GS1 MEMBER ORGANISATIONS IN ACTION
Success stories from around the world
At GS1, our vision is a world where things and information about them move efficiently and securely for the benefit of businesses and improvement of peoples’ lives, everyday, everywhere.

Our mission is to be the neutral leader enabling communities to develop and implement global standards providing the tools, trust and confidence needed to achieve our vision.
GS1 Standards in action

GS1 standards ensure effective exchanges between companies, and act as basic guidelines that facilitate interoperability and provide structure to many industries. They bring together companies representing all parts of the supply chain – manufacturers, distributors, retailers, hospitals, transporters, customs organisations, software developers, local and international regulatory authorities, and more. GS1 standards are used by huge multinational chains and by small corner shops; by world-famous brands and by individual craftsmen.

These companies, who may in fact have diverging business interests, work together under our leadership to agree upon standards that make the supply chain faster, more efficient, less complex and less costly.

Without a neutral, not-for-profit and global organisation like GS1, such very diverse companies would probably not be able to agree on standards. We make it happen, and consumers and businesses benefit.

Originally created by manufacturers and retailers to improve the efficiency of the distribution of food and consumer goods to supermarkets, GS1 standards today are used by millions of companies in dozens of sectors including healthcare, transportation and logistics, chemicals, high tech, and still, of course, the retail supply chain.

The GS1 System of Standards is created collaboratively by volunteers from companies across the supply chain. But the real day-to-day action takes place at our 108 Member Organisations.

Indeed, in countries on every continent, some 2,000 GS1 team members are working to help businesses get the most out of our standards.

This brochure shares just a few of their more interesting recent success stories.
The low-temperature, high-humidity environment of refrigerated and frozen products is often thought to be rather harsh and complicated for RFID technology – but GS1 Brazil thought differently.

They set out to demonstrate that EPC tags can be properly read in cold environments, resulting in concrete benefits such as an improvement in visibility of products thanks to the ability to register and monitor data via the GS1 EPCIS Communication Standard.

And so, the Brazilian EPC Cold Chain Proof of Concept project was created and launched. EPC tags were applied at the logistic unit level to boxes and pallets of processed chicken meat, and then tracked by their unique numbers from the moment when these units were packed at food processing company Avicola Flamboiã up to the moment they were shipped for export by its 3PL service provider Logimaster.

This tracking included all movements at the processing site, movements in and out of refrigerated chambers at distribution centres and then transport by refrigerated trucks.

Brazil is the world’s largest chicken meat exporting country: Avicola Flamboiã was obviously interested in participating in this project to see if GS1 standards, applied in this way, could help them differentiate from their competitors by providing a greater level of visibility.

And indeed, the project demonstrated the feasibility of EPC applications in the cold chain. The “read rate” for EPC tags on refrigerated and frozen products was close to 100%. Traceability information was made available in real-time via a website (www.epccoldchain.com.br) which was updated using EPCIS data from the tags. The companies involved saw noticeable operational improvements: for example, picking, shipping and receiving process were 43 times more efficient.

The project was a collaborative effort between GS1 Brazil and its members Flamboiã and Logimaster, with the support of a number of solution providers including Motorola, NEC, SEAL, eData, Genoa, and RR Etiquetas. GS1 Brazil acted as a facilitator and project manager, and also supported its end user companies, acting as an independent and neutral party for all involved.

The project showed how thanks to GS1 EPCIS, consumers can expect to benefit from new levels of food safety; and business partners can expect to see better and more efficient information exchange.

The next phase of the Brazilian EPC Cold Chain Project is already being planned: GS1 Brazil expects to expand the scope to the entire end-to-end cold chain, involving international trading partners.

For more information about GS1 Brazil, visit their website at http://www.gs1brazil.org.br
For more information about GS1 EPCglobal and GS1 EPCIS, visit http://www.epcglobalinc.org
In 2002, GS1 Canada developed ECCnet Registry to enable Canadian businesses to exchange accurate and up-to-date product information with their trading partners.

The industry-wide adoption and success of ECCnet Registry has led to streamlined business processes and improved business efficiencies. However, organisations across industry sectors in Canada were requesting enhancements to allow them to exchange all their product information through one central location, eliminating the need for paper-based processes.

As a result, GS1 Canada expanded upon ECCnet Registry with Item Centre. Item Centre leverages the information in ECCnet Registry while enabling the exchange of community, private and proprietary data. Item Centre allows organisations to improve their process efficiencies while advancing the “turning off the paper” initiative.

During economic times such as these, organisations understand the importance of operational efficiencies and seek out solutions to drive costs down and improve their bottom line. As is the case with ECCnet Registry, vendors only need to load their product data once in the Item Centre to grant all of their retailer trading partners access to their information; the Item Centre then processes the information in a single, workflow-based solution without using separate manual processes thus removing the need for paper in the listing process.

The Item Centre helps improve a product’s speed to market and increases the number of new product introductions, consequently enhancing organisations’ operational efficiencies. Furthermore, removing paper from the listing process improves data integrity, helps manage costs, decreases the number of resources required for product listing, and reduces an organisation’s carbon footprint.

McKesson Canada, the leading provider of logistics, information products and services in Canadian healthcare, is the first organisation to implement Item Centre into their business processes. In the first months of a pilot that began in Fall 2008, McKesson already saw benefits, such as a significant decrease in the amount of time required to complete the listing process for a product. Indeed, new products at McKesson are being listed at much quicker rates than ever before.

As the pilot progresses, McKesson expects to realise additional benefits. Item Centre will reduce the need for manual intervention, thus decreasing chances for human error and leading to fewer resources being allocated to the product listing process. Furthermore, McKesson anticipates being able to provide their vendors with the McKesson Item Number that their vendors require to place orders with retail trading partners, making the ordering process significantly faster.

A number of other Canadian organisations – including Sobeys Inc. (Sobeys) and Overwaitea Foods – have also begun evaluating the benefits of the Item Centre API.

Overall, implementing Item Centre or the Item Centre API into business processes will help organisations move forward with their “turning off the paper” initiative and improve the integrity of their data, leading to better trading partner relationships and helping them realise cost savings.

For more information about GS1 Canada, visit their website at http://www.gs1ca.org
For more information about the GS1 Global Data Synchronisation Network, visit www.gs1.org/gdsn
Chile is striving to be recognized as a world-class food and feed exporter. This goal is, in fact, explicitly declared as a national policy. To reach this objective, however, every participant in the Chilean food supply chain – from agricultural producers to companies which commercialise products – must be committed to meeting the requirements of the different markets to which Chile wishes to export its products. For example, to export food to the United States, Chile must meet the stringent requirements of the US Bioterrorism Act; similar regulations oversee exports to the European Union and Japan.

In 2007, GS1 Chile added the Global Traceability Conformance programme to the services it offers to its members, as a means to help Chilean companies fulfill the international food safety requirements (regulations, standards and commercial requirements) regarding traceability. Leading Chilean refrigerated warehousing company Icestar came to GS1 Chile to discuss their traceability system, which they had implemented in order to better know the location, temperature and status of all the pallets in their stock, from the moment they entered the warehouse until they leave.

Icestar wanted their traceability system to be fully based on the GS1 Global Traceability Standard, and they wanted to be able to prove it.

GS1 Chile performed an assessment of Icestar’s traceability system using the methodology established by the GS1 Global Traceability Conformance Programme. GS1 Chile then worked with Icestar to make a few modifications to processes and systems.

In November 2007, after this audit and work cycle, Icestar was the first company in Chile to be awarded GS1 Chile Global Traceability Conformance Seal.

Icestar has seen a number of benefits from this. The main one, no doubt, is the fact that they can now fulfill the traceability requirements of all the various international standards and regulations they must meet. They have confidence in their system and the data is produces. Their traceability system is fully compatible with other standardised traceability systems. But Icestar have also discovered a sales and marketing tool in their Conformance Seal: it has strengthened the loyalty of their existing customers and helped them capture new ones.

Pleased with these benefits, in 2008, Icestar performed another assessment process with GS1 Chile in order to renew and extend their Global Traceability Conformance Seal.

GS1 Chile has been pleased to be able to serve its member companies in this way: the GS1 Global Traceability Conformance programme gives them the ability to act as a neutral outside party with the experience and the tools necessary to verify and, if necessary, correct traceability systems. In this way, they help ensure the safe flow of food-related information in the supply chain and help generate benefits in logistical efficiency.

For more information about GS1 Chile, visit their website at www.gs1chile.org
For more information about the GS1 Global Traceability Conformance programme, visit http://www.gs1.org/traceability
The Chilean public healthcare sector can expect to see improvements in patient safety.

Thanks to this decision, the Chilean public healthcare sector can expect to see increased safety in the handling and dispatching of medicines and medical supplies across the country’s entire hospital network. Logistics as well can expect to have more reliable information regarding the products they treat.

For more information about GS1 Chile, visit their website at www.gs1chile.org
For more information about GS1 Healthcare, see http://www.gs1.org/healthcare

In 2006, the Ministry of Health of Chile, together with the Undersecretary of Assistance Networks and Director of the National Procurement Office of the Minister of Health of Chile (known locally by the acronym CENABAST), unveiled measures to encourage better management of stocks of drugs and medical supplies inside hospitals.

These measures were intended to modernize the Chilean medical supply chain, both for stock control and management of traceability initiatives, and to prevent delays in replenishing the medicines and medical supplies that are needed in hospitals.

Additionally, there was a goal of limiting or even preventing human errors in the handling of products for patient care.

As the medicine and medical device supply chain continues to expand across geographies, healthcare organisations need solutions that ensure consistent and interoperable traceability. The GS1 Global Traceability Standard for Healthcare makes this possible.

In August 2008, after two years of work with GS1 Chile, CENABAST informed its suppliers that it has officially adopted the GS1 System of Standards for identifying drugs and medical devices. CENABAST provides more than 70% of the needs of the Chilean public health system. The Chilean Ministry of Health has also pledged to use GS1 BarCodes in public sector hospitals.

The first phase of deployment will ensure effective traceability of drugs and medical devices from their arrival at the doors of a hospital to their reception at the hospital’s pharmacy; a second phase will then ensure traceability all the way through to the patient.
GS1 Germany has many initiatives and programmes underway to help its member companies; one such programme is Project PROZEUS, which was launched in July 2002 by the Federal Ministry for Economics and Labour. The objective of PROZEUS is to help SMEs to take advantage of global markets for purchasing and sales by means of eBusiness tools.

Within the framework of Project PROZEUS, GS1 Germany recently assisted a small manufacturer deploy an item master data project with the METRO Group. Hitschler International GmbH is a family-run enterprise with a product base of 300 varieties of sweets and candies. For decades, Hitschler has had a solid relationship with METRO, one of the country’s most important retailer groups.

Before the project with GS1 Germany, Hitschler handled processes manually: item master data were submitted via fax or handwritten notes – an inefficient process that inevitably resulted in a great deal of errors.

Hitschler worked with GS1 Germany to deploy a system to electronically manage their item master data. They sought quality management of master and logistic data, internally as well as on the customer side, so that inaccuracies along the entire supply chain could be reduced and business processes could become more efficient.

Before the launch and then during each phase of the project, GS1 Germany, together with the master data service provider, advised Hitschler; including planning the project details, selecting further service providers and ensuring staff were trained and qualified.

The deployment of a master data process paid for itself in less than 18 months.

The project between Hitschler and METRO resulted in a number of concrete benefits. For example, there were measurable savings in administrative and processing costs. Prior to the launch of their project, Hitschler issued an average of nearly 10 item passports per year per customer, with an input requirement of a full 4 hours per passport.

Today, using the data pool system now embedded within its own workflows, Hitschler only devotes 20 minutes to an item passport. So instead of 100 person-days per year, Hitschler now needs to spend only 8.4 person-days per year for the handling of their item passports.

When Hitschler compares the costs of implementing their project to the savings they have already seen, it turns out that introducing a master data pool has already paid for itself, in less than 18 months. Hitschler will of course profit from their investment in this project even more as the number of their retail customers supplied with item master data through the master data pool increases.

For more information about GS1 Germany, visit their website at http://www.gs1-germany.de
For more information about Project PROZEUS, see http://www.prozeus.de
GS1 BarCodes are already present on certain imported products in Kenya, and are used wherever available. However, until just recently, many products on Kenyan supermarket shelves, both imported and locally-produced, did not have any barcodes at all. To help correct this problem, GS1 Kenya undertook a long-term measurement plan and shared results with Kenyan retailers.

For example, Nakumatt is a Kenyan supermarket chain with 26 stores and more than 3,000 employees. A GS1 Kenya-led study of the 2003/2004 Nakumatt product portfolio showed that for a total of over 54,000 products in stock, only 58% had inherent GS1 barcodes.

Nakumatt was creating bar code stickers in-house with auto-adhesive thermal labels for the products that arrived without barcodes. GS1 Kenya calculated the costs of computers, printers, labels, labour, overhead, and variable costs, for the quantity of products going through this retailer every month; it was a very significant figure. Furthermore, printing stickers delayed the products going to the shelves; there were considerable errors, with stickers often being put on the wrong products; some stickers faded and could not scan; some suppliers’ brand names were blocked by stickers and looked messy. It short: it was an unacceptable situation.

GS1 Kenya performed a similar study of check-out time at Uchumi supermarkets, another Kenya retail chain. It took on average a full 7 seconds to key in an item without a bar code manually, as compared to a mere 1 second to scan an item with a valid GS1 BarCode. They were able to demonstrate to the store’s executives that properly scannable barcodes clearly represent a tremendous potential to save time, move more customers through the checkout per hour, and improve the customer experience.

GS1 Kenya’s careful studies have led them to conclude that the annual cost of poor or absent scanning of barcodes at the point of sale is 85,000,000 Kenyan shillings (USA $ 1.1 million); while the potential annual supply chain savings to be gained from enabling end-to-end scanning is 1.45 trillion KES (USA $ 18.1 million).

And in part thanks to GS1 Kenya’s diligent efforts, Kenyan retailers have taken steps to reduce these unnecessary costs and in turn reap the benefits: the CEOs of both Uchumi and Nakumatt supermarkets (as well as a chain of bookshops) have sent out letters to their suppliers indicating their commitment to GS1 and their requirement that all products sold in their stores have proper, scannable GS1 BarCodes. The retailers are also imposing a fine for every product that arrives in stores without an inherent GS1 BarCode. As a result of these efforts, there is even now a national Kenyan policy to make retail and supply chains more efficient.

For more information about GS1 Kenya, visit their website at www.gs1kenya.org
For more information about GS1 BarCodes, visit http://www.gs1.org/barcodes

The potential annual savings from enabling end-to-end scanning is 1.45 trillion Kenyan shillings.
Pilot results were so impressive that EastPack proceeded to an immediate roll-out at all sites.

The results of an initial pilot were impressive. The accuracy rate for data capture exceeded 95% and the forklift-mounted cameras enabled pallets to be located to within 20cm of their exact positions. These results led to EastPack’s decision to proceed to full roll-out before the start of the next season – a very tight timeline of only a few months.

EastPack have now implemented the solution throughout their 49 coolstores, processing 80,000 pallets in a season. Data in the first season showed the contribution that the EPC/RFID solution has made to increased sales, cost savings, increased operational efficiency and more motivated workforce. EastPack also confirmed return on investment within their first EPC-enabled (2008) season.

The value of the solution lives in EastPack’s vastly improved ability to locate particular pallets in store, and to quickly retrieve them for export at optimum times and with minimum reshuffling of other pallets. Their management system already held data on all fruit received for packing; now it also holds real-time information on the location and status of that fruit by pallet. Data mining promises further optimisation, and there are also opportunities for wider EPC application in the entire New Zealand kiwifruit supply chain.

For more information about GS1 New Zealand, visit their website at www.gs1nz.org
For more information about GS1 EPCglobal, visit http://www.epcglobalinc.org
Deploying traceability for native producers

GS1 Peru

In the global world in which we work, traceability and best practices are key issues to developing value-added services and helping companies both large and small be more competitive. This is particularly true in Peru, which is signing free trade agreements with many economies around world, making competitiveness a key element to sales success. Peru is experiencing an export "boom": total exports increased more than 30% per year between 2001 and 2007.

The social and economic role of SMEs in Peru is very important; indeed, they represent 46% of GDP, 70% of employment and 98% of total enterprises. Yet, according to local statistics, small and medium sized Peruvian companies often have low productivity and suffer from information and technology gaps and infrastructure inequalities. This, in turn, leads to problems with competitiveness.

To help combat this problem, GS1 Peru strives to develop solutions adapted to SMEs.

For example, in the second half of 2007, GS1 Peru oversaw a project and provided technical assistance in Arequipa, a region in the southern portion of the country. The project benefitted an association of 615 aromatic herb producers who live and work some 3,000 to 4,000 meters above sea level, producing 300 tons of herbs such as thyme, rosemary, mint, oregano, and others for export to Europe.

GS1 Peru helped this group to identify the strengths, weaknesses, opportunities and threats behind implementing traceability best practices using global standards. GS1 Peru then helped establish a traceability process map for the aromatic herbs supply chain, including points of control, registries of information and responsibilities; as well as a set of traceability templates and guidelines for each point of their supply chain.

The main benefit was certainly the 80% time savings seen when retrieving upstream batch information. Furthermore, in 2008, the system passed a critical test with flying colours when a European client’s quality control laboratory identified a problem that caused the export process to be halted. Immediately, teams in Peru carried out their own analyses, testing all the processes along the exact path that the flagged batch had travelled, using the standardised traceability registries filled in at each point of the supply chain; they quickly ruled out the possibility of any local contamination. With this information, the client launched another analysis that came back negative: it turned out the source of contamination was their own quality control laboratory. This concrete business case boosted the sense of trust the client felt toward the producers: they recently renewed their commercial agreement through 2013.

GS1 Peru oversaw a similar traceability and logistics best practices project in 2008 in Piura, a region in the north of the country, with producers of organic coffee and brown sugar (called panela). This panela organic brown sugar process is, in fact, the first Peruvian traceability process to be granted the official GS1 Peru Global Traceability Conformance Seal.

For more information about GS1 Peru, visit their website at www.gs1pe.org
For more information about the GS1 Global Traceability Conformance programme, visit http://www.gs1.org/traceability
Mitchells & Butlers, a leading operator of pubs and pub restaurants in the UK, uses the GS1 UK Data Pool to exchange product information with its suppliers. It is currently working towards moving the whole business to a more automated and standardised way of receiving accurate product data from its suppliers with Global Data Synchronisation.

The company strongly believes that accurate product information throughout its systems and full compliance with GS1 standards are essential to achieve an efficient supply chain. Mitchells & Butlers has started its transition to GDS by putting into place various measures to ensure that it reaches its objectives, which include ensuring that its systems are fully integrated and able to maintain the flow of accurate product information throughout the business. Business processes such as ordering, invoicing and delivering products to its customers rely on accurate information because errors and reconciliations caused by mistakes can be inefficient and costly to businesses.

The food service operator is working hard to ensure that the business as a whole implements the GS1 System of standards and that all its product attributes are GDS compliant. It is also championing the product data needs of the food service industry into the GDS standards through its participation in GS1 UK’s data synchronisation group which influences the global standards development process.

As part of the transition process, Mitchells & Butlers will need to get its suppliers to adopt GS1 standards and provide the necessary guidance on their adoption. With the support of GS1 UK, its suppliers will be engaged and advised of any new requirements. The company is also working closely with some of its suppliers who are already involved in GDS to use their knowledge and experience of the transition process and share this within the food service sector.

Working with the GS1 UK data pool currently, the company has been able to identify errors received from its suppliers, for example, wrong product dimensions.

The company has identified 37.5% of errors in dimensional information received from its suppliers during the data pool’s verification process. This shows the importance of the move to GDS.

With a fully integrated system in place, Mitchells & Butlers will benefit from better visibility of the stock within its estate. There will also be fewer product information errors within the Company’s systems, which will improve the flow of accurate information throughout the business. For example, improved data quality will reduce the work required in invoice processing and reconciliation.

GDS will also eliminate the need for the company to build and maintain data translation tables, which are very expensive to operate. Currently, Mitchells & Butlers and its suppliers’ product codes and names have to be translated and mapped out to be able to run an automated ordering and stock control system. A standardised system will ensure that both the Company and its suppliers exchange information based on a unique product code or GS1 Global Trade Item Number (GTIN). Suppliers will also benefit from the adoption of GDS as their product data will only need to be entered into a single data pool once allowing them to exchange their data with other food service customers.

Increased speed to market and a more efficient supply chain are Mitchells & Butlers’ main drivers for moving towards GDS; benefits that the company expects to pass on to their customers.

For more information about GS1 UK, visit their website at www.gs1uk.org
For more information about the GS1 Global Data Synchronisation Network, visit www.gs1.org/gdsn
With the continuous support and guidance of GS1 UK, Wythenshawe Hospital have implemented a bar coding system using GS1 standards to uniquely identify, track and trace its trays containing surgical instruments. This system was implemented following the centralisation of decontamination services of five hospitals including Wythenshawe into one new decontamination facility run by Synergy Healthcare plc.

The hospital handles approximately 69,000 surgical operations every year with 85,000 surgical instrument trays used at its site. Once surgical instruments are checked and counted by the scrub nurse, they are placed onto a trolley on the used equipment corridor at the back of the operating theatre. The bar code identification label for each tray is on a clipboard on the trolley. Staffers collect the trays and scan the trolley into the hospital’s hub. They then scan each bar code label into the on-line track and trace system which records the contents of each trolley and that the instruments are ready for collection by Synergy staff.

Synergy has been contracted to service the hospital’s trolleys within 8 hours therefore it is important that the collection and delivery times are verified effectively to avoid any penalties imposed by Wythenshawe.

Once the trolley arrives at the Synergy facility, it is scanned to verify receipt and then unloaded. The trays and instruments are then unwrapped and scanned to check against the hospital’s tray content sheet sent with the trolley. Each tray is allotted to a washer and the bar code scanned as it goes through the process. After the washing process, the items are scanned again in the clean room. Each tray is then packed according to a complex prioritisation system that ensures that all items are processed and returned within the required turnaround times. After packing, the trays are scanned in and out of the autoclave to identify the machine cycle that the equipment is processed in. The decontaminated trays and instruments are issued to the hospital’s trolley and scanned for release to the customer. Since implementation, the hospital has already benefited from faster and easier traceability.

A Synergy driver takes the trolley to the hospital and scans it into the delivery hub to verify the delivery time. Once the Trust staff check and approve the trays, they deliver the equipment back to the theatres that use the specific tray and attach the bar code identification label to the patients notes and register should there need to be a recall of the items used on that patient and any previous or subsequent patients.

Thanks to GS1 standards, all trays are uniquely coded, helping to ensure that inventory is correctly returned to the right hospital and delivery/use point, for e.g. a specific theatre or ward. All trays and supplementary instruments have unique identifiers that include the hospital’s GS1 customer prefix. Used in conjunction with Synergy’s tracking system, this provides traceability throughout the cycle of use, decontamination, cleaning, assembly, sterilisation and delivery. Coding also enables the traceability of decontaminated instruments used on patients in the unlikely event of a recall procedure. Historical information on individual instruments can be built up and stored electronically.

Since implementation, the hospital has already benefited from faster and easier traceability: trays can be tracked back to ensure that they have gone through the full decontamination process, simply by checking the bar coded label appended on the patient record by the scrub nurse after the operation at the theatre.

For more information about GS1 UK, visit their website at www.gs1uk.org
For more information about using GS1 standards in the healthcare sector, visit www.gs1.org/healthcare
Do you want to have your own supply chain success story? Your local GS1 Member Organisation can help!

GS1 offers a full range of products and services, all built upon the foundation of the GS1 System of Standards and its GS1 Identification Keys, GS1 Communication Standards and GS1 Data Carriers.

GS1 also has a full range of solutions that combine a selection of GS1 Standards into packages that provide true business-focused relevance on topics such as traceability.

If your company needs a barcode number, or wants to set up a traceability program, or is wondering about the potential of RFID, or wishes to begin synchronising master data with partners, or is interested in any of the many other solutions and services made possible by GS1 standards, then simply contact your local GS1 Member Organisation.

We’re present in 108 countries around the globe. Find the contact details for the GS1 Member Organisation in your country on our website at www.gs1.org/contact