

**UNITED NATIONS
ECONOMIC COMMISSION FOR EUROPE**

**United Nations Centre for Trade Facilitation and
Electronic Business (UN/CEFACT)**

MOBILE BUSINESS

Developing Guiding Principles, measures and good practice for the adoption, implementation and operation of Mobile Business (mBusiness) to facilitate international trade.

Mobile Business is the ability to conduct business using a mobile device, such as a mobile telephone, a Personal Digital Assistant (PDA), a smartphone, dashtop mobile device or other emerging mobile equipment and information and communication technologies.

Mobile Business is defined as any trade transaction, domestic, regional or cross border, involving the transfer of ownership or rights to use goods and services, or fulfilling government requirements, which is initiated and completed by using mobile access to wireless communications services and computer-mediated networks with the help of a handheld electronic device.



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One of the barriers often identified as retarding the growth and development of international trade is the lack of infrastructure. Most often this deficiency is seen as insufficient or poorly maintained roads, or the shortage of port facilities, including terminals, secure warehouses or the provision of free zones. But another major barrier to trade is the lack of infrastructure for data communication.

This affects the small and medium-sized business sector (SME) disproportionately compared to large corporations that can invest in high-end technological solutions such as a company Intranet or dedicated satellite communication.

Electronic Business (often referred to as e-Business) has transformed the way large corporations conduct international trade. Companies have been able to re-engineer back office functions and production and supply chain activities to reduce costs, which enhances trading performance and increases profitability. E-business has helped corporations achieve paperless (or significantly less paper) information exchange with business partners and government authorities and agencies. E-business offers rich possibilities for trade facilitation.

A similar enabling tool is needed for the SME sector, especially in developing and transition economies. Cost-effective and easy-to-use technology will offer SMEs and micro enterprises the opportunity to enter the global marketplace and help them contribute to economic development and wealth creation.

Mobile phones have already gone well beyond being an effective communications tool to being an alternative platform for voice, email, text, entertainment, payments, banking, and even personal navigation. Our needs, including those of business, are merging onto a common platform.

The mBusiness challenge

- To promote open and transparent links between paper, electronic documents and mobile devices
- Create clarity between business and government as to which technologies to support
- Overcome the lack of international standards
- Create compatibility with existing legal and regulatory environments
- Create simple, easy to use and affordable tools spanning from low-end applications to advanced technologies

There are a number of challenges for introducing mBusiness and ensuring it reaches a critical mass of usage. First, telecommunications manufacturers, providers and vendors have to provide mobile devices and applications that are reliable. Clearly this should be driven by market demand to guarantee customer-focused services. Telecommunications and software companies should be creative in anticipating and then fulfilling the needs of their customers, especially where the end-user is a government authority or other regulatory agency. Equally, providers and vendors should be imaginative and innovative in identifying gaps in the market and develop new tools, techniques and applications to meet the many, often unforeseen, drivers of customer and end-user demand. Last, but not least, mobile software developers should take into account the specific needs of the mobile interface to services.

Perhaps the biggest challenge, though, is to ensure an environment that offers opportunities to use the technology for international trade transactions and allows equality of treatment within the cross-border trading process. The task of developing such an environment and creating an appropriate mBusiness friendly framework necessarily falls to government and its institutions. Also, other organizations (e.g., financial institutions, payment networks) can play an important role.

Drivers for mBusiness

- Desire for a more efficient, effective and secure supply chain
- Need of business for speedy, predictable and cost effective cross-border trade
- Demands of government for better trade regulation compliance
- International co-operation on standards and best practice including simplification, harmonization and interoperability
- Promotion of the Single Window environment for international trade
- Need for easy access to services for traders independent of time and place

To show commitment to mBusiness, governments should consider instituting policies and procedures that:

- Define and promote the use of mBusiness
- Develop legislative and regulatory frameworks that support mBusiness technologies
- Guarantee technological neutrality
- Ensure that their authorities and agencies put in place administrative procedures that accept and process mBusiness outputs
- Give equality of treatment to mBusiness applications and outputs when meeting government requirements and legal obligations. mBusiness should not be treated differently than other methods of official presentation (paper documents) and transmission (EDIFACT, XML schema) of trade-related data exchange
- Guarantee the security of mBusiness outputs sent to government institutions.

The commitment to mBusiness and the development of an enabling environment requires major changes to the way government interacts with the SME and micro-enterprise sector. The changes could include institutional re-engineering and re-deploying resources to facilitate the use and acceptance of mBusiness. Although often unwelcome and resisted, change to institutions and the traditional methods of operation can drive a modernisation programme for processes and procedures. And this can lead to significant benefits for government through correct revenue yields, improved official control and greater trader compliance.

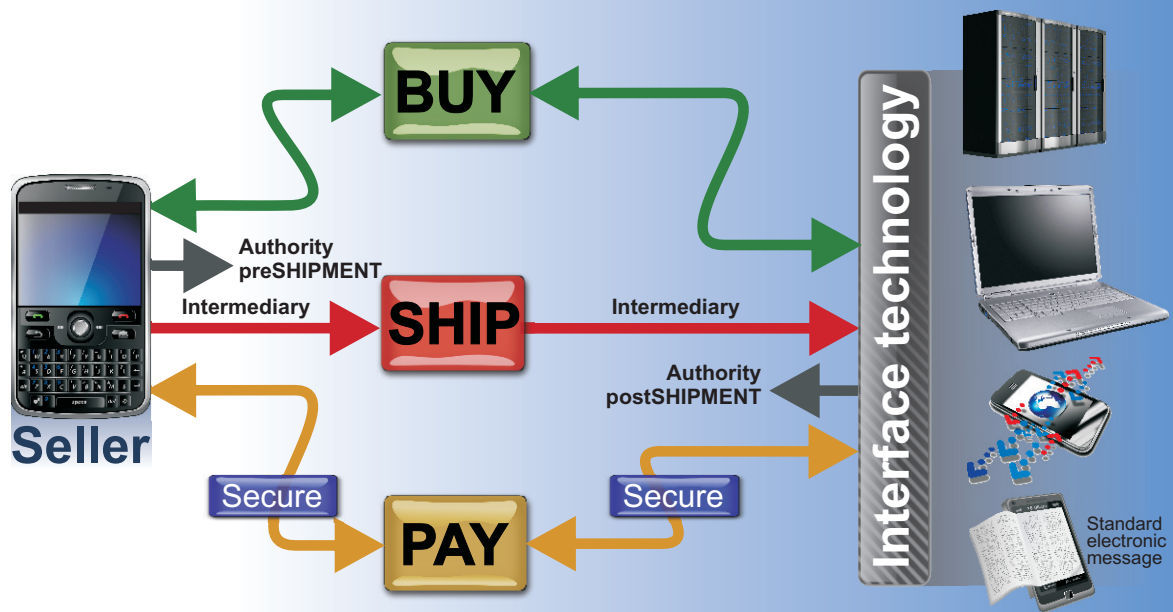
To give the trading community confidence in the use of mBusiness and stimulate active participation, government would need to demonstrate that legislation, regulations and administrative procedures can handle outputs from mobile communication devices. Government would need to ensure the security and processing of these outputs through a framework that addresses the issues of identification and authorisation of users, integrity of the message, recording, sharing, archiving and retrieval of data, and the protection of commercially confidential or sensitive information. Equally, and in conjunction with telecommunication providers and vendors, government would need to tackle the issues of adequate network coverage and accessibility.

Impacts	Benefits
<ul style="list-style-type: none"> ■ Cost of mBusiness applications and interfaces ■ Changes to business processes: <ul style="list-style-type: none"> ● re-engineering sales and order processing management systems ● rework goods delivery and forwarding agreements ■ Message creation and processing ■ Could be need for authorisation or registration ■ Liability and accountability issues, especially for intermediaries ■ Addition of non-commercial data items for official requirements 	<ul style="list-style-type: none"> ■ Mobile links to trading partners, trade services providers and government authorities ■ Commercial message provides the basic data as a sub-set ■ Single standard messaging with use of internet for message transmission ■ Paperless (less paper) trading ■ Opportunities to create integrated systems (if business needs demands) ■ Improved customer service, enhanced trade performance, increased competitiveness and profitability

For most of us, a mobile phone is no longer simply a fashion accessory or a new gadget but has become an essential communication tool. Citizens use mobile communication to maintain contact with family and friends, to access information and to purchase goods and services easily and quickly on an individual consumer level. It is not surprising that many people who own and manage SMEs and micro enterprises now want to extend the use of mobile phones and other handheld devices into their professional and business operations.

Mobile commerce could be in the process of making the leap from relatively small B2C (business to consumer) transactions to B2B (business to business) domestic and cross-border trade with the added benefit of a B2G (business to government) applications.

Possible business model for mBusiness



mBusiness could result in a much simpler business and trading contract where the contracting parties agree on functional equivalence with a traditional (paper-based) agreement. The terms and conditions could address the issues of ensuring the informed assent of the contracting parties through the early exchange of standard, stable 'master data' supplemented by information for the specific transactions. The 'mBusiness lite' business contract could also cover the later recording of data on another (agreed) medium, use of trusted third parties and the right of withdrawal from a particular trade transaction or the overarching contract.

Mobile devices, spreading faster than any other information and communications technology, have the capacity to change the livelihood of the poorest people in developing and transition economies. Government must recognise this and design policy initiatives that respond to the new communications environment to ensure that the benefits reach the broadest number possible in the most effective way.

Mobile devices have the potential to support a new business sector's form, the micro enterprise, offering employment and wealth creation to people with limited education or skills and few resources, especially financial. The key is **affordability** and a responsive government framework for adoption and operation.

Government policies can greatly help create the appropriate environment to ensure the benefits from mBusiness are available to the user, as well as to institutions and authorities. Conversely official actions can severely retard the advance of the technology and harm the market penetration of a new business-enabling tool.

To ensure wholehearted support for mBusiness, government should:

- Analyse the usage of mobile devices without being intrusive or creating the suspicion of conducting surveillance
- Appreciate the dynamic of the new ICT technology environment and make every effort to be proactive in supporting the changes that the spread of mobile Business would offer the business community
- Examine existing (and planned) legislation on electronic Business to identify cases where laws should be repealed or amended or enacted
- Understand the level of knowledge and skills needed to conduct mBusiness and explore training opportunities with private-sector providers to raise awareness and educate users
- Work closely with mobile software developers to ensure that mBusiness applications for international trade transactions are available and affordable within the financial and technical resources of small businesses, especially micro enterprises
- Consider allocating funding ('seed' financing) to prototype projects and 'start-up' mBusiness communities to encourage greater penetration of the market
- In conjunction with existing users make a checklist of the conditions required to meet the business needs of local and national mBusiness trade transactions
- Consider the implications of mBusiness in the wider field of subregional, regional and international trade
- Introduce innovative and imaginative strategies that balance encouraging the increased use of mBusiness with the need to maintain revenue yields and proportionate official controls on international trade transactions.

Regarding the final, suggested strategy, government should also introduce risk management techniques. After a suitable period, government should then examine transaction flows and data, re-assess the risk and review the deployment of official resources, and the results of enforcement actions. This approach will ensure the risk-management strategy continues to meet government requirements for control and, at the same time, recognises the business needs of legitimate traders.

Mobile communication is expected to grow exponentially very soon. As technology advances, with better production methods, improved services and new applications, mobile communication should become cheaper to access, easier to use and a more efficient and effective enabling tool for conducting international trade transactions.

Case Study

Gateway Sweden is a joint project between Swedish and Norwegian Customs, mobile-phone service providers and pilot users from the business community. It is "location-aware", using the geographic dimension of mobile-phone network "cells", and offers a SMS Customs declaration service when entering or leaving phone system "cells".

The process is simple. A Stairway® operator's truck only requires a virtual handshake through the driver's mobile phone when crossing the border to enable a **non-stop procedure**. At the Customs check-point the only check is to ensure the shipment is carried by a Stairway®-certified operator. Identifying low-risk operators is the foundation of The Stairway® where supply-chain stakeholders can request different service levels and certified operators enjoy highly simplified Customs-procedures.

Benefits: **fast and easy border-crossing with lower costs, improved transparency and greater efficiency**, enhanced protection of Swedish society and a stimulus to Swedish foreign trade. *Described as applied in 2005.*

Now the time is right to gauge the need for developing and disseminating a set of Guiding Principles and Guidelines for adopting and operating mBusiness. With its history of developing Recommendations and guides on good practice, UNECE, through its Centre for Trade Facilitation and Electronic Business (UN/CEFACT), is considering the possibility of preparing guidance on the use of mBusiness for trade facilitation. Therefore, UN/CEFACT would welcome input and suggestions on the scope of any guidance and the issues to be tackled in the content.

Note:

The description of mBusiness in this publication is an attempt to help create a general understanding of the term and its components. It is not an attempt to provide a definitive definition. Work on m-Business is also conducted by ISO under TC 68 and TC 154, the European Commission and the GSM Association.

For further information on Trade Facilitation and Electronic Business, or comments on this material:

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Prepared by the International Trade Procedures Domain of UN/CEFACT, under the aegis of the United Nations Economic Commission for Europe.