Unilever operates several dozen warehouse sites across Europe with a number of different logistics partners. In 2005, this global manufacturer of food, home care, and personal products identified an opportunity to improve the way it works with these partners, through the standardisation of processes, the establishment of electronic messaging and the consolidation of connectivity. DHL Supply Chain, the contract logistics arm of DHL, was one such partner.

The two companies worked together on what they named the Warehouse Communication Integration (WCI) project. WCI is a business process model based on common business processes and messages and connectivity standards. WCI was established as a pan-European effort, covering all Unilever product categories and focusing on DHL Supply Chain’s core warehouse management activities. Warehouse management is the receipt, storage and preparation of products for customer delivery on the basis of orders, as well as the control and disposal of damaged or obsolete stock.

The WCI standard’s objectives were to establish a limited set of 16 GS1 XML message-types that would be used to cover all the business requirements for warehousing for the Unilever business units involved, as well as to create a single point of connectivity between Unilever and DHL. Unilever and DHL also aimed to standardise best practice processes in the warehouses covered by the project.

Unilever and DHL jointly created strong central teams consisting of IT and business champions covering the United Kingdom, Spain, Belgium, Slovakia, Hungary, Ireland and Portugal. The WCI project became an enabler of the Unilever SAP Consolidation programme and was also linked with DHL’s Enterprise Systems Integration (ESI) developments, ensuring that the two partners were technically very well aligned from the start of the project.

By the end of 2008, WCI standards were deployed to DHL sites in UK, Spain, Hungary, Belgium and Slovakia, and standards will continue to be deployed for new business and new warehousing sites servicing the participating Unilever business units into 2010 and beyond. Connectivity was moved toward AS2 and Internet and away from VANs and resulted in significant cost benefits.

Use of GS1 eCom XML messages have significantly streamlined communication between Unilever and DHL
WCI makes use of a wide range of GS1 standards, including GS1 Identification Keys such as GTIN, GLN, and SSCC; GS1 BarCode standards such as GS1-128 for labeling; and a wide range of GS1 eCom XML messages. WCI covers all the processes that take place within the four walls of a warehouse, with a set of 16 standard interfaces based on GS1 eCom XML standards. The messaging includes processes in master data management for items and locations; inbound goods such as upfront notification of receipt, receipts confirmation; outbound goods such as instruction to dispatch, delivery, re-pack and dispatch confirmation; inventory control and management such as stock reconciliation, sampling, scrapping, (quarantine) status, re-palletisation, pallet de-topping and physical movements.

Deployment of the WCI standard has significantly streamlined communication between Unilever and DHL, speeding up the launch of new business activities and sites. The creation of a single point of connectivity has also improved the reliability of connectivity to levels well above what was achievable before WCI. Best practices identified in individual warehouses are now more easily transferred to other sites.

The standardisation delivered by the WCI standard has also allowed Unilever to roll out its SAP consolidation programme more quickly. Because it is based on the concept of “develop once, deploy anywhere,” another major benefit has been the reduction of support and maintenance costs. The level of efficiency gains realised by the project partners through the initial WCI rollout has led to the decision to deploy the standard to the remaining sites, and to all new sites.

During the project, the partners found that the then-available versions of the GS1 XML messages did not always cover all the requirements of the warehouse processes they were operating. In some cases, extensions to the standard GS1 eCom XML messages had to be created. Unilever and DHL are both actively engaged in GS1 Transport and Logistics User Group and in particular, in the eCom related developments for this sector. The Logistics Interoperability Model (LIM) documented what processes happen in the warehouse management and transportation, so that further developments of the GS1 eCom standards are based on the LIM. This development is ongoing now, as part of the Logistics eCom work group, and both Unilever and DHL are working to ensure that the learnings from the WCI project are incorporated into future releases of GS1 XML standards.

For more information about Unilever, visit www.unilever.com
For more information about DHL Supply Chain, visit www.dhl.com