



GS1 Mobile Com Group recommends barcodes for mobile applications to promote early development, piloting and standardisation

This position paper aims to give manufacturers, retailers and other existing users of the GS1 system guidance on what barcodes they should consider for mobile phone applications.

Because of the multitude of possible barcode formats available, many of them proprietary, the GS1 Mobile Com group recommends using only barcodes that meet the following criteria:

- Approved by ISO and therefore public domain status declared
- Approved by GS1
- Open standards (royalty free use, no patent exercised)
- Proven implementation (mobile or non-mobile)
- Can be read by a consumer-available mobile device

GS1 recommendations

As a consequence, the GS1 Mobile Com group recommends using only the following barcodes:

- GS1 EAN/UPC. The 1D barcode used on all millions of consumer products worldwide.
- GS1 DataMatrix. 2D barcode currently implemented in numerous sectors including automotive and healthcare direct part marking.
- Quick Response (QR) code. 2D barcode well-known in Japan and East Asia for mobile applications. Currently, QR code is not a GS1 standard. However since the GS1 carrier policy change in May 2008, it can be submitted to GS1 for approval.



A typical EAN-13 barcode



A typical GS1 DataMatrix barcode



A typical QR Code

The GS1 Mobile Com group also recommends that these barcodes support both GS1 identification keys (unique numbers to identify products, locations and more) and GS1 application identifiers to ensure backward and forward compatibility with other barcode application requirements.

Future perspectives

For the future, the GS1 Mobile Com group is working for GS1 DataBar (a higher capacity 1D barcode to be adopted by 1 January 2010) and Electronic Product Code (EPC) compliant Radio Frequency Identification (RFID) tags to be read by consumer-available mobile devices. The GS1 Mobile Com group has established a sub-group to work on a clear position relative to Near Field Communication (NFC).

Goal of this recommendation

The goal of this recommendation is to help companies innovate and test new applications for mobile commerce. Simplifying the options available to companies will stimulate growth in this area and clear a path towards more cost-effective mobile applications. Beyond the short-term, companies will be able to built interoperable and scalable systems and ensure consistent consumer experience across devices and markets. This position paper does not replace the GS1 standardisation process and the GS1 Mobile Com group is actively moving forward standardisation in this area.

Questions / comments / reactions?

Contact Joe Horwood at joe.horwood@gs1.org.

About GS1 Mobile Com

GS1 Mobile Com is an industry-wide initiative to enable businesses to give consumers access to product information via their mobile phones. The objective is to provide a simple way for consumers and businesses to interact based on an open infrastructure and open standards.

GS1 Mobile Com White Paper

Published in February 2008, "*Mobile Commerce – opportunities and challenges*" is a White Paper that seeks to demonstrate the reality of mobile commerce for businesses and consumers alike and the need for GS1 to contribute in a neutral way to establish relevant global standards for the benefit of all stakeholders. It covers the following areas:

- Mobile Commerce Overview: why mobile is changing the way business happens
- Business Applications: what use cases are possible with GS1 standards and how
- Technical Environment: building blocks for mobile commerce



The White Paper is available for download from www.gs1.org/mobile/.

Extended Packaging

The main project of GS1 Mobile Com for 2008 – 2009 is Extended Packaging - allowing consumers access additional information about products through their mobile phone. Extended Packaging was chosen from the six main business applications presented in the White Paper as being the simplest, most fundamental use case on which other applications (such as Mobile Couponing) can be built. The workgroup aims a piloting framework and guidelines on how to implement Extended Packaging.



To join the workgroup visit www.gs1.org/mobile/ep/.

GS1 Mobile Com Group

Aside from Extended Packaging, the Mobile Com group is working on the following activities:

- **ID & Data Carrier:** GS1 standards are used for mobile enabled 1D and 2D barcodes and for RFID
- **Handsets/Operators:** All handsets worldwide read GS1 barcodes and EPCglobal RFID tags
- **Information Pools / Providers / Hubs / Messaging:** GS1 Data Pools and messaging standards are leveraged to the maximum for product information
- **In-store / Point-of-sale (POS):** In-store services and POS systems are able to read GS1 barcodes and EPCglobal RFID tags from mobile phones
- **Payment:** Mobile payment providers are aware that GS1 standards exist and can be used
- **Consumer behaviour:** Get consumer insight to group
- **PR / external communication / education:** Communicate effectively about activities of group

Find out more and get involved!

If you would like more information or to join the current GS1 Mobile Com Group, go to <http://www.gs1.org/mobile/>.

About GS1

For the last 30 years, we at GS1 have dedicated ourselves to the design and implementation of global standards for use in the supply chain. GS1 standards provide a framework that allows products, services, and information about them to move efficiently and securely for the benefit of businesses and the improvement of people's lives, everyday, everywhere. Our standards ensure effective exchanges between companies, and act as basic guidelines that facilitate interoperability and provide structure to many industries.

GS1 standards 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. GS1 has offices in 108 countries and more than 2,000 people helping us achieve our vision. Our work is funded by the contributions of our users.

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, aeronautics, defence, chemicals, high tech, and still, of course, the retail supply chain.

Download the "What is GS1?" brochure from http://www.gs1.org/docs/what_is_gs1.pdf. For other information about GS1, go to www.gs1.org.