
<tr>
<td>GS1 Paraguay</td>
<td>Asunción</td>
<td>+595 21 202 518</td>
<td><a href="http://www.gs1py.org">www.gs1py.org</a></td>
</tr>
<tr>
<td>GS1 Peru</td>
<td>Lima</td>
<td>+51 1 203 6100</td>
<td><a href="http://www.gs1pe.org">www.gs1pe.org</a></td>
</tr>
<tr>
<td>GS1 Philippines</td>
<td>Pasig City</td>
<td>+63 2 6370897</td>
<td><a href="http://www.gs1ph.org">www.gs1ph.org</a></td>
</tr>
<tr>
<td>GS1 Poland</td>
<td>Poznań</td>
<td>+48 61 85 1 7754</td>
<td><a href="http://www.gs1pl.org">www.gs1pl.org</a></td>
</tr>
<tr>
<td>GS1 Portugal</td>
<td>Lisbon</td>
<td>+35 1 21 752 07 40</td>
<td><a href="http://www.gs1pt.org">www.gs1pt.org</a></td>
</tr>
<tr>
<td>GS1 Qatar</td>
<td>Doha</td>
<td>+974 44300 295</td>
<td><a href="http://www.gs1.org">www.gs1.org</a></td>
</tr>
<tr>
<td>GS1 Romania</td>
<td>Bucharest</td>
<td>+40 21 3178031</td>
<td><a href="http://www.gs1.ro">www.gs1.ro</a></td>
</tr>
<tr>
<td>GS1 Russia</td>
<td>Moscow</td>
<td>+7 495 989 26 88</td>
<td><a href="http://www.gs1ru.org">www.gs1ru.org</a></td>
</tr>
<tr>
<td>GS1 Saudi Arabia</td>
<td>Riyadh</td>
<td>+966 11 218 24 20</td>
<td><a href="http://www.gs1.org.sa">www.gs1.org.sa</a></td>
</tr>
<tr>
<td>GS1 Senegal</td>
<td>Dakar</td>
<td>+221 33 820 99 82</td>
<td><a href="http://www.gs1senegal.org">www.gs1senegal.org</a></td>
</tr>
<tr>
<td>GS1 Serbia</td>
<td>New Belgrade</td>
<td>+381 11 3132 312</td>
<td><a href="http://www.gs1yu.org">www.gs1yu.org</a></td>
</tr>
<tr>
<td>GS1 Singapore</td>
<td>Singapore</td>
<td>+65 6826 3077</td>
<td><a href="http://www.gs1.org.sg">www.gs1.org.sg</a></td>
</tr>
</tbody>
</table>
### GS1 Member Organisations

**GS1 Slovakia**  
Zilina  
+ 421 41 565 11 85  
www.gs1sk.org

**GS1 Slovenia**  
Ljubljana  
+ 386 1 5898320  
www.gs1si.org

**GS1 South Africa**  
Randburg  
+ 27 11 777 3300  
www.gs1za.org

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**GS1 Spain**  
Barcelona  
+ 34 93 252 39 00  
www.gs1es.org

**GS1 Sri Lanka**  
Colombo  
+ 94 11 5588808  
www.gs1lanka.org

**GS1 Sweden**  
Stockholm  
+ 46 8 50 10 10 00  
www.gs1.se

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**GS1 Switzerland**  
Bern  
+ 41 58 800 70 00  
www.gs1.ch

**GS1 Syria**  
Damascus  
+ 963 11 54 27 909  
www.gs1sy.org

**GS1 Tajikistan**  
Dushanbe  
+ 992 37 227 1168  
www.gs1tj.org

---

**GS1 Tanzania**  
Dar es Salaam  
+ 255 22 2664310  
www.gs1tz.org

**GS1 Thailand**  
Bangkok  
+ 66 2 345 1200  
www.gs1th.org

**GS1 Tunisia**  
Tunis  
+ 216 71 948 660  
www.gs1tn.org

---

**GS1 Turkey**  
Ankara  
+ 90 8503031471  
www.gs1tr.org

**GS1 Turkmenistan**  
Ashgabat  
+993 12 46 80 25  
www.gs1tm.org

**GS1 Ukraine**  
Kiev  
+ 380 44 2021155  
www.gs1ua.org

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**GS1 United Arab Emirates**  
Dubai  
+ 971 4 557 0988  
www.gs1ae.org

**GS1 UK**  
London  
+ 44 20 7092 3500  
www.gs1uk.org

**GS1 Uruguay**  
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+ 598 2 606 2134  
www.gs1uy.org

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**GS1 US**  
New Jersey  
+ 1 9374353870  
www.gs1us.org

**GS1 Uzbekistan**  
Tashkent  
+ 99871 2526604  
www.gs1uz.org

**GS1 Venezuela**  
Caracas  
+ 58 212 237 87 77  
www.gs1ve.org

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**GS1 Vietnam**  
Hanoi  
+ 84 1 900 636 218  
www.gs1.org.vn
Sources of facts and figures cited in this document

Page 6
Schrage Michael. “Data, Not Digitalization, Transforms the Post-Pandemic Supply Chain.”
MIT/Sloan Management Review. 29 July 2020.

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Page 23
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GS1 Global Standards Management Process data as of July 2020.

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GS1 Healthcare data as of July 2020.

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GS1 India data as of July 2020.

Page 33
Huang Dr. Kingsley, Dr. Shih-Chung Huang, Dr. Chou-Yuan Ko and Major Yi-Liang Shih.