The Mobile Services Initiative

Introduction

Through the GSM Association Mobile Services (M-Services) Initiative, mobile operators aim to speak with one voice regarding the service capabilities they require in terminals. The operators believe they can thereby encourage availability of a consistent set of features in terminals and boost creation of user-friendly mobile internet services.

Northstream's verdict is that this is a very positive and necessary initiative. The intentions are commendable, as is the collective action of operators. Continued effort is essential.

Northstream believes that actions taken both collectively and individually by industry players (network operators, terminal vendors, application providers and server vendors) can secure the aims for M-Services.

Northstream will continue to follow the evolution of the M-Services Initiative.

Contents

- M-Services Outline
- Background
- Industry declarations
- Northstream commentary
 - Need for clarity
 - Interoperability /compliance
 - Openwave and the Mobile Services Initiative
 - Timescales are tight
 - Technology vs Business
- The verdict
- Next steps

About Northstream:

Northstream offers strategies and intelligence to the wireless industry. We cover all aspects of wireless: R&D, technology and business planning, implementation and end user aspects. Northstream has assembled a multinational team with some of the world's best experts and analysts on wireless communication business and technology. Within Northstream you will find a dedicated research team, which follows and analyses the developments in the wireless industry.

In our work as strategic advisors, we work with several of the world's leading operators and system suppliers, e.g. Vodafone, AT&T Wireless Services, NTT DoCoMo, SmarTone, Sonera, Mitsubishi, Ericsson, Microsoft, Nokia and Siemens.

For further details: www.northstream.se

M-Services Outline

Launched June 2001 and compiled by leading operator members of the GSM Association the **Mobile Services Initiative** provides "feature guidelines for mobile phones that aim to help ensure that operators could depend on a certain set of consistent features and services in mobile handsets."¹

This intends to "allow the operators and content providers to focus on building globally available compelling applications that will excite users and create opportunities for new revenue streams based on a common application framework."²

The guidelines cover these feature areas³:

- Graphical User interface (GUI)
- Framework for download of content
- Multimedia messaging
- Human Machine Interface (HMI) recommendations

Existing standards/technologies are referenced. These include EMS, MMS, WAP and SyncML. Openwave's solutions for the GUI (WML extensions) and download framework ('Download Fun') are referred to as possible ways of implementing the features.

Terminal support for each feature is rated on a scale of importance as 'mandatory', 'recommended' or 'optional'.

There are two timescales, October 2001 and June 2002. At each point, a particular set of capabilities is specified. A feature's rating may change over time e.g. MMS is 'recommended' in October 2001 and upgraded to 'mandatory' in June 2002.

By gathering operator requirements, and speaking as one, the GSM Association operators aim to promote a consistent set of technologies that can be used by operators and application developers who are creating services. In addition they anticipate a range of compatible terminals. The ultimate goal is availability of successful consumer services.

Background

The seed of M-Services was sown by operators within the GSM Association. It was based on their understanding of the reasons behind the success of imode in Japan. They aimed to replicate this success in the GSM world that is still recovering from the 'WAP backlash'. The GSM Association is a wireless industry representative body, consisting of over 500 organisations including network operators and other industry players. The GSM Association created a task force to work on the development of the guidelines. These were subsequently approved by the global membership and therefore became an official document of the GSMA. The initiative was launched in June 2001, on the basis of the document – M-Services Guidelines.

 $^{^1}$ GSM Association Press Release, June 13 2001 "GSM Association acts to support mobile services"

http://www.gsmworld.com/news/press_2001/press_releases_24.html ² ibid.

³ "GSM Association M-Services Guidelines" http://www.gsmworld.com/ presentations/m_services/aa35.doc

Industry declarations

At the M-Services initiative launch the GSM Association and Openwave referred to the following industry players as 'supportive' of the initiative:

Terminal vendors: Alcatel, Ericsson, Motorola, Nokia, Sagem, Samsung and Siemens.

Network operators: Telecom Italia Mobile - Italy, France Telecom Mobiles, Deutsche Telekom – Germany, Telefónica Móviles - Spain, BT Wireless – United Kingdom, M1 – Singapore, Vodafone Group.

In addition, Openwave states that "any terminal based on Openwave Mobile Browser WAP Edition 5.0 with the GUI and Download Fun will meet the vast majority of M-Services requirements". Alcatel, Sagem, Samsung, Siemens and Telit will commercially ship M-Services phones using the Openwave Mobile Browser in 2001.

It remains to be seen if such declared support will translate to implementation. Since June 2001, there has been little public movement, from the GSM Association, operators or terminal vendors regarding M-Services.

Northstream Commentary

Need for clarity

The M-Services guidelines document refers to standards from many different standardisation and industry organisations. These include the WAP Forum, Internet Mail Consortium, 3GPP and the Internet Engineering Task Force. Northstream has reviewed these guidelines and notes that in some cases it is unclear which version of the standard is referred to. Northstream believes such items need to be clarified in order for the application development community and terminal vendors to understand what exactly is involved in complying with the M-Services Guidelines.

Some human machine interface (HMI) suggestions, e.g. menu structure and keys, are listed in an 'informative' Appendix to the M-Services document. It's not fully clear how they relate to the feature list describing each feature as 'mandatory', 'recommended' or 'optional'. This has led to confusion in the industry as to whether compliance with these is needed for M-Services compliance.

In addition, such requirements could prove counterproductive, because

- terminal vendors as a whole would anyway be unable to meet such requirements by October 2001, and even meeting the June 2002 deadline will prove difficult.
- the integrity of their own user interface is key to successful branding and differentiation of terminal products.

Whether due to lack of understanding, or to provoke action from vendors, such requirements may not prove to be constructive input to operator/vendor dialogue.

It appears that the guidelines were developed in a very short timescale, between March and May 2001. It would now be appropriate to release an updated version, clarifying some of these issues.

Mobile Services Initiative

What about interoperability/compliance?

Northstream believes that lack of interoperability is a key issue that needs to be addressed if M-Services is to be successful. Because individual features are marked as 'mandatory', 'optional' or 'recommended' there is potential for implementation of a wide variety of different feature combinations. This could then lead to interoperability issues, as different implementations (sets of features) try to work together, and fail.

The number of feature set variations could be minimised by categorising features into, for example three groups. Operators, application providers and server vendors, who wished to know exactly what features would be available in terminals could then use/refer to these groups. In addition such groupings could potentially be used when advising customers on what mobile to buy. This method would have the advantage of providing both consistent feature sets and flexibility of implementation.

This is a proven way to communicate terminal capabilities. NTT DoCoMo mark i-mode terminals that support a set of features with a number series. Content providers can then develop and sell services compliant with that series and it is used to communicate to customers also. By modifying this i-mode practice to the M-Services initiative, operators could enhance the ability of the initiative to generate consistent, interoperating terminals and services. However such modification would need to be implemented in a way that terminal vendors don't feel impacts adversely on their terminal brand.

There is no specific initiative addressing M-Services testing and interoperability at this stage. (Openwave provide support to those implementing their solutions).

The industry should work actively to avoid interoperability problems similar to those it faced on introduction of WAP. Such problems previously played a significant part in the subsequent user and media 'WAP backlash'.

In addition, without a concerted initiative to counter interoperability issues it is unclear to the industry what can and cannot be called 'M-Services compliant'.

Openwave and the Mobile Services Initiative

Openwave was prominent at the June 2001 launch of the initiative and provides proprietary implementations of some features outlined in the M-Services guidelines. Industry players perceive that the GSM Association has afforded prominence to one vendor, which is an unexpected development. This perception has sparked widespread reaction in the industry ranging from very positive to quite negative.

Timescales are tight

Northstream believes it is unlikely that all elements will be in place in time to make M-Services compatible applications, services and terminals available for the Christmas 2001 market across Europe. By not effectively including these players in the decision process unrealistic timescales were defined.

Some terminal vendors believe their closer involvement would have benefited the initiative. Northstream observes that closer liaison with terminal vendors would be beneficial for future development.

Mobile Services Initiative

Technology versus business focus

Northstream believes M-Services is a necessary, if insufficient step towards successful service offerings. In addition operators individually need to move the discussion beyond focusing simply on technological aspects, essential as that is, to also encompassing strategies to effectively and profitably use the technology to create attractive services. It is also important that realistic business models are made available for content developers and application providers.

The verdict: "Great intentions - more work needed"

Northstream believes the M-Services Initiative is a very positive and necessary development.

However we believe that elements such as those highlighted above could result in inconsistent sets of features in terminals – the very problem that the initiative aims to address. If that is to be avoided, and the original aim of the initiative is to be achieved, action must be taken collectively by the operators in the GSM Association, in their ongoing work with this initiative. Northstream encourages the operators collectively to:

- Stay at the helm of this work. One public push is not enough. Continuous effort is needed if the industry as a whole is to be won over to the initiative.
- Speed up choice of technologies. Industry players cannot understand why, for instance WAP 1.2.1 and SyncML 1.0 are referred to, because just weeks later new versions (WAP 2.0 and SyncML 1.0.1) were released.
- Narrow the variety of implementations/interpretations of standards and prioritise between features to be implemented, so there is less room for misinterpretation of the guidelines.
- Clarify interoperability plans. This will resolve industry confusion as to what 'M-Services compliance' actually entails. Most importantly it will help ensure a successful consumer experience.
- Understand motivations of terminal vendors and application providers. Get involved at a stage in the product development process that is early enough to influence and advise. Work with them to maximise likelihood of success for the initiative.

Next steps

In addition to the steps that can be taken collectively, each player should identify which aspects affect them most and exploit them if the industry is to reap full benefit from this initiative.

Operators

- Remember that the M-Services initiative, though important, is not enough to ensure creation of successful services. Focus on using these technologies to create attractive, revenue generating services.
- Realise that for innovative services and content, you need a thriving content community. Encourage this by fostering realistic business models.

Mobile Services Initiative

• Participate in GSMA M-Services discussions. This will help you to stay informed, to understand how your counterparts are working and to influence future development.

Terminal Vendors

- Realise the advantages that lie in the operator community collectively stating their requirements.
- Get involved! Listen to operator concerns and state realistic timeplans.
- Vendors should aim to limit the variety of special implementations for different operators. Agree internally on a fixed/limited way of implementing M-Services, and use that as a basis for case by case negotiation with operators. This tactic could limit variation and resulting interoperability problems. It would also help manufacturers and operators get reliable M-Services terminals on the market.

Application Developers

- It's good that operators are acting collectively in this way. It could mean that you can take advantage by focusing your resources on the features outlined in M-Services.
- Push for business models that bring revenue to operators and application developers. Don't wait for them - create them!
- Understand that there is no guarantee that an 'M-Services' terminal supports all features in the guidelines. When planning your products establish that the features you require to support your applications will be on the market.

Server Vendors

- M-Services state that WAP 2.0 should be supported by June 2002. Understand the implications of WAP 2.0 on your role.
- Work to ensure interoperability issues don't stunt the growth of this initiative.

Glossary

3GPP:	3 rd Generation Partnership Project
EMS:	Enhanced Messaging Service – 3GPP standard
GSMA:	GSM Association
GUI:	graphical user interface
HMI /MMI:	Human/man machine interface
MMS:	Multimedia Messaging Service –3GPP standard
SyncML:	open synchronization protocol
WAP:	Wireless Application Protocol

Contact:

Northstream has studied all aspects of the **Mobile Services Initiative**. Please contact us if you would like to find out more about this or about our company and the services we provide.

E-mail us at <u>info@northstream.se</u> or call our local offices at +46 8 564 84 800 (SE) or +33 4 9723 2450 (FR) or +81 3 3560 2401 (JP) or +852 2168 0858 (HK) or +46 70 232 9894 (UK)