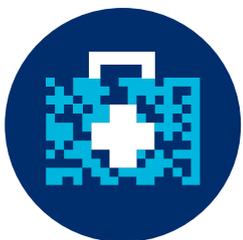
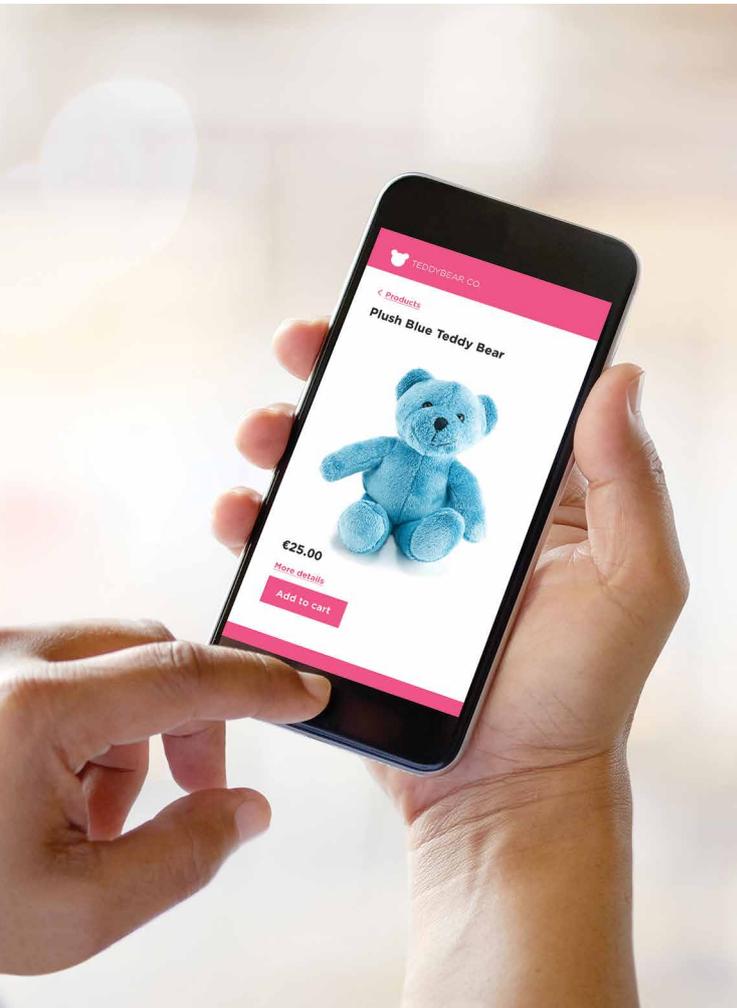


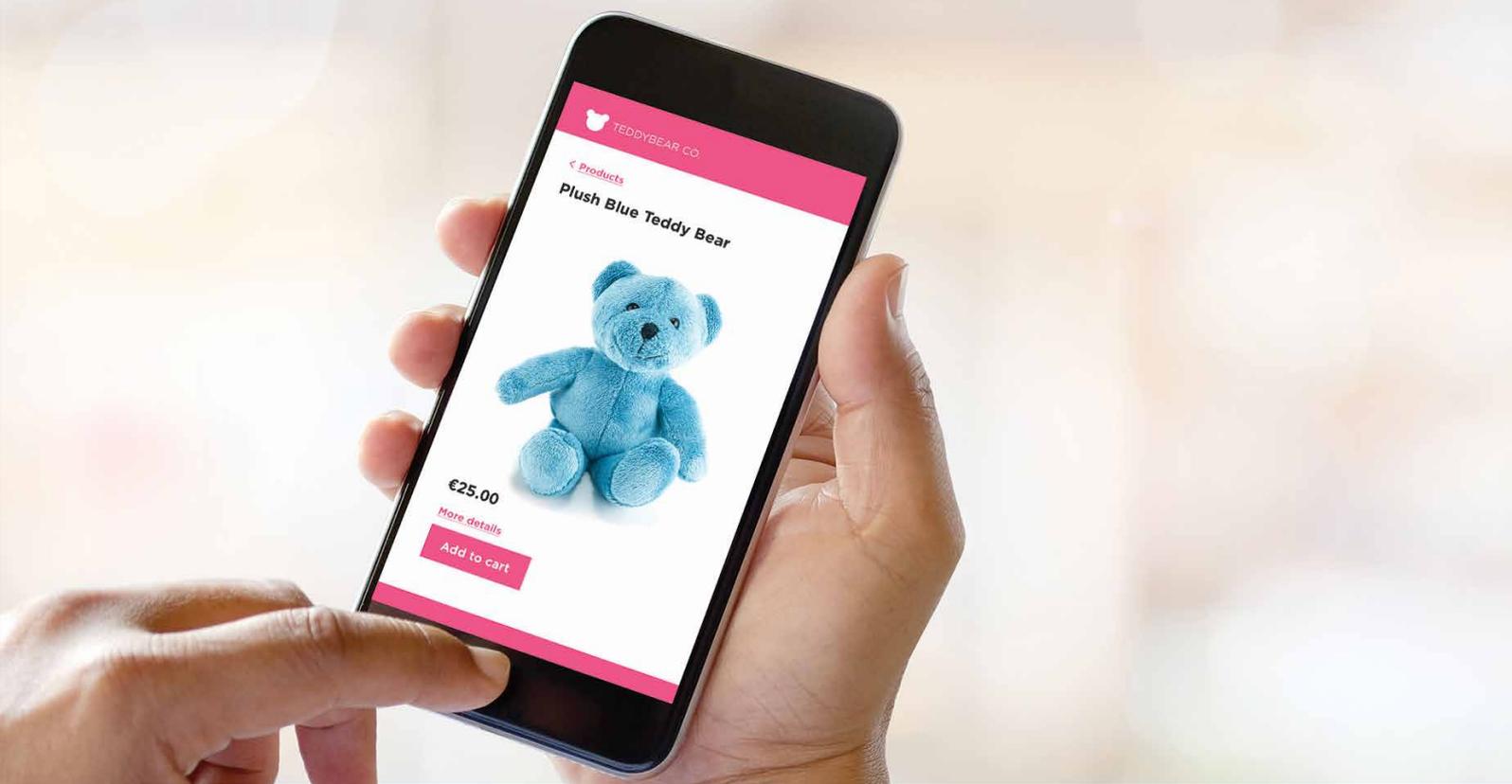


The Global Language of Business

Annual Report 2017-2018







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

We create a common foundation for business by uniquely identifying, accurately capturing and automatically sharing vital information about products, locations and assets.

We enable visibility through the exchange of authentic data.

We empower business to grow and to improve efficiency, safety, security and sustainability.

We are:

- Neutral and not-for-profit
- User-driven and governed
- Global and local
- Inclusive and collaborative



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A letter from our leaders

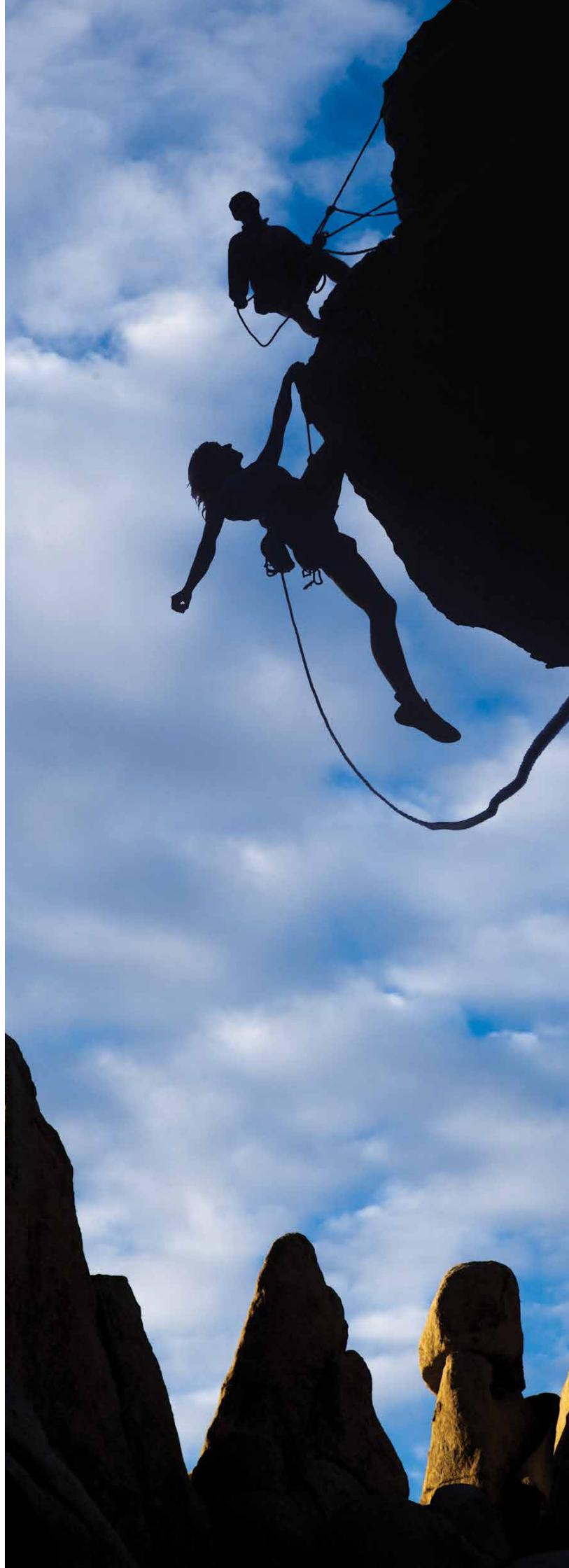
The power of GS1 to transform the way we work and live has been demonstrated again this past year. We have taken so many steps forward and achieved so many great things. Our community remains focused on the greater good of the industries and the people we serve. We are user-driven and user-governed, and proud to be trusted, neutral advisors for our members and other stakeholders.

Thank you to every one of our Member Organisations for your work and your engagement throughout this exceptional year. We believe that everyone makes a difference at GS1 and we operate in a way that ensures everyone has a voice.

We must nevertheless face a truth: there is still work to be done in order to **See One Vision, Speak with One Voice and Act as One Organisation**. We will continue climbing!

GS1 builds bridges between the physical and digital worlds

The retail industry is feeling the pressure of new technologies and changing consumer expectations. Indeed, it is the same in all of our business sectors and in every region of the world. Identification is critical. Good quality product data is key. The information gathered by tracking the events that make up a product's journey is essential. And, of course, interoperability: different systems communicating with each other using a common language. This is what GS1 already does well – and we are hard at work building better bridges between physical-world and digital-world commerce and services.



GS1 is about identification and data is the new oil

The ability to identify, capture and share data underpins the mission of GS1 and indeed lies at the very foundation of the way our standards work to increase transparency, speed and trust. That is why we have been working to create the GS1 Cloud platform – enabling capabilities such as Check and Activate. As the largest global, unified registry for basic trusted data about millions of products, the GS1 Cloud will enable GS1 Member Organisations to offer a service benefitting anyone who cares about product information.

A new strategy for Healthcare

The environment surrounding healthcare is evolving rapidly due to changes in population and society, and due to technology. We have worked with the healthcare industry to integrate these into our strategy. We will increase our efforts to drive deeper implementation of GS1 standards and further enhance the already increased focus on healthcare providers and patients by helping to build a stronger digital thread across the industry. We will also, where appropriate, engage with emerging technology developments.

Traceability

We know that interoperable, scalable traceability systems allow trading partners to more easily collaborate and share information across the entire chain. That's why our newly-released Global Traceability Standard version 2.0 brings increased transparency and interoperability to trading partners across today's complex supply chains.

Pursuing our transformation

All organisations need to evolve to continue to meet the needs of a changing world, and GS1 is no exception. We've named our long-term, transformative programme "The Big Picture". We are working to harmonise our offer of standards and services while continuing to provide real value to our stakeholders. Our ultimate goal is to ensure that all users of GS1 standards—whether multinational companies or small enterprises—can grow their business and become more efficient.

It's time for GS1 to accelerate change

In the pages of this document, you will read more about all of these projects and many others. One thing binds them all: GS1's firm belief that global standards can transform the way we work and live. We are not just enabling change – we are accelerating it. At GS1, everyone makes a difference, every day.



Kathryn E. Wengel

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

A handwritten signature in black ink, appearing to read 'Kathryn E. Wengel'.



Timothy P. Smucker

Chairman Emeritus,
The J.M. Smucker Company
Chairman Emeritus, GS1

A handwritten signature in black ink, appearing to read 'Tim Smucker'.



Miguel A. Lopera

President &
Chief Executive Officer,
GS1

A handwritten signature in blue ink, appearing to read 'Miguel A. Lopera'.





Sectors & Standards

GS1's open, neutral, global standards create a strong foundation to sustain the industries we serve.



Marianne Timmons

President, Industry Engagement & Standards Development

Retail

GS1 standards are helping to build bridges between traditional and digital retail, as commerce becomes truly seamless



The retail sector continues to transform to meet consumer demands and take advantage of technology and business innovations. Today's shoppers are becoming "channel-agnostic": they jump from computer to smartphone to physical store as they move along their path to purchase. They want options—whether from a retailer or an online marketplace—to buy an item at a physical store, online or via click-and-collect. What was once about getting a product on a store shelf is now about connecting products to the world.

At the same fast pace, we are expanding the portfolio of GS1 standards to better ensure that the complementary, interdependent worlds of physical and digital commerce are as seamlessly connected as possible. Our standards allow companies across the retail value chain to reduce costs, create experiences—and sell more stuff.

Globally-unique identification is still the foundation of our work in this sector.

Our UniqueID programme has simplified and clarified the rules for managing Global Trade Item Numbers (GTIN), set clear rules around the reuse of GTINs, and is now enabling the use of Consumer Product Variant identifiers.

We've defined a GS1 guideline for Mobile-Ready Hero Images to help represent real-world products in ways that maintain most of the physical product's design, shape and colour, and that make it easily recognisable on the digital shelf of an online store. We completed the GS1 Digital Link standard, which will help to bridge physical products with their digital twins when used alongside the GS1 SmartSearch web vocabulary. These are foundational steps towards enhancing industry's ability to engage with consumers seamlessly.

Stay up to date on our work in this demanding sector at www.gs1.org/retail.

“GS1 unique product identifiers, like the GTIN, and standards for digital representation of products (digital twins) are of mission-critical importance to both satisfy consumers and power the next wave of global commerce digitally.”

Amit Menipaz

Member, GS1 AISBL Management Board
Former VP & GM of Vertical Experiences & Structured Data, eBay



Did you know?

In a September 2016 report, consulting firm Deloitte found that digital interactions influence **56 cents of every dollar spent** in bricks-and-mortar stores in the United States.

In a January 2018 study, Deloitte found that **three of the top four fastest-growing retailers** are exclusively focused on **e-commerce**: Chinese e-retailers Vipshop and JD.com, and German apparel specialist Zalando.

As e-commerce grows, physical retail establishments are not disappearing: a July 2017 report from market research firm eMarketer showed that **90%** of worldwide retail sales still occur in **physical stores**.

Certainly one of the best illustrations of the current convergence of digital and physical is **Amazon**: this global e-tailer **bought a bricks-and-mortar channel** via its August 2017 acquisition of Whole Foods, an American grocery chain with more than 450 retail stores.

Key initiatives 2017/2018

- Gathered business requirements and convened a standards working group around the topic of the Consumer Product Variant (CPV); this work will provide a way for business partners to share data about minor product differences that do not require the creation of a new GTIN
- Began a dialogue with the GS1 in Europe community about the value of GS1 standards and services to Marketplaces (frictionless platforms that attract buyers and sellers and facilitate transactions between them). We are aligning messaging and a strategy for engagement for this critical set of stakeholders
- Prepared and submitted Mobile Ready Hero Image guidelines to the Global Standards Management Process for ratification

Learn more about our work in consumer packaged goods, fresh foods, foodservice, apparel and general merchandise in the following pages.



Consumer packaged goods & fresh foods

Faster, fresher and safer supply chains for retailers, brands and consumers alike



GS1 standards can provide higher-quality data at a lower cost and a better shopping experience for consumers

Today's consumers want more granular information about packaged goods and fresh foods. GS1 standards for unique, persistent identification and accurate, complete data exchange enable brands and retailers to provide consumers with trusted product information, no matter how or where they shop.

In the consumer packaged goods (CPG) sector, iconic global brands are joined today by smaller local or regional companies offering unique products to consumers, often through specialty and online retailers. During the past year, GS1 deployed a range of programmes to help these new brand owners work more effectively and successfully with large retailers and online marketplaces. CPG trading partners are also using GS1 standards to create efficiencies in processes, such as new item introduction or online B2B and B2C order fulfilment.

The fresh foods sector is also growing and changing, driven in part by the demand from health-conscious consumers and improved

access to safe, fresh products through global trade. Longer and increasingly complex supply chains have strengthened the need for greater speed and efficiency, especially for fresh products with short shelf lives. GS1 standards, services and solutions are being used to enhance traceability. They can also expedite cross-border trade—for example by helping ensure transport documents match the physical product and electronic information about that product and shipment. GS1 DataBar can automatically manage expiration dates at the point of sale: that's one reason why Australian retailers Coles and Woolworths are now using GS1 DataBar on loose fresh produce.

Learn more by following a shipment of fish from catch to consumer at discover.gs1.org/freshfoods or a jar of strawberry jam from grower to consumer at discover.gs1.org/cpg.

Foodservice

We are helping companies across the foodservice supply chain share complete, accurate, reliable product information so that efficiency and food safety can be improved

Foodservice is a complex business. Margins are thin, competition is fierce and the demands for more transparent product information by consumers and governments are stronger than ever before. GS1 standards for unique, persistent identification and accurate, complete data have been helping foodservice manufacturers, distributors and operators meet these challenges for decades.

This year we emphasised the importance of having high-quality data – not just to exchange between business partners, but also to provide companies with actionable insights that their marketing, operations, supply chain, sales, IT and other teams can utilise. One example of this: our GS1 Member Organisation (MO) in Germany is facilitating a project with foodservice companies to explore opportunities made possible by data quality initiatives and the GS1 Global Data Synchronisation Network. Representatives from Nestlé, Unilever, Metro, Edeka, Transgourmet, Aramark—and more—meet regularly to

collaborate on standards, and will soon be publishing guidelines so that others can benefit from their work.

Traceability is a key focus area for the foodservice industry. In the past year, GS1 MOs in Brazil, Guatemala, Hong Kong, New Zealand and Sweden all launched new GS1 traceability training and education programmes focused on this sector.

GS1 MOs undertook other awareness and outreach actions, too. For example, MOs in Argentina, Australia, Canada, China, Colombia, France and the US hosted foodservice-specific events. We also hope you had the opportunity to visit the GS1 booths at Internorga Hamburg, Intergastra Stuttgart or Food & Hotel Asia in Singapore.

Learn more at www.gs1.org/foodservice and follow a shipment of fish from catch all the way to the restaurant table at discover.gs1.org/foodservice.

Trusted information is a key ingredient in creating reliable, expanding and profitable relationships with consumers



Apparel & General Merchandise

GS1 can help manufacturers, brands, retailers, regulators and even consumers better navigate a changing retail landscape



It has become increasingly clear the many ways that GS1 standards can help solve challenges in the selling of apparel and general merchandise products—for companies both large and small operating in physical stores, online shops and web-based marketplaces. Whether focusing on stock efficiency, inventory accuracy, new sales channels, new fulfilment strategies, consumer returns or other business processes and KPIs, GS1 offers the benefits of industry-wide collaboration. We promote a source-to-consumer approach with an emphasis on business processes that highlight the customer journey.

Traceability and sustainability are increasingly important across the apparel and general merchandise sectors. Stakeholders in this sector are facing growing demands from governments, business partners and consumers, who need more—and better—information about product safety, traceability and sourcing. That is one reason why we have been collaborating on a

project driven by the United Nations Economic Commission for Europe (UNECE) focused on enhancing transparency and traceability of sustainable textile supply chains. The goal is to create a traceability framework for the sector that takes into account initiatives developed by the United Nations, the European Union and other bodies with a global reach.

We are also working to help our users better manage their master data. One of the most frequent root causes of unnecessary spending and inefficiencies in apparel and general merchandise is data that is inaccurate, incomplete or not readily available. This is particularly true for extended product information and product images. Improving the quality of master data and standardising the way it is shared are top priorities in these sectors.

Stay up to date on our work at www.gs1.org/general-merchandise and www.gs1.org/apparel.

"I'm confident GS1's comprehensive study of the current state of RFID in Retail will dispel some of the myths about this exciting technology and provide valuable new insight to assist all of us who are on the RFID journey."



Richard Jenkins

Head of RFID and Loss Prevention
Marks & Spencer

Did you know?

What can RFID do for retail? That was the question driving a 2018 report called "Measuring the Impact of RFID in Retailing" co-produced by GS1 UK and the ECR Community Shrink & On-Shelf Availability Group.

Inventory accuracy of participating companies went from 65% to 75% before to **93% to 99%** after deploying RFID. This shift correlates with many other RFID studies. Companies also saw on-shelf availability improve to **90%**.

Sales benefitted as well: the report notes a sales uplift of between **1.5% to 5.5%** resulting in **€1.4 to €5.2 billion** of additional sales.

RFID also permitted companies in the study to reduce stocks by **2% to 13%**.

Perhaps one of the most thought-provoking insights: **100%** of the companies involved said that they had achieved a positive return on investment.

Download the full report at www.gs1uk.org/rfidinretailing.

Key initiatives 2017/2018

- Worked with our GS1 Member Organisations (MOs) on digital product information and extended attributes for images, which will help retailers sell products online as well as deploy technologies such as in-store tablets or smart mirrors
- Continued to educate our user community about how GS1 standards can greatly improve inventory accuracy and stock flow in the apparel sector, which ultimately drive sales
- Supported programmes at several GS1 MOs devoted to improving master data quality
- Engaged with the International Apparel Federation (IAF) for adoption of GS1 standards in the upstream supply chain
- Produced and published an online app where viewers can follow an organic cotton T-shirt from cotton farm to consumer, in order to better illustrate GS1 standards in action: discover.gs1.org/apparel
- Initiated work on an important set of support materials that, once completed, will help our GS1 MOs engage with sub-sectors within General Merchandise such as Do-It-Yourself, consumer electronics, toys, furniture, luxury cosmetics and more
- Conducted a survey on garment manufacturers in 25 manufacturing countries
- Identified and clarified the important role we can play for raw material providers and garment manufacturers and communicated this value proposition to our GS1 MOs

Healthcare

Continuing our work to make healthcare safer and more efficient, everywhere on the globe



GS1 Healthcare continued to expand standards implementation across all aspects of healthcare, with a focus this past year on the role GS1 standards can play in supporting regulatory and humanitarian efforts. The United States Agency for International Development (USAID) Global Health Supply Chain Program notified their suppliers of their intention to implement global standards for product identification, labelling and data exchange, and requested their cooperation. The Interagency Supply Chain Group (ISG) has endorsed GS1 standards in medicine supply chains due to their ability to improve traceability and visibility. We also held our first African GS1 Healthcare Conference in Addis Ababa, Ethiopia. Hosted by FMHACA (the Ethiopian healthcare regulatory body) and opened by the Minister of Health and Director General of FMHACA, the event welcomed 310 people from 38 countries, including 92 delegates from 45 regulators and 62 delegates from 23 humanitarian organisations.

Our global teams continued to engage healthcare providers to communicate the benefits of GS1 standards in clinical processes. We formed a Clinical Advisory Committee for physicians, as well as a Nurses in Leadership Group. GS1 Healthcare experts also led training sessions to help our MOs better engage local healthcare providers and strengthen their knowledge of hospital operations.

The GS1 Healthcare community closely monitors regulatory and trading partner requirements for medicinal product identification, data capture and information sharing. So far, all EU member states have decided to use GS1 standards for the implementation of the EU Falsified Medicines Directive. On Unique Device Identification (UDI), new regulations are coming in Brazil and China while Europe is looking into the details of implementation.

“Trust and credibility in the supply chain has been compromised due to lack of transparency and accountability. Therefore, the implementation of globally harmonised standards is a non-negotiable imperative.”

His Excellency Dr. Amir Aman Hagos
Minister, Federal Ministry of Health
Federal Democratic Republic of Ethiopia



Did you know?

Imbanaco Medical Centre in Colombia reduced satellite pharmacy inventory levels by **25%** and improved inventory shrinkage and waste by **98%** with a GS1 standards-based automated inventory management system.

University of Fukui Hospital in Japan reduced overall surgical operation preparation process time by **500** hours each year and reduced the time required to assemble instruments by **2,000** hours per

year by using laser engraved GS1 DataMatrix barcodes on surgical instruments.

Barking, Havering & Redbridge University Hospitals in the UK improved patient records identification and traceability with GS1 standards, and expect a GBP **£2.4 million (EUR €2.7 million)** return on investment in a year.

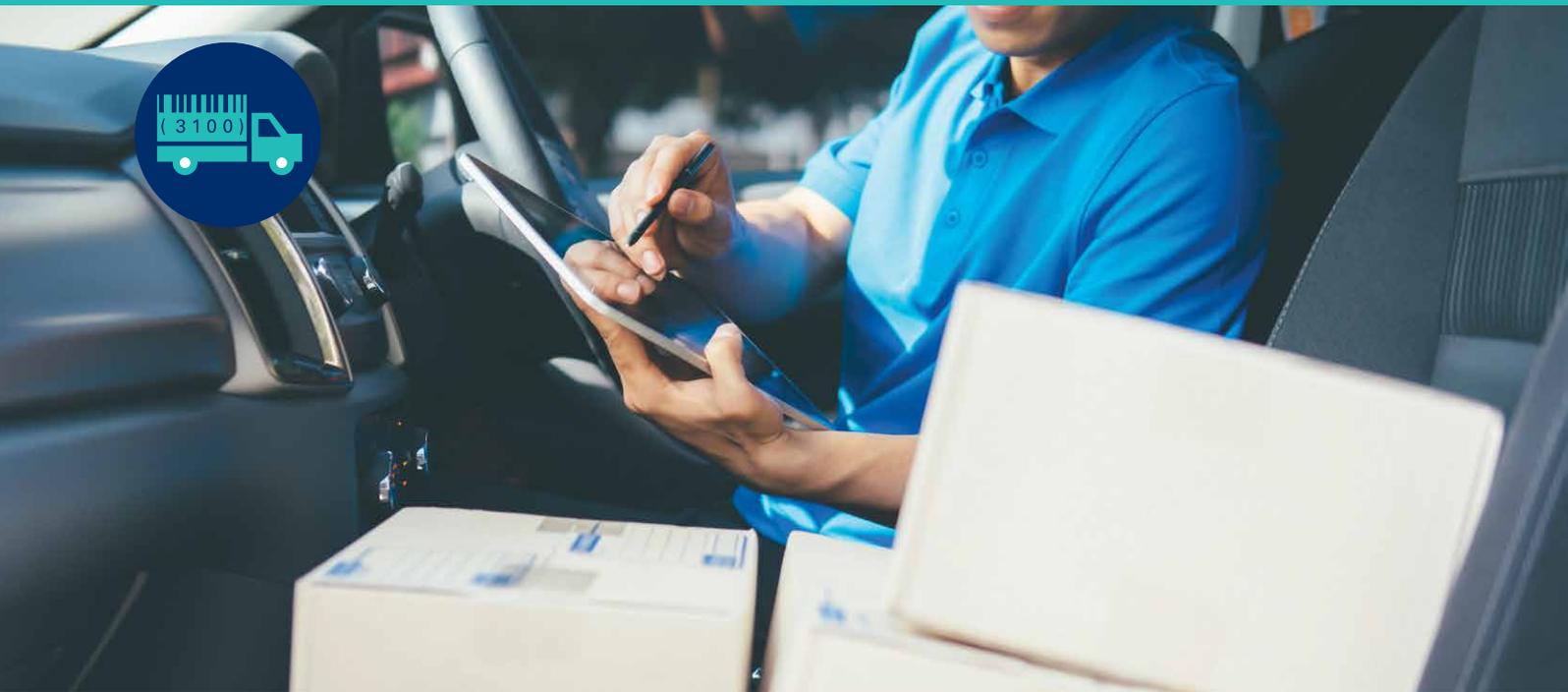
Read more examples of GS1 standards at work in the GS1 Healthcare Reference Book, downloadable at www.gs1.org/healthcare/reference-books.

Key initiatives 2017/2018

- Saw our global community grow: today more than 110 companies, hospitals and other healthcare organisations from 19 countries are global members of GS1 Healthcare
 - Held successful Global GS1 Healthcare Conferences in Chicago (USA) and Bogotá (Colombia)
 - Held our first African GS1 Healthcare Conference in Addis Ababa (Ethiopia) with the theme “Track and trace for access to safe medicines”
 - Participated as speakers at 71 conferences in 23 countries to discuss healthcare-related issues such as traceability, serialisation, safety, logistics and UDI.
 - Developed the GS1 Global Model Number standard so our users can meet the EU UDI requirement for Basic UDI-Device Identifier (BUDI-DI)
 - Worked closely with solution providers who are members of GS1 Healthcare to develop tools designed to help ensure GS1 standards are included in solutions used by healthcare stakeholders
 - Joined the Worldbank Private Sector Advisory Council which is looking into implementing optimised and safe supply chains in developing countries
 - Continued to improve and promote the use of our healthcare provider database, a repository for detailed information about hospital implementations of GS1 standards
 - Explored the use of GS1 standards in pharmaceutical clinical trials within healthcare environments
- Learn more, including the dates of our upcoming GS1 Healthcare Conferences at www.gs1.org/healthcare.

Transport & Logistics

GS1 is working to achieve fully accurate, real-time visibility throughout the supply chain, from source to consumer, no matter what the mode of transport



It has been a productive year for our work within the transport and logistics sector. GS1 standards are now widely recognised for the benefits they bring to road, rail, air and maritime transportation. We also work with key stakeholders in the port and harbour community. For example, in the past year, we helped ensure that GS1 Global Location Numbers (GLNs) can be used to identify facilities within ports, as part of a Port Call Optimisation project.

We made great progress in our work to support the digitalisation of end-to-end transport, and in particular last mile parcel delivery processes. The popularity of e-commerce has led to an increasing number of shipments, smaller order sizes, significant cost of returns—and consumers who demand fast, transparent and convenient deliveries. In the European Union, meeting these needs was often difficult due to inefficient cross-border processes.

That's why we are particularly pleased that the European Committee for Standardization (CEN) chose the GS1 Serial Shipping Container Code (SSCC) to uniquely identify parcels and enable interoperability between all parties in the delivery network. We are now working with CEN to ensure that electronic exchanges of delivery information between stakeholders will also benefit from GS1 standards.

We are similarly pleased to announce that the Federation of Freight Forwarders Association (FIATA) and the International Air Transport Association (IATA) have both turned to GS1 to help achieve real-time visibility and conduct safer, more efficient business. FIATA will soon be introducing an electronic Bill of Lading using GS1 standards, and IATA recommended the use of ISO-compliant GS1 standards for piece-level tracking. We will continue to work with both organisations in the year ahead.

“The use of global standards is essential to optimising international shipping processes and enhancing collaboration between the key stakeholders in a port environment.”

Andreas M. van der Wurff

Husbandry Manager
Maersk Line



Did you know?

The impact of the internet on business-to-consumer commerce has been extensively documented. Today, industry is seeing the same phenomena reach business-to-business (B2B) commerce.

In their report “10 eCommerce Trends for 2018”, e-commerce specialist AbsoluNet notes how the expectations of B2B buyers for online and mobile product information and sales are driving a **high-speed disruptive transformation** across the B2B sector.

The data support this claim. By 2019, B2B firms will spend **more** on e-commerce technology than online retailers do, and **more than half** of all B2B purchasing will be done online. In 2021, B2B online sales are projected to reach **USD \$1.2 trillion (€1 trillion)**, up from USD \$889 billion (€756 billion) in 2017.

One possible reason for all this? The average B2B buyer today is a digital native **less than 35 years old**.

Key initiatives 2017/2018

- Held a two-day intensive workshop with representatives from industry, academia, GS1 Member Organisations and the GS1 Global Office to discuss the future of the T&L industry and how GS1 might play a useful and relevant role
- Created a comprehensive, forward-looking, global strategy for our work in this area over the next three to five years
- Actively participated in the European Committee for Standardization (CEN) initiative to define a harmonised parcel label, resulting in the endorsement of GS1 standards for this label
- Signed a Memorandum of Understanding with the Federation of Freight Forwarders Association (FIATA) to begin identifying and migrating FIATA documents into a digital platform
- Participated in the International Air Transport Association (IATA) Piece Level Tracking Task Force (PLTTF); completed work on a Recommended Practice for Piece Level Tracking, an end-to-end framework for tracking individual air cargo transport units from seller to receiver
- Participated in the European Community’s TAXUD (Directorate-General for Taxation and Customs Union) Low Value Consignments Project Group
- Engaged actively with standardisation bodies in the Maritime & Ports sector to find areas where GS1 standards could add value

Stay up to date about our work at www.gs1.org/transport-and-logistics.

Technical industries

Our standards and services improve collaborative life cycle management processes from product design to product disposal



It has become very clear that global open standards are just as important in technical industries as they are in consumer goods, fresh food or healthcare. Companies in construction, defence, rail and other industrial sectors need to improve traceability and ensure end-user safety just like their peers in retail. They want more efficient supply chains and more easily accessible product information.

At GS1, we believe in the power of standards to transform the way we work and live. Our engagements with stakeholders in technical industries present us with new opportunities to fulfil that mission.

One of the most basic business needs in technical industries is end-to-end traceability – but there’s a catch: in retail or grocery, a product is consumed within hours, days or occasionally years. But a typical technical industry product can have a service lifetime of decades, which means traceability needs to last that long, too.

These industries acquire components and parts from a vast network of specialised suppliers. Furthermore, parts taken out of a given assembly for repair or maintenance are often put into a completely different assembly, sometimes owned by a different end-user company. In such challenging conditions, globally unique identifiers for components and parts are mandatory. Once that is achieved, it becomes much easier for companies to detect counterfeits, manage inventory, optimise warehouses and perform predictive maintenance and repair. Business partners can share master data on components, parts, assemblies or even finished products.

All of our initiatives are designed to help our member companies leverage the industrial Internet of Things: digital twins, Industry 4.0, smart factories, sensors, augmented/virtual reality, artificial intelligence and more.

“The adoption of GS1 barcodes and other GS1 standards have helped us fast-track improvements in how we manage basic inventory. It also gives us the ability to uniquely identify each one of our high-value assets. This will allow us to track information throughout the life of the asset.”



Michael Mowat

Manager Asset Reliability & Performance
V/Line Corporation

Did you know?

One challenge faced by technical industry companies is the large number of individual parts in their products.

A frozen pizza, for example, usually contains 30 to 40 separate ingredients—but the average passenger car is made from 30,000 distinct parts. A pair of jeans nowadays is assembled from just a few dozen pieces—but an Airbus A380 contains 4 million parts produced by 1,500 companies in 30 countries.

With such quantities of components and parts to source, buy, receive, manage and maintain, the need for GS1's global language becomes much clearer.

Unique identification of components and parts also boosts safety, whether for tracking maintenance and service requirements, or in the event of a recall. It also allows companies all along the item's complete life cycle to be certain they are respecting national, regional and international regulations.

Key initiatives 2017/2018

- Increased our engagement with current members and potential new users through three different groups within the GS1 Global Standards Management Process: the Life Cycle Traceability in Rail User Group, the Technical Industries Interest Group (currently limited to representatives from GS1 Member Organisations) and the Construction Interest Group (currently limited to representatives from GS1 Member Organisations)
- In the rail industry, witnessed broad, sector-wide adoption and implementation of GS1 standards for the identification of parts and components and the exchange between business partners of data about them, particularly in Europe and Australia
- Saw first successful live implementations of GS1 standards in construction, defence and engineering
- Began work on a comprehensive overview of how our standards can bring value to industrial activities and business processes, and in particular those relating to life cycle management

Learn more about our work with technical industries, including case studies of live implementations, at www.gs1.org/technical-industries.

GS1 Global Standards Management Process

Our passionate, dedicated GSMP community continues to identify relevant business problems and develop standards to help solve them



Over the past year, we have continued our efforts to ensure that the GS1 Global Standards Management Process (GSMP) delivers standards and guidelines that are relevant to industry while making effective use of the time of a broad range of participants from multiple and varied business sectors.

Together with industry, we ratified new standards and specifications for seafood and agriculture traceability, cash handling, digital product images, and manufacturing, maintenance, repair & overhaul (MRO) processes in rail—among many others.

Our Standards Development Certification Programme, created to help improve the quality and efficiency of working groups, has had a productive first year. More than 250 people from 62 GS1 Member Organisations, the GS1 Global Office and industry participated in classroom and online courses.

Seventy-eight people are now Level 1-certified and 38 already have both Level 1 & 2 certifications. We will soon be adding a Project Management Training module to the programme.

Our efforts are not going unnoticed: the results of our annual satisfaction survey were positive across the board—and in particular showed marked improvements in the three areas about which we feel the most strongly: overall satisfaction with GSMP, satisfaction with GSMP staff and efficiency of the process itself.

In the months ahead, we will be working to shine a brighter spotlight on our incredible community. It is not always easy for businesses to be part of a working group with members that are your suppliers, customers—or even competitors. And yet, time and again in our role as neutral facilitator, we see how quickly people meet this challenge and collaborate actively to find solutions that benefit everyone.

“The speed at which industry mobilised to collaboratively create and ratify a new global standard to address an EU regulation is a testament to the efficiency and relevance of the GS1 Global Standards Management Process.”

Dr. Meinrad Lugan

Member of the Board of Management
B. Braun Melsungen AG



Did you know?

Our GS1 Industry & Standards Event in Brussels, Belgium gathered together representatives from businesses facing similar problems to work collaboratively on identifying relevant, efficient, standards-based solutions. Attendance at the October 2017 edition of this gathering was the highest ever: **379** people from **32** countries.

At the March 2018 edition of our annual GS1 Standards Event in Jersey City, New Jersey,

USA, **206** attendees from **22** countries worked to build standards and guidelines that deliver real business value; a fourth of these participants were enthusiastic and engaged first-time attendees

Working with peers from across sectors and around the world to find solutions that benefit everyone involved, is both meaningful and rewarding. If you want to make a difference in the world, you should join us. Learn more at www.gs1.org/gsmg.

Key initiatives 2017/2018

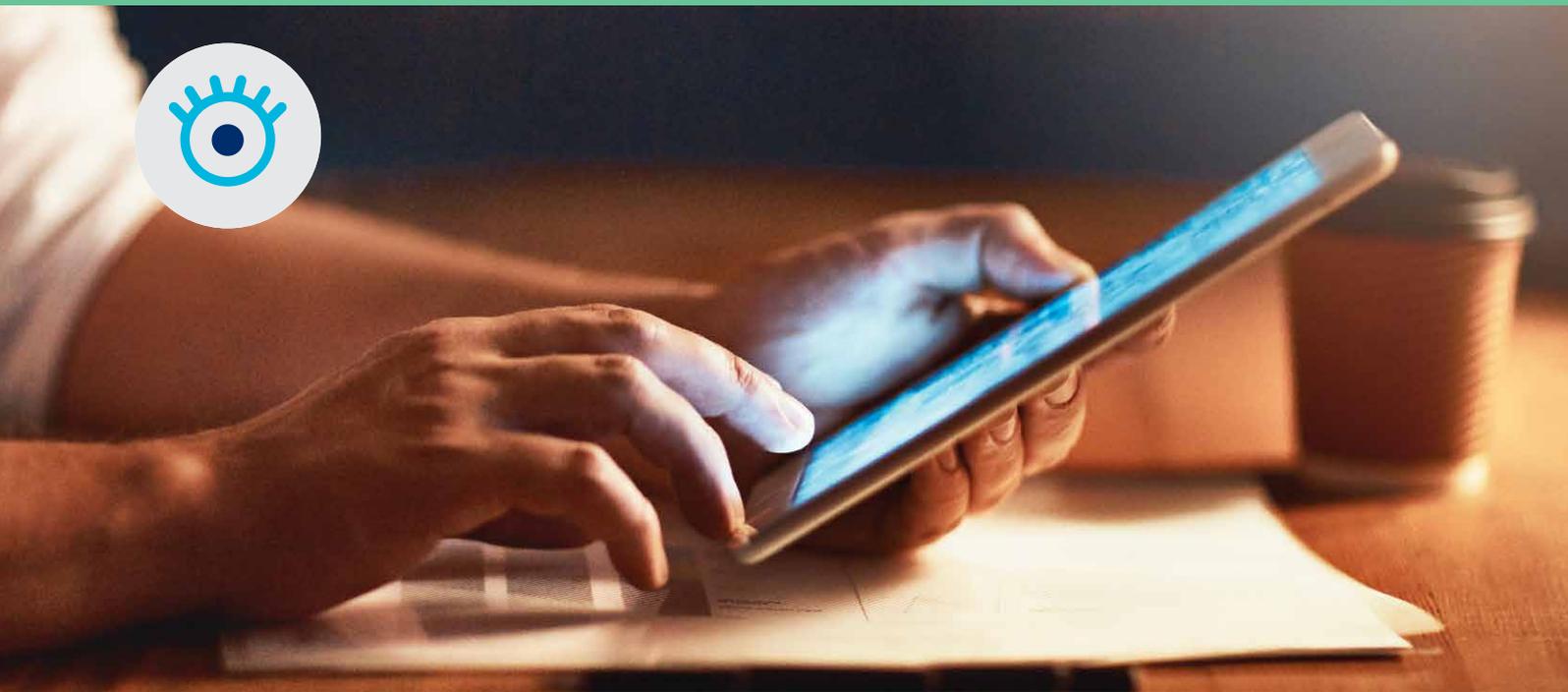
- Enhanced our community engagement capabilities, increased meeting participation rates and reduced costs related to business travel by deploying a system allowing for simultaneous meetings in two locations
- Launched an improved work request system with filtering and search capabilities, a redesigned entry form, the ability to print lists of work requests and a fresh, modern look and feel
- Engaged more than 200 people and certified more than 70 people with our Standards Development Certification Programme
- Recognised John Terwilliger (Abbott Laboratories), Vera Feuerstein (Nestlé), Naoki Mori (GS1 Japan) and Bernie Hogan (GS1 US) as recipients of the Ken Traub Standards Award for their knowledge, leadership and significant impact on the development and adoption of GS1 standards
- Responded to user demands by piloting the creation of the “GS1 Mobile Ready Hero Image Guideline” as a web page instead of a PDF document, in order to provide an interactive user experience and be better optimised for small screen viewing

For a complete list of all GS1 standards, visit www.gs1.org/standards/log.

Learn more about GSMP and get involved at www.gs1.org/standards-development.

Identify: GS1 standards for identification

Our community of users expects to find information rapidly and easily, so we are bringing GS1 standards for identification to the internet



In today's world, globally unique, persistent identification is needed not only for products but also for things, places, companies, assets and transactions. That suits us: for more than 40 years, identification has been the foundation of what GS1 does.

Because both industry and consumers have demanded it, we are bringing the GS1 system online. Our GS1 Cloud platform—along with Check and Activate, the first services deployed onto it—are among the most visible results of this effort (see pages 33-35).

We also launched the GS1 Application Identifier (AI) web tool. GS1 AIs are used to add information such as batch numbers, serial numbers or use-by dates to a GS1 ID Key. This is becoming more and more important to our users, and particularly companies in healthcare, fresh foods, logistics, components & parts and other sectors who are using them to provide additional information that consumers and regulators

are demanding. Our AI tool allows users to easily view and search AIs from a computer or smartphone. Have a look at www.gs1.org/application-identifiers.

In other achievements, we ratified a new ID Key: the GS1 Global Model Number (GMN), which enables unique identification of a product model across its entire life cycle. GS1 GMNs will initially be used for regulated medical devices in Europe. Other applications may be added in the future, after approval through the GS1 Global Standards Management Process.

Building upon the Individual Trade Item Piece (ITIP) AI, we also created a new means to identify individual pieces of a trade item which provides enhanced visibility. The business need for this has come directly from the footwear sector, because ITIP allows left and right shoes to be identified individually as part of a pair.

“GS1 standards for identification are helping the Raben Group provide comprehensive, cost-efficient and reliable land, sea & air transport services to our customers so they can stay competitive.”

Janusz Aniot

General Director
Raben Logistics Polska



Did you know?

Australia has a vast rail infrastructure, and the rail industry contributes significantly to the economy.

Since 2015, the Australasian Railway Association, in partnership with GS1 Australia, has been driving the Project i-TRACE initiative to standardise the way objects in the supply chain are identified and marked. The greater goal is to be able to follow an asset or component throughout its lifecycle from procurement through maintenance and onto disposal.

Project i-TRACE will go live in 2019. It will benefit rail and network operators, contractors, systems integrators and solution providers.

Individual stakeholders will see **improved efficiency** enabling them to **deliver better customer service**. The rail industry will become **more competitive** and **more profitable** by **eliminating costs and waste** from the way materials and assets are managed.

Key initiatives 2017/2018

- Published a special intermediary 17.1 version of the General Specifications, featuring updates that were identified through the UniqueID project, including guidance about the Consumer Product Variant (CPV) which addresses industry's need to clearly communicate minor product changes that do not require the brand owner to change the GTIN
- Published General Specifications version 18, featuring changes as requested, developed and ratified by our community, including the ability to use the GS1 Global Service Relationship Number (GSRN) in GS1 DataBar to support loyalty cards scanned at the retail point of sale; better tolerance for larger-sized GS1 DataMatrix barcodes in healthcare; clarified rules for using GS1 Serial Shipping Container Codes (SSCCs) on outer cases of shipments; and a new AI for Portugal's National Healthcare Reimbursement Number (NHRN)
- Ratified and launched a new GS1 Identification Key, the Global Model Number (GMN)
- Created a means to provide enhanced visibility to the pieces of a trade item using the Individual Trade Item Piece (ITIP) Application Identifier which has a variety of use cases in apparel, footwear and logistics
- Signed an agreement with AIM and launched associated work to develop and publish specifications for a sensor Application Identifier (AI) for use within the GS1 system

Learn more and see the full list of all GS1 identification keys, including fact sheets for each one, at www.gs1.org/id-keys.

Capture: GS1 standards for barcodes, EPC/RFID and the web

We are creating data capture standards that enable seamless and accurate connections between data barcoded on products and product data across the web



GS1 barcodes and GS1 EPC/RFID (radio frequency identification) are data capture standards that today allow GS1 identification keys and GS1 Application Identifiers (AIs) to be stored in a barcode or on an RFID tag. We are working with industry to build a future where GS1 ID keys and additional data are linked to multiple information resources for use by both humans and machines. That's because the divide between capturing and sharing data is disappearing. Business users and consumers expect our globally-unique identifiers to seamlessly connect across the web. Recent updates to GS1 standards are helping to enable physical/digital convergence.

We are also working with AIM to create a new AI that will help to quickly understand and capture data (such as an imminent expiration date or a critical temperature change) from labels incorporated on packaging. This will help ensure safety and quality, for example on food or pharmaceutical items.

GS1 EPC/RFID continues to flourish, particularly in retail, where measurable benefits have been noted in live deployments (see page 15 for more on this). In the past year, we made changes to the GS1 EPC Tag Data Standard (TDS) to ensure it stayed harmonised with the latest GS1 General Specifications. In October 2017, we launched our EPC Gen2v2 Certification Programme. This helps companies to ensure that the RFID devices they buy from their vendors conform to the latest version of GS1's EPC Gen2v2 standard and are interoperable with RFID devices from other vendors. In light of the dynamic nature of RFID technology, and because RFID is subject to a range of regulatory pressures, we also increased our participation in cross-sector working groups in order to protect our users' interests.

“Scanning a barcode only translates marks on paper into a sequence of numbers and letters. This is meaningless without context. GS1 application identifiers provide that context. For example, a GS1 barcode symbol may encode an object’s GTIN, weight, lot number and expiration date.”

David C. Allais

Founder & Chairman, PathGuide Technologies
Technical Consultant to GS1, 1974-present



Did you know?

Consumers use smartphones to find product information on the web. Because traditional barcodes cannot easily link directly to the web, companies often put scannable QR codes on product labels. But these extra codes waste precious packaging space and can cause scanning issues at checkout.

Enter GS1: we have developed a global standard for a web address that carries a GTIN and other essential product identifiers

that can be read from QR codes. Likewise, existing GS1 identifiers encoded in other barcodes can be converted into web addresses.

Thanks to the **GS1 Digital Link standard**, the same trusted GS1 identity that already supports supply chain systems offline can now work seamlessly **online**. Brands, retailers and healthcare suppliers can manage links to data and the online experience; consumers get fast, easy access to the information they want.

Key initiatives 2017/2018

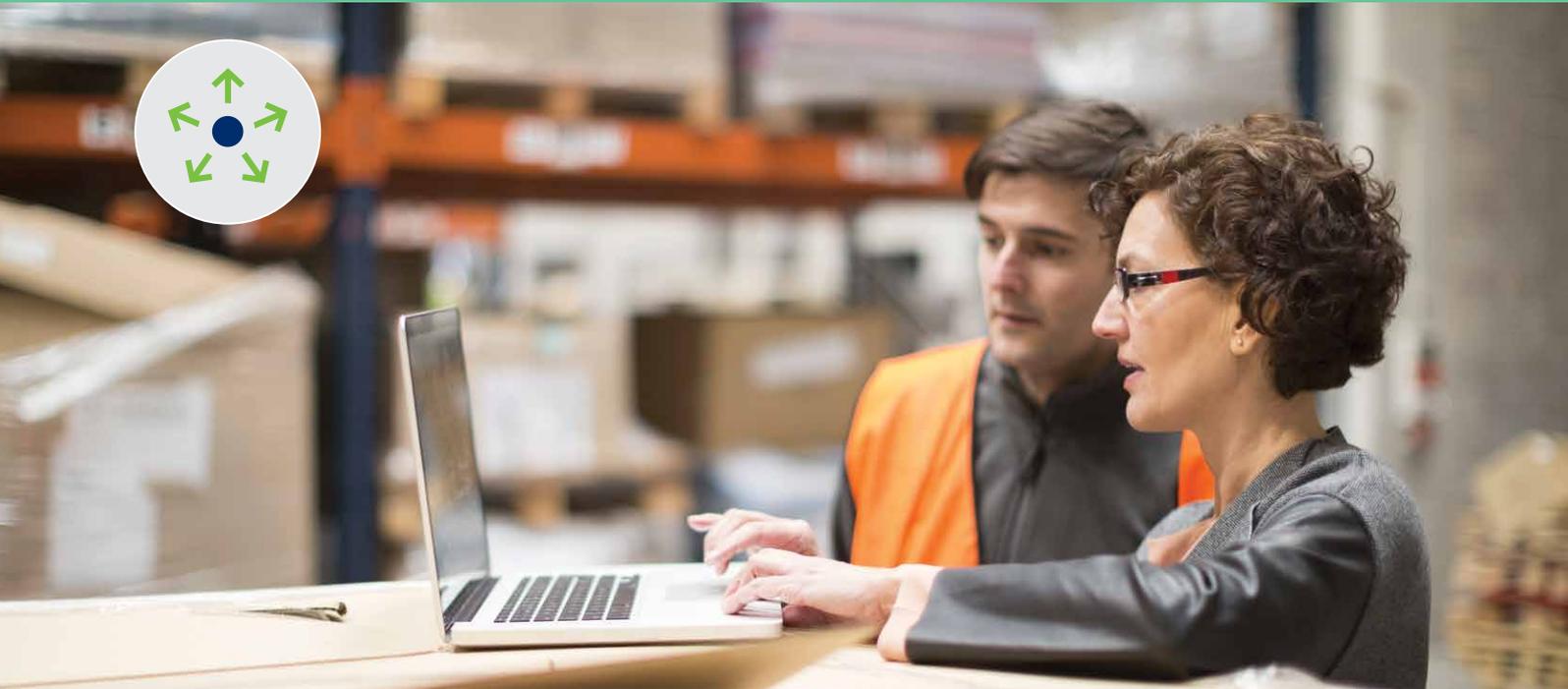
- Ratified a basic syntax for the GS1 Digital Link standard
- Updated our barcode quality conformance program to include the latest print quality parameters
- Ongoing success of the AIDC Member Organisation (MO) Technical Team that was launched last year, in which more than 20 countries actively participate to discuss practical implementation topics
- Had strong solution provider and GS1 engagement in our Barcode Identification Technical Group
- Continued our 15-year participation as a core member in the European Telecommunications Standards Institute’s workgroup for RFID (ETSI TG34), to actively represent our user community’s interests and support radio spectrum harmonisation efforts
- Worked to promote the harmonisation of the 915-921 MHz band across Europe in cooperation with other RFID stakeholders (RAIN, AIM, CNRFID, GS1 France) and in ongoing dialogue with the European Commission
- Launched Gen2v2 Certification Programme

Learn more about GS1 barcodes at www.gs1.org/barcodes.

Learn more about GS1 EPC/RFID at www.gs1.org/epc-rfid.

Share: GS1 standards for exchanging transactional and event-based data

For both EDI and EPCIS, we remain focused on helping solve real-world business problems that have been prioritised by industry



Unique identification and sharing of high-quality data are first steps in any company's work to increase transparency, speed and trust. To fully achieve that objective, data must also be shared between companies who may use different systems. GS1 standards provide the needed interoperability and a set of common rules to meet these challenges. In addition to the GS1 Cloud (page 33) and the Global Data Synchronisation Network (pages 36-37), GS1 Electronic Data Interchange (EDI) standards allow the smooth exchange of messages about business transactions and EPCIS standards help event-based information to be shared about movements of goods.

Our work on EDI standards has shifted from being technology-driven to being business-driven. We are defining common business process models and identical data definitions across our EDI syntax portfolio, including work to add UBL to a long list of existing syntaxes.

The ultimate goal is to simplify and facilitate interoperability and to enable newer technologies, such as APIs, to embrace and leverage GS1 EDI standards.

We've also begun work to enhance EPCIS as part of broader efforts to strengthen its role as a visibility enabler and to lower barriers to adoption. We are working to support the requirements of users from a wide range of sectors, including fresh foods, textiles, pharmaceuticals and the Internet of Things. New functionalities will allow sensor data to be included in supply chain events, for example in conjunction with cold chain temperature monitoring or pesticide level checks on agricultural produce. The EPCIS Core Business Vocabulary (CBV) will also be optimised: future versions of the CBV will have a wider scope and will be more agile, thanks to the inclusion of machine-readable attributes for automated event validation.

“During the last quarter-century, EDI has been an instrument to automate the Order-to-Cash process. Now it’s time to explore new opportunities: transactions between different sectors, automation of other business processes and new technologies like API.”

Sofie Hofman

Supply Chain Director Belgilux
Nestlé Belgilux



Did you know?

Filliers Grain Distillery is a small independent Belgian company, well known for its traditional jenever-style gin.

In 2017, with the help of a solutions provider, Filliers rolled out a new ERP system, and at the same time they automated their Order-to-Cash processes using GS1 standards for Electronic Data Interchange (EDI).

Although this EDI deployment was initially undertaken because a few of Filliers’ major customers made it mandatory, the company quickly saw other benefits. Because orders could be processed **more swiftly and efficiently**, customers received their deliveries much **more quickly**. As a result, invoices can be sent to customers **sooner**, and this in turn leads to **prompter** payments.

Key initiatives 2017/2018

- Ratified and published a new set of XML messages that supports cash processing between banking institutions
- Launched work to integrate Universal Business Language (UBL) into the EDI standard syntax portfolio
- Launched a major harmonisation initiative to provide a single content description for transactional data which will include all existing EDI syntaxes, new API syntaxes and any future technologies used to exchange transactional data
- Convened a Mission-Specific Work Group (MSWG) of experts from our user community and began work to complete enhancements to EPCIS and the CBV, including support for sensor-captured quality data, inclusion of party certification information, an overhaul of the vocabulary, and important additions of a JSON-LD syntax and REST binding support

Stay up to date with the latest information about EPCIS at www.gs1.org/epcis and on EDI at www.gs1.org/EDI.







Services

Application providers, regulators and consumers access GS1-powered services and solutions. Everything is easier when you speak the same language as your customers, suppliers and partners.



Sanjay Mandloi
Chief Technology & Data Officer

The Big Picture

We have progressed on this long-term, transformative project devoted to ensuring GS1 continues to meet the needs of a changing world



We are building capabilities and changing the culture so we can launch globally-managed, locally-deployed core services

Last year, we began work on a long-term project to introduce a portfolio of core and value-added services that our 112 Member Organisations could offer to their users. This effort was undertaken in response to requests from our user community to offer services that could be deployed faster and with a greater impact.

We called it “The Big Picture” because it is first and foremost an effort to simplify our offer and to continue to provide real value for our stakeholders. The Big Picture project will help all of GS1’s users, whether multinational companies or small businesses, to grow their business and become more efficient.

In the past year, we have transformed our organisational culture, breaking down silos and working as one GS1 across global and local Member Organisations. We have promoted diversity and inclusion and we have built new capabilities - including creating and implementing new roles in product management.

These changes have enabled us to deploy new web-based standards and new GS1 global services.

In the next pages, read about GS1 Cloud—the foundational platform of the first core services we will launch—and discover Check and Activate, two of the first services to go live.

For further information and to learn about what elements of the Big Picture will come into focus next, watch our global website at www.gs1.org or contact your local GS1 Member Organisation (see pages 62-66).

The GS1 Cloud

As the largest global, unified registry for basic trusted data about millions of products, the GS1 Cloud will enable GS1 Member Organisations to offer modern services

Consumers today rely on digital product information when purchasing—and of course they expect it to be accurate. At the same time, companies want to build connected and enriched consumer experiences that drive satisfaction, loyalty and growth—experiences that hinge on unique product identification and the ability to provide trusted information.

Until now, there has been no single platform for brand owners to share their basic product data globally; nor has there been a way for retailers, e-tailers and marketplaces to validate the product identifiers and data in their systems; nor a single global source from which app developers and solution providers could assemble data with confidence.

The GS1 Cloud is going to change that. It will be a unified global platform with trusted data about millions of products, based on the GTIN, our successful GS1 standard for product identification worldwide.

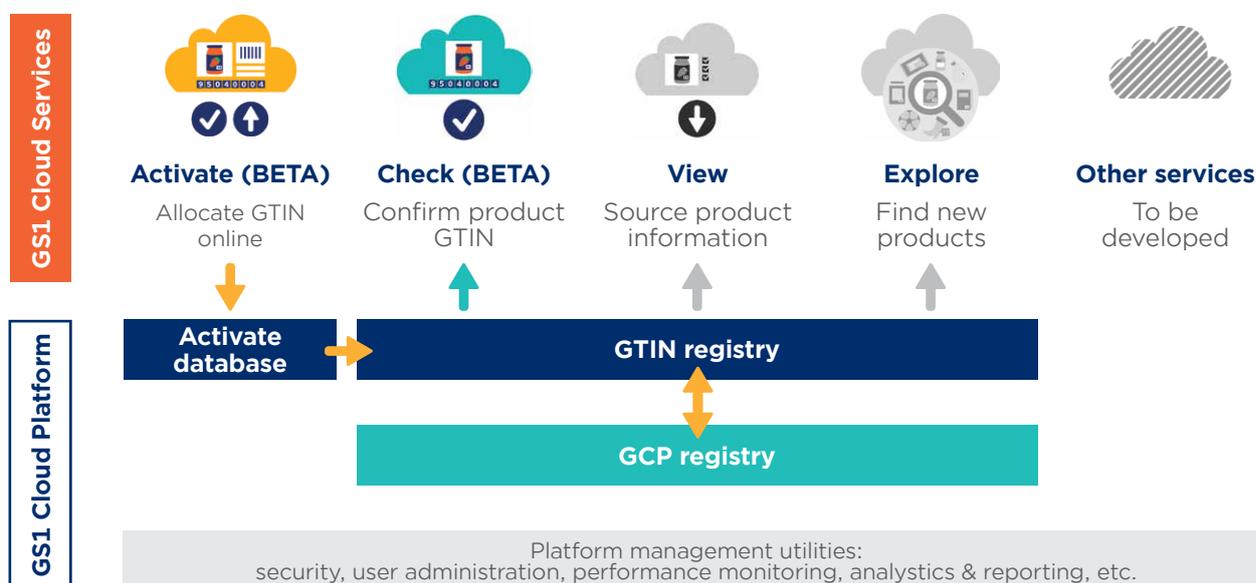
Brand owners and manufacturers will upload basic data about each of their products, including its GTIN and six additional core product attributes: brand, label description, medium-resolution image URL, target market, company name and product classification. As of September 2018, the GS1 Cloud contains more than 70 million GTIN data records sourced from the local catalogues of GS1 Member Organisations.

The GS1 Cloud will support services such as Check and Activate (see pages 34-35), with more to come in the future.

The GS1 Cloud will benefit brand owners and manufacturers who put the data in, as well as all of its users including retailers, e-tailers, online marketplaces, app developers, solution providers, regulators and the ultimate data user: today's consumer.

GS1 Cloud is a global service provided to member companies by their local GS1 Member Organisation. Visit www.gs1.org/cloud to learn more.

The GS1 Cloud platform will be the basis of a range of services benefitting anyone who cares about product information



Activate

Unique product identification starts with Activate, GS1's key issuance, management and activation service



Every GS1 member company, large or small, can activate their products and benefit from global data visibility

To get a GS1 Global Trade Item Number (GTIN) or any other GS1 Identification Key (see pages 24-25), a company first needs a GS1 Global Company Prefix (GCP). In the past, GCPs were given to brand owners without collecting details on the assignment of GTINs. This lack of globally-available information is creating questions about the validity, uniqueness and accuracy of GTINs and other GS1 identifiers. In today's digital world, users are demanding that GS1 make foundational information about products accessible anytime, anywhere.

Activate, a new product data management service which is part of the GS1 Cloud platform (see page 33), is the answer to these demands. Activate provides brand owners and manufacturers with the ability to easily identify their products with GTINs and barcodes, and to create, store and share their product data. At the same time, Activate ensures the quality and compliance of GS1 standards, so that critical needs of industry are being met.

Activate is maintained by the GS1 Global Office, however companies will access it through their local GS1 Member Organisations (MOs). GS1 MOs will configure the service to look and feel like part of their local offering by translating the content and choosing features and attributes that resonate well with their customers.

Activate started as GS1 Ireland's Barcode Manager, a service whose capabilities were thoroughly tested in real-world conditions. More than 40 GS1 MOs participated in the Experts Group that scaled up the GS1 Ireland solution so that it could properly meet the needs of a global user community.

Activate will roll out progressively to GS1 MOs across 2018 and 2019. Initially, it will focus on allocation of GTINs, but in the future, Activate may cover other ID keys such as Global Location Numbers (GLNs).

Check

Thanks to Check, e-tailers and online marketplaces can confirm that products are properly identified in their systems with a valid GS1 GTIN right from the start

Trusted product information is critical in today's world because consumers want to feel confident that a product is what it says it is. GS1 Global Trade Item Numbers (GTINs) enable unique product identification and make it possible to connect the right information to the right product.

Unfortunately for online shops and marketplaces, sellers sometimes enter incorrect numbers when they list their products. This can create a range of problems. For instance, a GTIN that is simply wrong will obviously not link to data about the company that makes the product in question; or an incorrectly-entered GTIN could conflict with the true GTIN of another product and create confusion.

And that's where Check comes in. Just like its name says, this foundational service of the GS1 Cloud platform (see page 33) allows users to verify if a GTIN is legitimate and issued by a GS1 member company.

E-tailers and marketplaces can integrate Check directly into their product listing processes, using an API to validate a GTIN as it is entered by a seller and flag a potential data quality issue before it becomes a problem. Similarly, batches of GTINs can be processed through Check to confirm their legitimacy. This sort of screening authenticates sellers and products, reducing the risk of counterfeits. By establishing product identification as the foundation of product data management processes, companies can improve the shopping experience for their consumers. Furthermore, Check will help identify invalid or illegitimately-used GTINs that lead to returns and customer dissatisfaction. It will also help GS1 Member Organisations prevent fraud and protect the GS1 system.

Check is a global service provided to member companies by their local GS1 Member Organisation.

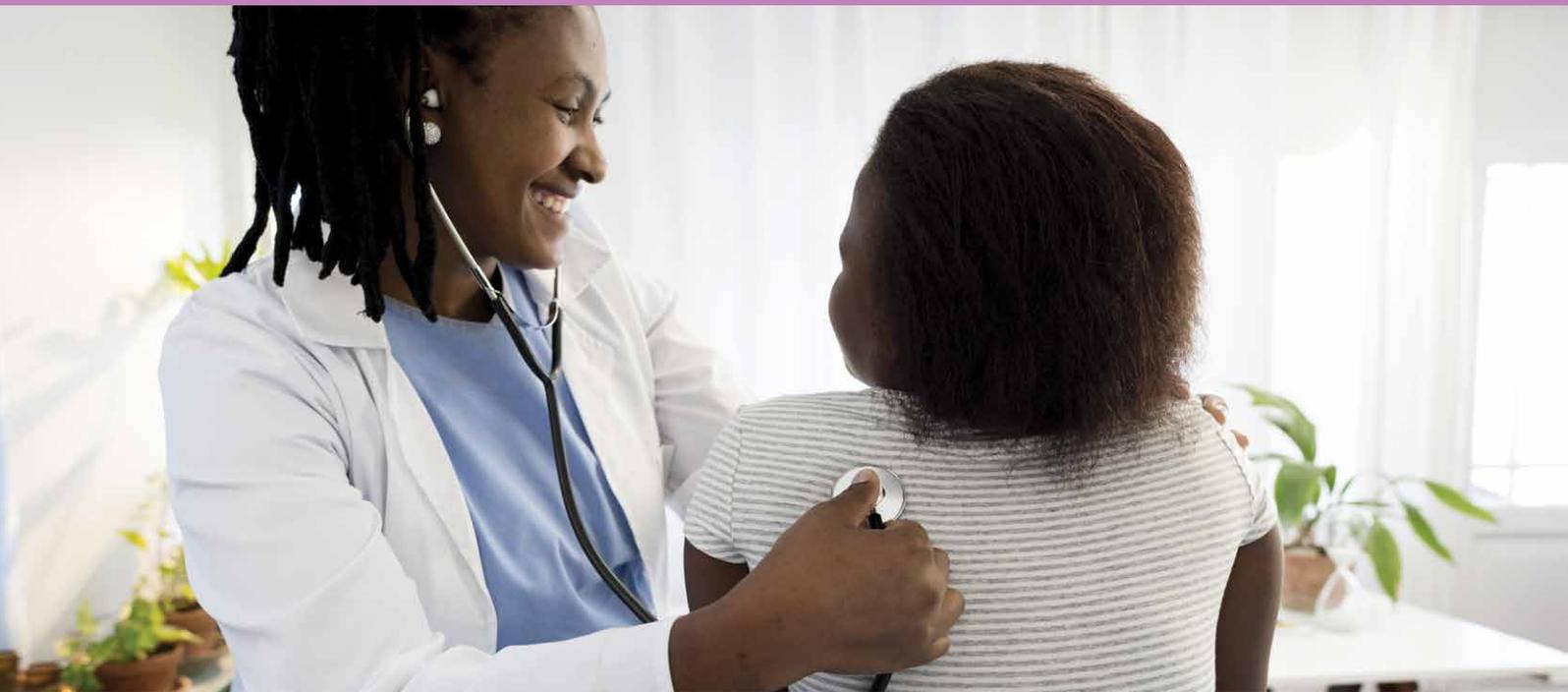
Visit www.gs1.org/cloud to learn more.

87% of American consumers are unlikely to buy products again after an experience with inaccurate product information



GS1 Global Data Synchronisation Network

GDSN is still the most secure and comprehensive way for brands, suppliers, healthcare organisations and retail partners to exchange product data with trading partners



For almost 15 years, the GS1 Global Data Synchronisation Network (GDSN) has been enabling companies to use GS1 standards to share product data across the world, automatically and efficiently.

Today, the GDSN contains more than 28 million GS1 Global Trade Items Numbers (GTINs). This exceptionally rich source of trusted information is used by more than 50,000 companies in just about every country on the planet, in commerce and increasingly also in the healthcare sector. The GDSN helps companies bring new products to market quickly, meet the demands of today's data-hungry consumers and keep costs down.

In the past year, our GDSN team has continued its work to advance product data quality and empower the consumer experience. We have also helped improve patient safety: by providing accurate master data on more than two million healthcare products to healthcare providers, the GDSN helps ensure that the right products are ordered and available in a healthcare facility

when a patient needs them. GDSN data can also be used to feed databases so when the product barcode is scanned, it references a perfectly up-to-date database and can be immediately validated as the proper medication for that patient.

We have also pursued a global initiative to simplify the GDSN. Through this project, we are studying ways to bring improvements in connectivity, onboarding and operations to both existing and new users of the GDSN.

Organisations familiar with the GDSN may question how the Network fits with the GS1 Cloud (see page 33). The GS1 Cloud complements—not replaces—the GDSN. In fact, the GDSN serves as a core source of brand information for the GS1 Cloud, particularly for business-to-business GTINs and GLNs. GDSN is and continues to be foundational to almost all GS1 standards and services.

“We have confirmed the Global Data Synchronisation Network can support eCommerce initiatives, fulfilling content experience for our customers and consumers. Nestlé is committed to leveraging GDSN to share product data beyond traditional supply chains.”

Jean-Marc Klopfenstein
Global Master Data Lead
Nestlé



Did you know?

In France, a number of regulations currently being deployed require hospitals to track and trace all healthcare products. As a result, pharmacists in French hospitals need reliable and complete information for the products they use.

In April 2018, Resah (one of the main group purchasing organisations [GPO] in France) and MiPih (a major player in hospital information systems) launched eCat-Santé, the first e-catalogue of medical devices.

This solution will ensure that all health establishments and purchasing operators have access to **complete and standardised product information**, which is **provided and updated** directly by the industry through the GS1 Global Data Synchronisation Network.

All along the value chain, GS1 France estimates that data management costs are reduced **from €65 to €10 per product record** thanks to this new catalogue.

Key initiatives 2017/2018

- Ratified and successfully deployed into the network GDSN Maintenance Releases 3.1.4 and 3.1.5, the latter including implementation of the recent updates to Global Product Classification (GPC) and Efficient Code Lists (ECL)
- Developed network release methodology that smoothly allows for up to four releases a year
- Worked with the GS1 Healthcare leadership team to define a methodology for an annual release of healthcare-focused changes for the Network
- Continued to monitor, communicate and collaborate with the GDSN community to gather feedback and prepare future releases, as always thanks to the ongoing dedication of the members of the Global Master Data Standards Management Group
- Certified five new data pools and welcomed them to the GDSN, bringing the total to 42
- Performed annual audits on all GDSN-certified data pools to ensure the Global Data Synchronisation Network's credibility by requiring data pools be capable of, and conform to GDSN Mandatory Standards for technical and operational performance, as established by the GS1 Data Excellence Certification Committee

Learn more about GDSN at www.gs1.org/gdsn and access current, future and legacy GDSN standards at www.gs1.org/access-gdsn-standards.

Data quality

High quality data is fundamental to generating sales, creating efficiencies, providing customer satisfaction, respecting regulations and ensuring patient safety



Increasingly, the quality of products and services is directly linked to the quality of the data available about them

The ability to capture and share data underpins the mission of GS1 and indeed lies at the very foundation of the way our standards work to increase transparency, speed and trust.

Where initially the focus of GS1 was on enabling the smooth and rapid exchange of data, over time it became apparent that we could play a more prominent role in supporting data owners in evaluating and—when necessary—improving the quality of their data.

More and more manufacturers and retailers are undergoing digital transformations, and this is causing an exponential growth in the quantity of digitised information. As a result, the quality of data has truly become a key decisive factor. Consumers and business partners want to know: is this data accurate? Is it easily accessible? Is it readily available?

Having spent much time and effort on educating and certifying brand owners and GS1 Member Organisations (MOs) through our Master Data

Services programs, we have created a support structure that enables them to improve and strengthen the manual processes that determine data quality at the source.

Thanks to the most recent modern data science technologies, we have now started analysing the available datasets and data usage to identify weaknesses, inconsistencies and patterns and to determine new ways in which we can contribute to improving data quality.

Through intensifying collaboration and co-innovation initiatives with our MOs, we will pursue our global ambition to create perfect digital copies of every product with a GS1 barcode.

Learn more about how to improve the quality of your data at www.gs1.org/data-quality.

Global LEI services

GS1 has been accredited to issue Legal Entity Identifiers (LEIs), the codes that uniquely identify companies participating in financial transactions

The Global Legal Entity Identifier Foundation (GLEIF) supports the implementation and use of the Legal Entity Identifier (LEI). LEIs—unique, 20-character alphanumeric codes—allow companies to identify themselves in financial transactions. This greatly enhances transparency, security and trust for all market participants.

In 2014, GS1 played an important role in the establishment of GLEIF. As a neutral, interdependent federation with expertise in global identification standards, we helped ensure that GLEIF was built on a strong foundation.

GLEIF granted GS1 Mexico and GS1 Germany their accreditations as LEI issuers in 2017. Then, with the active collaboration and support of GS1 Germany, the GS1 Global Office was accredited as a GLEIF Global Operating Unit in June 2018 and achieved the ability to issue LEIs globally.

As a result, we can now train and certify GS1 Member Organisations (MOs) as LEI Registration Agents.

GS1 MOs are uniquely qualified to offer complete LEI services to their members thanks to their expertise in data validation and their knowledge of local language, laws and regulations.

More than two dozen GS1 Member Organisations from all regions of the globe have already completed our webinar- and classroom-based certification process and are now helping their members obtain, transfer and renew LEIs. Thanks to this global network of local Registration Agents, we can provide “one-stop” service for companies or organisations that need LEIs issued in multiple countries.

It only takes three easy steps to register for your own Legal Entity Identifier so you can begin making smarter, less costly and more reliable decisions about who to do business with.

Go to www.gs1.org/services/lei to apply.

Our community of users can now meet global regulatory reporting requirements in the financial sector using GS1 LEI services







Solutions & Innovation

In an era of constant innovation and transformation, unique identification, good data, tracked events and smooth interoperability underpin everything we do.



Robert Beideman
Chief Solutions & Innovation Officer

Traceability & Sustainability

Our new Global Traceability Standard version 2.0 brings increased transparency and interoperability to trading partners in today's complex supply chains



Today, traceability goes beyond trading partners asking, “Where is my shipment?” or “When will it be delivered?” Indeed, patients and shoppers now want to know “Was this product sustainably produced?” “Is this medicine legitimate and not counterfeit?” and “Is this food safe to eat?” Answering such questions requires more granular information and greater visibility into change of ownership. That’s a big reason behind the increased interest in traceability from businesses and governments.

For more than a decade, GS1 has provided standards to support the implementation of traceability solutions. In August 2017, we ratified version 2.0 of the GS1 Global Traceability Standard, which will further help trading partners share information across the entire chain via an interoperable, scalable framework.

With this release, we are again demonstrating our commitment to ensuring that accurate information can be seamlessly and rapidly accessed across traceability systems in all

business sectors. Industry feedback shows that our refreshed standard can help meet demands for increased transparency between businesses and consumers. We have developed and deployed a wide range of support material and training modules across the GS1 Member Organisation community to support engagement across industry.

We have continued our collaborative work with ITC, the International Trade Centre, a joint agency of the World Trade Organisation and the United Nations. GS1 Global Location Numbers (GLNs) are being used to enable ITC’s Sustainability Map, which is working to connect businesses along sustainable value chains.

We are also working with industry and our GS1 community to develop a relevant, comprehensive and actionable vision and strategy for our work in traceability over the next three to five years.

“Carrefour Brazil implemented a food traceability and monitoring program leveraging GS1 standards. We’re seeing improvements in efficiency and productivity – and more importantly, we’re providing safer, higher quality food to our customers.”

Jerome Mairet

Director of Loss and Risk Prevention
Carrefour Brazil



Did you know?

In October 2017, the World Health Organization (WHO) estimated that **600 million** people—almost **1 in 10** humans in the world—fall ill after eating contaminated food and **420,000** die every year. Children under 5 years of age are particularly vulnerable, representing **40%** of the victims of foodborne disease.

In January 2018, the WHO reported that an estimated **10%** of medical products in low-

and middle-income countries is substandard or falsified. Substandard and falsified medical products range from very expensive products for cancer to very inexpensive products for treatment of pain.

U.S. Immigration and Customs Enforcement warned consumers in May 2016 that **counterfeit auto parts** are a booming business that puts everyone on the road at risk, because there is no inspection process applied to counterfeit parts to ensure they meet safety standards.

Key initiatives 2017/2018

- Ratified and released GS1 Global Traceability Standard version 2.0
- Created and shared a full set of marketing tools and material to support the release of the Global Traceability Standard version 2.0, including sector-specific traceability messaging for the consumer packaged goods, food and foodservice sectors
- Developed and implemented a new internal strategy for traceability portfolio management
- Developed and deployed a suite of interactive traceability training modules so that GS1 Member Organisations can better help customers adopt and use GS1 standards for traceability
- Through ongoing work with ITC, expanded the use of GS1 Global Locations Numbers for the Sustainability Map
- In close collaboration with GS1 Member Organisations, developed our strategy for sustainability
- Launched work to define our strategy for the next years, so that we can enable growth of industry, break new ground in product transparency and allow our users to continue to earn the trust of their customers, consumers and patients

Stay up to date about our work in these areas at www.gs1.org/traceability as well as www.gs1.org/sustainability.

Fighting illicit trade

By helping detect, deter and disrupt counterfeiting and illicit trade, GS1 standards support government authorities and their partners to fight against illicit trade



In a first success story, GS1 standards are well positioned for use across Europe to help fight illicit trade in tobacco

Illicit trade and product counterfeiting are serious problems for manufacturers, brand owners, retailers, government authorities, consumers and patients – and unfortunately, many important business sectors and all regions of the globe are negatively affected.

Global, neutral, open GS1 standards can play an important role in fighting these sorts of criminal activities because they enable unique identification, high-quality data, tracked events and smooth interoperability.

Over the past several years, for example, we have been working proactively with authorities, economic operators and all stakeholders to study how GS1 standards could add value to efforts to combat the illicit trade of tobacco products.

The European Commission has officially called for the establishment and operation of an EU-wide tracking and tracing system for tobacco products. This traceability system will aim to contribute to reducing the circulation of non-compliant and illicit tobacco products, better protect public health and reduce tax losses.

The regulation specifically mentions the potential to use GS1 Global Trade Item Numbers (GTINs) to uniquely identify tobacco products and to use GS1 Serial Shipping Container Codes (SSCCs) to identify transport units. GS1's position as a neutral and independent body offering open solutions that promote interoperability across nations was pivotal to the EU's mention of GS1 standards.

We expect that this early work in Europe will be foundational to future efforts across other sectors and geographies, especially in the 40+ other countries that ratified the WHO Protocol to Eliminate Illicit Trade in Tobacco Products, which entered into force on 30 September 2018.

Watch for further news about our work in this area at www.gs1.org.

Innovation

An era of unprecedented business & technology change has prioritised the need for GS1 to innovate around our core, for the benefit of users in every business sector

At a very fundamental level, most companies are trying to reduce costs, create experiences—and sell more stuff. This is the foundation upon which GS1 was built forty-five years ago.

With technology and business needs evolving at unprecedented speeds, we are in an era of transformational change. Top performers are focused on increasing transparency, speed and trust between supply chain partners and consumers, patients and users. End-users want to customise their experiences with products—and industry must adapt.

A theme has emerged which is guiding our work to innovate: GS1 must help industry meet the challenges of bridging two complementary, interconnected and interdependent ecosystems that co-exist today: the physical world and the digital world.

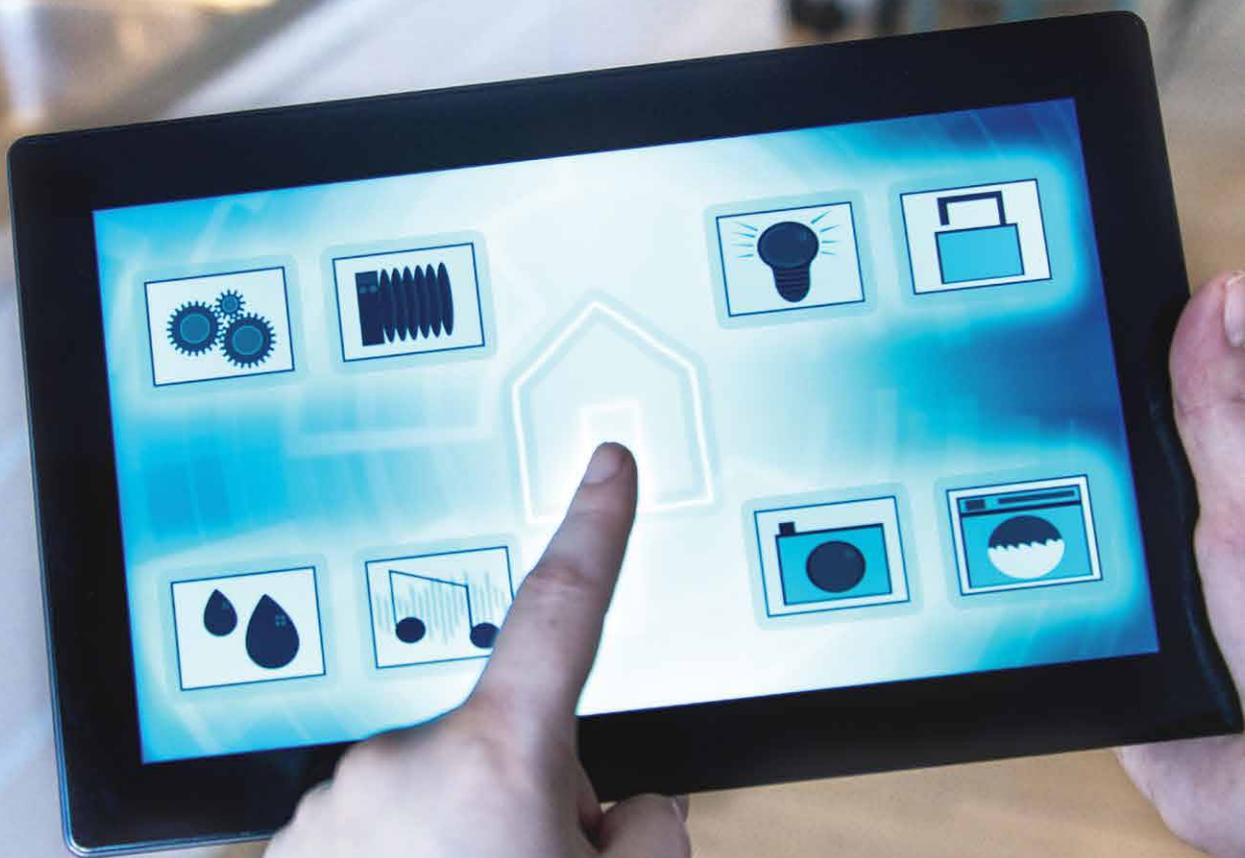
We are actively engaging to address the most urgent needs in physical/digital convergence.

We have launched a comprehensive program to identify, organise and prioritise trends, opportunities, and threats, to ensure GS1 adapts. And we have continued to more closely align the longer-term research work done by and with the Auto-ID Labs—which, in the past year, has included 23 projects with partners from over 100 government, research and industrial organisations on topics including blockchain, food traceability, voice-activated commerce, IoT, sensors—and more.

Throughout this report, you will read about what GS1 is doing to become a critical enabler of innovative physical/digital convergence across industries. We are dedicating time and energy to adapt the GS1 system to meet the needs of efficient data exchange and to use data in a converged world. We are expanding so that our “global language of business” enables event-data sharing and the interoperability of solutions around the world. It’s an exciting, motivating mission.

We are working to bridge the physical and digital worlds with the GS1 system, so that business can adapt and grow





Blockchain and the Consumer Internet of Things (C-IoT)

GS1 standards provide a trusted foundation for Consumer IoT and Blockchain solutions that build upon interoperable, global identification and data exchange

Blockchain and the Internet of Things are examples of significant industry disruptors that need a “global language of business.” For both, GS1 is providing thought leadership, guidance and a place for collaboration.

Blockchain systems are distributed, shared digital ledgers that record a history of immutable transactions. Blockchain technology facilitates the exchange of cryptocurrency, such as Bitcoin and Ethereum. But the ledger technology that is core to blockchains and that facilitates data-sharing between parties also makes it potentially suitable to address specific supply chain business needs. We have worked with IBM, Microsoft, SAP and others to ensure that foundational GS1 standards are leveraged by those who wish to use enterprise blockchain systems to support the sharing of data between trusted parties—and to increase transparency in healthcare, food, government and other sectors.

While enterprise blockchain solutions are still largely in pilot across industry, the Internet of Things (IoT) is a truly disruptive force today. In the consumer space, IoT is changing the face of commerce by connecting consumers with their devices and products to create new experiences, rather than just “moving” the store into the home. Yet the highly fragmented market for Consumer-IoT solutions creates challenges. GS1 is working to understand industry needs in this space. We believe that connecting physical and digital identities of products, devices and people is key to interoperability across the Consumer Internet of Things—and GS1 is well positioned to lead industry, having decades of experience in product identification. In collaboration with GS1 US, we are developing an open C-IoT architecture to enable these interoperable consumer experiences.

Learn more at www.gs1.org/IoT.

GS1 is well positioned to play a leadership role as both of these emerging industry trends mature







GS1 Member Organisations in Action

Since its creation in the 1970s, our federation has welcomed new Member Organisations in more than 100 countries to bring GS1 standards to the companies that need them. Today, more than a million companies of every size use our standards. In these next pages, read about just a few of the many GS1-powered projects that are underway now.

GS1 Argentina: Helping a foodservice company improve traceability and boost efficiency

With better processes for orders, inventory, deliveries and invoicing, a family-owned Buenos Aires food producer can keep growing



La Juvenil improved track and trace capabilities, operational efficiency, order accuracy, customer satisfaction—and more

GS1 Argentina works with many small businesses to help them realise all of the benefits of GS1 standards and best practices. La Juvenil, a producer of fresh pasta and other Italian food specialties, is one Argentinian company that has seen measurably-improved results thanks to their collaboration with GS1.

La Juvenil has been a well-known brand in the Buenos Aires area for almost 60 years. Starting with just one shop, the company today has 20 stores and restaurants supplied by a central kitchen. Their plant also supplies La Juvenil food products to retailers, hotels, restaurants and leading foodservice providers like Sodexo and Compass.

Quick delivery and efficient logistics processes are extremely important for La Juvenil because of the 24-hour shelf life of most of their products. With the objectives to better serve customers, improve their operations and position the company for further growth, La Juvenil worked with GS1 to automate ordering and fulfillment

operations and to enable traceability. They deployed a range of GS1 standards, including GTINs, SSCCs, GS1-128 barcodes encoded with lot numbers and expiration dates, and GS1 EDI order to cash.

Before this project, the company took orders by fax or by telephone. Today, 95% of orders are received electronically, confirmed by the sales department and delivered to screens in the food production area. La Juvenil has boosted their order tracking and logistics efficiency rates from 80% to almost 95%. Returns due to delivery errors are now almost non-existent and customer satisfaction is noticeably better.

These operational changes have improved traceability and allowed staff to develop new products, attract new customers and work on new projects.

GS1 Argentina: www.gs1.org.ar

GS1 for Foodservice: www.gs1.org/foodservice

GS1 Netherlands: Dutch NGO Eco2city is helping European cities with last-mile delivery logistics

Consumers, businesses, online retailers and logistics services providers all benefit from a more sustainable and reliable service for last-mile parcel delivery

The European Committee for Standardization (CEN) has endorsed the GS1 Serial Shipping Container Code (SSCC) to uniquely identify cross-border parcels. The resulting Harmonised Parcel Label (HPL) is the collaborative work of representatives from postal organisations, online retailers, couriers, and express & parcel service providers. It is another meaningful step toward the European Commission's ultimate goal of a single market that is fit for the digital age.

Dutch non-governmental organisation Eco2city was one of the first to implement the HPL. Eco2city supports cities all over Europe as they strive to achieve more efficient, zero-emission city logistics.

Eco2city quickly recognised the label's ability to positively impact last-mile delivery services. Traditionally, each online retailer and manufacturer shipped all the way to the final destination. For many businesses and consumers, this led to multiple deliveries arriving throughout the day.

To prevent this waste of time and resources, specialised logistics operators consolidate shipments from different carriers through a central hub—delivering them all at once. Consolidators are also better able to navigate neighbourhoods with narrow streets and city centres that are accessible only at specific times of day or by certain types of vehicles.

Because it is a unique label for all packages, the HPL enhances Eco2city's ability to deliver parcels quickly and efficiently, with reduced risks of error and optimised costs. Data can be shared across every segment of the transportation path, providing visibility and support to all stakeholders. Ultimately, delivery services will be more sustainable and more reliable.

GS1 Netherlands: www.gs1.nl
 GS1 in Europe: www.gs1.eu
 GS1 for Transport & Logistics: www.gs1.org/transport-and-logistics

The SSCC is a natural choice for the Harmonised Parcel Label since many companies already use it and other GS1 standards



GS1 Portugal: Bedside scanning at Hospital de Cascais helps improve patient safety

To increase safety, Hospital de Cascais identifies each medication dose using GS1 standards, and caregivers scan the medication and the patient's wristband



Use of GS1 barcodes during medication administration saved 9 hours per nursing shift, allowing caregivers to spend more time with patients

Hospital de Cascais in Portugal is known for excellence, unwavering ethics, quality, competence and innovation. More than seven years ago, the hospital began to automate its processes. Among the objectives of their project: improve patient safety and provide even better quality of care.

Hospital de Cascais was especially focused on providing its hospital staff with tools using GS1 standards that would help them increase safety when administering medication, so that the right patient receives the right drug in the right dose at the right time, via the right route, from an authorised caregiver—the patient rights.

They have achieved this by implementing GS1 standards in combination with BIQ Health Solutions PharmaTrac® in clinical departments across the entire medication cycle, from receiving to bedside administration.

The hospital's pharmacy uniquely identifies every single-dose of medication using a GS1 GTIN and

a serial number, along with the batch number and expiry date. This information is encoded in a GS1 DataMatrix barcode that is applied to the packaging of the individual dose. Each patient is uniquely identified with a wristband that carries a GS1 DataMatrix barcode.

When administering medication, caregivers scan the barcodes on the dose and on the patient's wristband. An alert is activated if the medication is incorrect, if the dosage should be different or if the batch has been recalled. If everything is in order, the patient's electronic medical record is automatically updated, significantly increasing the time nurses can spend with patients by reducing time spent on administrative tasks.

At Hospital de Cascais, safer, more efficient care starts with a simple scan.

GS1 Portugal: www.gs1pt.org

GS1 Healthcare: www.gs1.org/healthcare

GS1 Sweden: Helping construction companies boost efficiency and enable traceability

Identifying building products with GTINs is part of a broader objective to promote seamless, open, digital information flows in the construction sector

Construction is one of the least productive industries, with an average annual global growth rate of only 1% over the past 20 years. Many large countries have seen construction productivity rates flatten or fall.

In this challenging context, a decision recently made by a group of Swedish construction companies and associations is all the more significant: they now require all building products to be identified with a GS1 Global Trade Item Number (GTIN).

Before this agreement, there was no consistent way for Swedish construction firms to identify building products—which meant that a lot of time was wasted manually searching for information in different databases. Implementation is now expected to be fairly simple because most product databases in the construction sector already had a data field intended for GTIN.

The group consists of Swedish construction firms NCC, Peab, Skanska, JM and Veidekke; Byggmaterialindustrierna, the association

of Swedish building material manufacturers; Byggmaterialhandlarna, the association of Swedish building material merchants; and BIM Alliance Sweden, a non-profit promoting the use of open standards in the built environment. These organisations all believe that open, digital structures with seamless information flows are necessary to enable design, construction and maintenance companies to lower costs, increase revenues and provide traceability and sustainability information.

GS1 GTINs provide an excellent, robust and durable way to keep accurate product data available in end-to-end workflows across companies and across borders. They are becoming essential elements of Building Information Modeling (BIM), the virtual representation of a physical construction.

GS1 Sweden: www.gs1.se

GS1 in Technical industries:

www.gs1.org/technical-industries

GTINs also allow Swedish construction firms to work across borders more smoothly and efficiently







Corporate & Financial Information

We are pleased to share here the results of our 2017-2018 financial year, information about our governance and contact details for our GS1 Member Organisations around the world.



Philippe Wéry
Chief Financial and Administrative Officer, GS1

Financial statements

Key financial statistics: Global revenues

GS1 Member Organisations (MOs) around the world are funded by their local members through annual membership fees and sales of services. The calendar year 2017 experienced another year of strong growth in MO revenues with an increase of 7.0% (excluding the impact of currency i.e. at constant exchange rates) versus 8.5% the year before. However, the adverse exchange rate fluctuations negatively impacted the revenues, reducing the growth in EURO to 0.4% at €417M, an increase of €1.6M versus 2016. All regions grew strongly in 2017 (without foreign exchange impact): North America at 3.9%, Latin America at 18.3%, Asia Pacific at 6.5%, Europe at 4.5% and MEMA at 43.1%.

GS1 Global Office: Revenue evolution

In 2017-18, GS1 Global Office's revenues amounted to €33.1M, an increase of €2.3M or 7.5% versus the year before, on a comparable basis as the new Funding Model was approved at the General Assembly in May 2016 and applied over the last two fiscal years. The 2018-19 budget foresees a modest increase in Global Office revenues of €0.5M to reach €33.6M, due to the negative exchange rate impact on the MO revenues. The 2018-19 Global Office revenues include the first year of revenues from the Global LOU project.

GS1 Global Office: Income statement and headcount

For 2017-18, GS1 Global Office shows a negative result of €0.7M compared to the 'revised' budgeted loss of €2.1M. Revenues amounted to €33.1M while operating expenses and other expenses amounted to €33.8M. This €1.4M positive variance versus budget is mainly due to higher revenues (€0.2M), lower expenses (€0.3M) and a positive currency impact on expenses (€0.9M) as the USD weakened against the Euro. In 2017-18, we have spent €3.6M in the New Services projects, mostly in the GS1 Cloud (€2.1M), in the Global LOU (€0.9M), in Activate (€0.5M) and in two other projects (€0.1M).

Including the New Services expenses, the operating expenses increased by €3.1M or 10.0% versus 2016-17, driven by (1) the €1.2M increase in payroll expenses at €19.5M (+7% vs. 2016-17) due to inflation and to the full-year impact of the 2016-17 recruitments and of the new hires of 2017-18, (2) the €1.8M increase in discretionary spending at €11.7M (which includes travel, consulting, marketing and meetings/events), mainly due to the GS1 Cloud, Activate and Global LOU projects. Fixed expenses remained flat at €2.4M.

Both the base business (managed from the GS1 Central Office) and Data Excellence Inc. had better results than budgeted in 2017-18. GS1 Data Excellence Inc. had a positive result in 2017-18 while GS1 Central Office incurred a loss. With a consolidated negative result of €0.7M, we used some of the reserves built in the past to cover for and accelerate investments in our new initiatives / projects. In the last fourteen years, we have built accounting reserves of €17.1M, out of which we used €0.7M in 2017-18.

The 2018-19 budget foresees an increase in the expenses of the New Services projects. Consequently, the 2018-19 budget, as approved by the General Assembly in May 2018, foresees a negative result of €1.9M to be funded by the reserves.

In terms of expense categories, our main investment remains our people, with 96 staff members at the end of June 2018, which represent 58% of our operating expenses. The 2018-19 budget foresees to increase the Global Office headcount to 104 FTEs, most if not all of the increase in the first quarter of the new fiscal year.

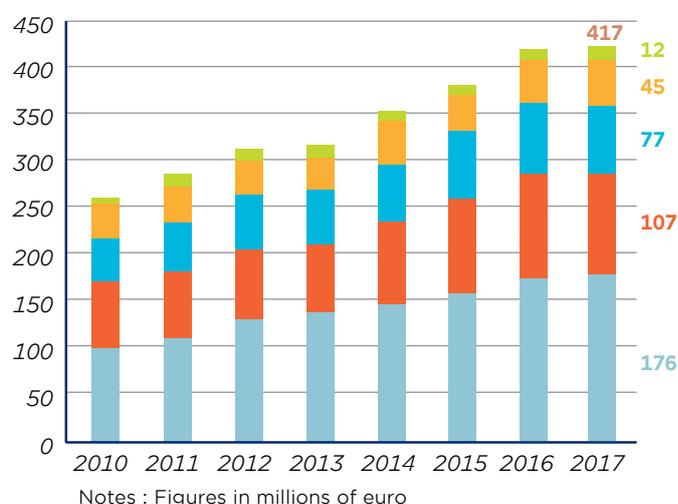


GS1 Member Organisation revenue: Growth by region

	Growth 2017/2016	
	%	w/o FX*
Middle East/ Mediterranean/Africa	25.1%	43.1%
Latin America	3.0%	18.3%
Asia Pacific	-0.9%	6.5%
North America	-6.1%	3.9%
Europe	3.2%	4.5%
TOTAL	0.4%	7.0%

* Foreign exchange impact

GS1 Member Organisation revenue: Historical perspective



GS1 Global Office revenue: Historical perspective

Figures in millions of euro	10/11 Actuals	11/12 Actuals	12/13 Actuals	13/14 Actuals	14/15 Actuals	15/16 Actuals	16/17 Actuals	17/18 Actuals	18/19 Budget
GS1 Central Office	22.7	23.9	25.0	26.2	26.3	28.4	28.3	30.5	31.3
EPCglobal Inc.	-	-	-	-	-	-	-	-	-
GS1 Data Excellence Inc.	2.0	2.0	2.0	2.0	2.1	2.4	2.5	2.6	2.3
Total GS1 Global Office	24.7	25.9	27.0	28.2	28.4	30.8	30.8	33.1	33.6
Staff (FTEs)	72	77	80	80	81	81	82	96	104
Accounting Reserves*	10.2	12.2	13.8	15.5	16.0	17.1	17.1	16.4	15.2

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

GS1 consolidated fiscal year 2017/18: Actuals

Figures in millions of euro	Consolidated	GS1 Central Office	GS1 Data Excellence Inc.
Revenue	33.1	30.5	2.6
Fixed/Recurring Expenses	2.4	2.0	0.4
Discretionary Expenses	11.7	10.8	0.9
Payroll Expenses	19.5	18.7	0.8
Operating Expenses	33.6	31.5	2.1
Operating Result	(0.5)	(1.0)	0.5
Other Revenue / (Expenses)	(0.2)	(0.2)	-
Result for the period	(0.7)	(1.2)	0.5

Consolidation based on budget rate (1.07 USD/EUR). Fiscal year 2017/18 ended 30 June 2018.

GS1 Management Board

Members of the Management Board of GS1 AISBL*:

Kathryn E. Wengel

Executive Vice President & Chief Global Supply Chain Officer
Management Committee Member
Johnson & Johnson

Chair
GS1 Management Board

Renaud de Barbuat

Chief Information Officer France
Carrefour

Vice Chair
GS1 Management Board

Julio Nemeth

President Global Business Services
The Procter & Gamble Company

Vice Chair
GS1 Management Board

Bruno Aceto

Chief Executive Officer
GS1 Italy

Mark Batenic

Chairman
IGA Inc.

Rakesh Biyani

Joint Managing Director
Future Retail Limited

David Calleja Urry

Chief Executive Officer
GS1 Malta

Rubén Calónico

Chief Executive Officer
GS1 Argentina

Bob Carpenter

President & Chief Executive Officer
GS1 US

François Deprey

Chief Executive Officer
GS1 France

Thomas Fell

Chief Executive Officer
GS1 Germany

John Gilbert

Chief Executive Officer
DHL Supply Chain

José Loaiza Herrera

Vice President of International Business
Grupo Exito

Samir Ramzy Ishak

Group Vice President of Operations
Abudawood

Sunny Jain

Vice President Core Consumables
Amazon

Xiao An Ji

Chairman
Beijing Hualian Group

Chris Johnson

Head of Group Human Resources & Business Services
Nestlé S.A.

Miguel A. Lopera

President & Chief Executive Officer
GS1 AISBL

Meinrad Lugan

Member of the Board of Management
B. Braun Melsungen AG

Gary Lynch

Chief Executive Officer
GS1 UK

Amit Menipaz

Vice President of Vertical Experiences & Platforms
eBay

Daniel Myers

Executive Vice President,
Global Integrated Supply Chain
Mondelēz International

Hidenori Osano

Vice President & Executive Officer,
Senior Chief Officer of IT
AEON Co., Ltd

Maria Palazzolo

Executive Director & Chief Executive Officer
GS1 Australia

Kerry Pauling

Senior Vice President & Chief Technology Officer
Walmart Stores Inc.

Joseph Phi

President
LF Logistics

Dr. Martin Reintjes

Member of the Executive Board
Dr Oetker GmbH

Rob Rekrutiak

Group Product Manager
Google LLC

Chris Resweber

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

Timo Salzsieder

CIO METRO AG & CEO METRONOM
METRO AG

Steve Schuckenbrock

Chief Executive Officer
CROSSMARK

Joseph Sheridan

President and Chief Operating Officer
Wakefern Food Corp

N. Arthur Smith

Chief Executive Officer
GS1 Canada

Lin Wan

President
Cainiao (Alibaba Group)

Chenghai Zhang

Chief Executive Officer
GS1 China

* As of 30 June 2018

GS1 Data Excellence Board

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

Jean-Marc Klopfenstein	NBE Master Data Chair, GS1 Data Excellence Inc. Board of Directors	Nestlé
Sanjay Mandloi	Chief Technology & Data Officer President, GS1 Data Excellence Inc.	GS1 AISBL
Marc Blanchet	President	Viagenie
Karin Borchert	Chief Executive Officer	1WorldSync
Bob Carpenter	President & Chief Executive Officer	GS1 US
Vincent De Hertogh	Manager Supply Chain Strategy	Delhaize Group
JP De Villiers	Director of Content Acquisition	Walmart
Yolande Diaz	GDS Domain Manager	Carrefour Groupe
Thomas Fell	Chief Executive Officer	GS1 Germany
Rafael Flórez	Chief Executive Officer	GS1 Colombia
Stefan Hesse	Chief Financial Officer & UK Managing Director	Alkemics
Grant Hodgkins	MDR/Eudamed Workstream Lead	Smith & Nephew
CoryAnn Holst	Director, Mondelēz Business Services, Global Master Data Tower	Mondelēz International
Lars Kyed	Chief Executive Officer	GS1 Denmark
Pieter Maarleveld	Chief Executive Officer	GS1 Netherlands
Mike Nickituk	Global Managing Director	Nielsen Brandbank
Maria Palazzolo	Executive Director & Chief Executive Officer	GS1 Australia
Alex Panzano	Senior Vice President, Strategy & Business Development	Edgenet
John S. Phillips	Senior Vice President, Customer Supply Chain & Go-To-Market	PepsiCo Global Operations
Dave Ralph	President & Chief Executive Officer	Commport Communications International Inc.
Paul Salay	Chief Executive Officer	Gladson (FSEnet)
Laurent Seroux	Global Master Data Business Process Expert - Global Business Services	Procter & Gamble
N. Arthur Smith	Chief Executive Officer	GS1 Canada
Lori Schrop	Director, Industry Initiatives & Standards	The J.M. Smucker Company
Jan Somers	Chief Executive Officer	GS1 Belgium/Luxembourg
Markus Tkotz	Managing Director	Markant Handels-und Industriewaren- Vermittlungs AG
Nate Whitten	Director, Product Content	Lowe's Companies, Inc.
Christian Zaeske	Director Master Data Management	METRO AG

GS1 Innovation Board

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

Sanjay Sarma

Professor, Vice President for Open Learning

Massachusetts Institute of Technology

Chair, GS1 Innovation Board

Eric Ballot

Full Professor

Management Science Lab, Deputy Director

Mines ParisTech

Robert Beideman

Chief Solutions & Innovation Officer

GS1 Global Office

Myron Burke

Principal, Store N°8, Senior Director II

Walmart Stores, Inc.

Chris Diorio

CEO, Vice Chair and Founder Impinj

Ahmed El Kalla

Chief Executive Officer

GS1 Egypt

Christian Floerkemeier

Chief Technology Officer & Co-Founder

Scandit

Bernie Hogan*

Senior Vice President Emerging Capabilities & Industries

GS1 US

Marina Kotsianas

Chief Executive Officer

Artia Strategies (University of Southern California)

Christian Lovis

Professor & Chairman Division of Medical Information Systems

University Hospitals of Geneva (HUG)

University of Geneva (UNIGE)

Rob Rekrutiak

Group Product Manager

Google LLC

Chris Resweber

Senior Vice President, Industry Affairs

The J. M. Smucker Company

Milan Turk, Jr.

Managing Director Go-To-Market Innovation

Procter & Gamble

* Retired March 2018





GS1 Leadership

The GS1 Global Office Leadership Team is composed of the following people:

Miguel A. Lopera, President and Chief Executive Officer

Robert Beideman, Chief Solutions & Innovation Officer

Alain Jonis, Chief Marketing Officer

Sanjay Mandloi, Chief Technology & Data Officer

Marie Pètre, GS1 General Counsel

Marianne Timmons, President, Industry Engagement & Standards Development

Philippe Wéry, Chief Financial and Administration Officer

Left to right:

Alain Jonis, Robert Beideman, Marianne Timmons, Miguel A. Lopera, Marie Pètre, Sanjay Mandloi, Philippe Wéry

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.

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📍 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

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📍 Melbourne
☎ + 61 3 95589559
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☎ + 43 1 505 86 01
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☎ + 994 12 4987405
🌐 www.gs1az.org

GS1 Bahrain

📍 Manama
☎ + 973 17 456330
🌐 www.gs1bh.org

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☎ + 375 17 298 09 13
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📍 Brussels
☎ + 32 2 229 18 80
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☎ + 591 3 3383361
🌐 www.gs1.org.bo

GS1 Bosnia - Herzegovina

📍 Sarajevo
☎ + 387 33 25 86 45
🌐 www.gs1bih.org

GS1 Brazil

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☎ + 55 11 3068 6229
🌐 www.gs1br.org

GS1 Brunei Darussalam

📍 Berahas
☎ + 673 424 0069
🌐 www.gs1bn.org

GS1 Bulgaria

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☎ + 359 2 8117 567
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🌐 www.gs1cambodia.org

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🌐 www.gs1chile.org

GS1 Member Organisations

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📍 Beijing
 📞 + 86 40 0700 0690
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 📞 + 886 2 2393 9145
 🌐 www.gs1tw.org

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 🌐 www.gs1greece.org

GS1 Guatemala

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 📞 + 502 2245 9595
 🌐 www.gs1gt.org

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📍 Tegucigalpa
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 🌐 www.gs1hn.org

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📍 Hong Kong
 📞 + 852 2861 2819
 🌐 www.gs1hk.org

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GS1 India

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☎ + 91 11 42890890
🌐 www.gs1india.org

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🌐 www.gs1id.org

GS1 Iran

📍 Tehran
☎ + 98 21 88935095
🌐 www.gs1ir.org

GS1 Ireland

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☎ + 353 1 208 0660
🌐 www.gs1ie.org

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📍 Tel Aviv
☎ + 972 3 519 87 14
🌐 www.gs1il.org

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☎ + 39 02 777 2121
🌐 www.gs1it.org

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☎ + 81 3 5414 8520
🌐 www.gs1jp.org

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📍 Amman
☎ + 962 6 56 200 38
🌐 www.gs1jo.org.jo

GS1 Kazakhstan

📍 Almaty
☎ + 7 727 394 88 53
🌐 www.gs1.kz

GS1 Kenya

📍 Nairobi
☎ + 254 20 238 5270
🌐 www.gs1kenya.org

GS1 Korea

📍 Seoul
☎ + 82 2 6050 1400
🌐 www.gs1kr.org

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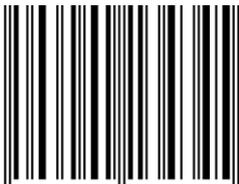
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