

# A CASE AGAINST THE MOVING FROM SMS TO MMS

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WILL THE MULTICOLORED ANIMATED  
PICTURE MESSAGES OF MMS EVER  
COMPLETELY REPLACE THE 160 TEXT  
CHARACTERS OF SMS?

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# MOVING FROM SMS TO MMS

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## ABSTRACT

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The Short Message Service (SMS) has become the most widely used person-to-person messaging medium throughout the GSM world. It has proven to be an extremely successful paradigm and has shown itself useful in server-to person and server-to-server applications found in information services and vehicle tracking. The “instant” culture surrounding SMS has been an unexpected surprise, its popularity especially among young mobile phone users, who often send more than 100 short messages per month; has made SMS a real marketing contender. Successful as SMS is, it risks being dethroned by a new messaging service known as MMS (Multimedia Message service). MMS is a hot topic at present and has been hyped in and out of the mobile industry as the next phase in mobile messaging technology. MMS However suffers from many faults and design issues which makes the move from SMS to MMS in my opinion a potential liability. This report highlights a case against moving from the well established messaging service SMS to the much publicized and hype driven messaging service MMS.

Will the multicolored animated picture messages of MMS ever completely replace the 160 text characters of SMS? In my opinion NO, in this report the case will be put forward why.

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## INTRODUCTION

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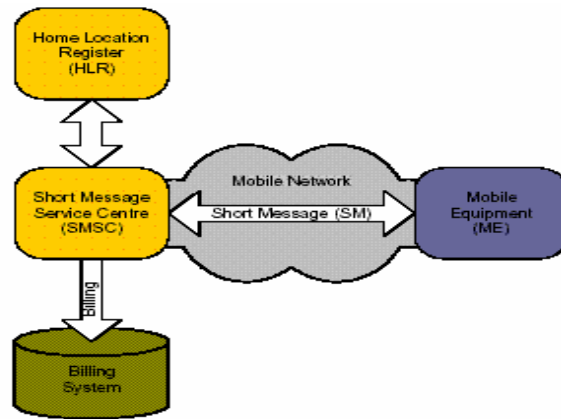
Today, there are several forms of mobile messaging available to consumers: instant messaging, SMS (Short Messaging Service) messaging, EMS (Enhanced Messaging Service) messaging, MMS (Multimedia Messaging service) messaging and Smart messaging, to name a few. Of these, SMS is currently the king of communication in many parts of the world.

SMS (Short Message Service) is the ability to send and receive text messages to and from mobile telephones comprising of words or numbers or an alphanumeric combination.<sup>1</sup> SMS is provisioned using a Short Message Service Centre (SMSC) that acts as a store and forward mechanism for Short Messages. Short Messages are sent via a signalling channel of an associated mobile network. The SMSC uses the network operator’s Home Location Register (HLR) to locate Mobile Equipment on the network, and when a Short Message has been

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<sup>1</sup> <http://www.mobileSMS.com>

delivered, details of billing are sent to the Billing System. Fig 1.0 illustrates the SMS architecture.<sup>2</sup>



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Fig 1.0 SMS Architecture

As a standard created by GSM the SMS short message systems allows up to 160 characters in length when Latin alphabets are used, and 70 characters in length when non-Latin alphabets such as Arabic and Chinese are used; although simple, it has proven to be very successful.

Over the years the SMS market has flourished and now more than 15 billion SMS messages are sent worldwide each month. SMS has now emerged as an “instant” culture, its demand and popularity is so high, vendors have incorporated new features into their mobile phones to help facilitate its use. Features such as Predictive text, which attempts to anticipate which word a user is trying to generate, an “ABC” button which allows easy switching between numbers and letters and a Vibrating alert for incoming messages, are all direct responses to SMS’s shocking success.

At present nearly all GSM mobile telephones, are able to send and receive short messages (known as SMS MT: Mobile Terminate) with exception to mobile phones purchased before 1990. Today SMS Messaging is so prominent and dominant that it is becoming the most natural area of personal communication in the world. The user emphasis is shifting and the concept of mobile communication is rapidly changing, it is no longer viewed as a talk easy world, it is now visually becoming a text easy world.

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<sup>2</sup> [www.nextmessaging.com](http://www.nextmessaging.com)

<sup>3</sup> [www.mobiledvelopers.com](http://www.mobiledvelopers.com)

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## THE NEW CHALLENGER

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Despite however its overwhelming success some critics have said that messaging is evolving beyond the standard plain text achieved by SMS messaged to a new phase of multimedia messages

They have argued that SMS (Short Message Service) is a rudimentary, limited interface media which can no longer contain the consumers need for self expression. As a result a new messaging service is being prompted as the successor to SMS; this messaging service is called MMS (Multimedia Messaging Service) and has been labeled as the next big thing.

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## WHAT IS MMS?

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MMS is a messaging service which allows a user with an MMS enabled mobile phone to send and receive visually enhanced messages using animated pictures, photographic images, voice sound clips and video clips.

Developed by the WAP forum (Wireless Application Protocol forum) and the Third Generation Partnership Project (3GPP) MMS is being cited as the next key application within the wireless messaging business; much hype surrounds the potential move from the current standard SMS to the current favorite MMS as many benefits from such a transition have been acknowledged, benefits such as the ability to send messages from mobile to email and email to mobile in addition to mobile to mobile messaging, the ability to create, send and forward image messages in addition to the standard SMS text messages, also the ability to send audio and video clips and as an option for personalizing messages and electronic postcards all these plus more have been seen as reasons in favour for a move to MMS from SMS. However as seen with any new technology with the good usually comes the bad with the many potential benefits comes the many potential risks and problems, these risks and problems in my opinion act as potential barriers against any move from SMS to MMS.

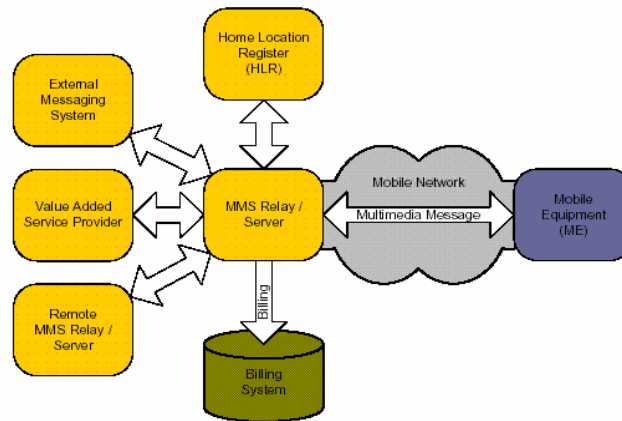
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## PROBLEMS WITH THE TRANSITION

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One of the documented problems associated with the over anticipated move from SMS to MMS is the issue of handset vendors. As handset vendors push to complete MMS solutions there is likely to be an amount of variation between vendors when interpreting technical specifications, although leading vendors have signed an agreement to ensure interoperability in reality they will be focusing on their own offerings. If users with mobile devices from different manufacturers cannot send messages to each other or network

operators discover that mobile devices will not communicate correctly with their MMS service Centers then the transition from SMS to MMS will be a complete disaster. Another problem also related to the MMS structure is to do with the issue of service centers, in the same way as SMS requires a Service Centre to store and forward short messages, MMS requires a Service Centre to manage the flow of multimedia messages the complete architecture can be viewed in fig 1.1



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MMS architecture Fig 1.1

Architecture problems could arise between service centers, at present the only guarantee is that a vendor's own MMS Client will communicate with the vendor's own Service Centre, Service Centers may not communication with each other and MMS Clients and Service Centers may not be interoperable if this happens there will be major problems when different server centers and clients need to communicate.

Another issue surrounding handsets and handset vendors is the lack of handset penetration, and the lack of MMS enabled handsets available. At present, the average user replaces his/her handset on a timescale of between 12 months and 2 years this timescale is likely to increase as the cost of handsets increases to facilitate the new MMS service, this increase in cost will act as a potential barrier in adopting any new handset technology as consumers will have to pay out more and more money for each new service. The other issue is the current lack of MMS enabled handsets available on the market, there are only a few giving potential users a limited amount of choice; this brings to mind another problem. Although MMS is actively being promoted as the messaging standard of the future it is in fact not a full standard at present and has not been widely adopted like SMS has this causes a problem for potential users, a user will not consider whether or not someone has a particular

<sup>4</sup> [www.mobileddevelopers.com](http://www.mobileddevelopers.com)

MMS enabled terminal, they will simply adopt the lowest common denominator and assume the person they are sending the MMS enhanced message will receive and be able read and view the message. This causes a problem in itself having a MMS enabled phone does not hold well if no one else is able to receive your enhanced messages. Another problem, is to do with the mobile industries perceptive of what the consumer really wants; the whole telecom industry suffers from an obsession with technology, by adding new technology all consumer problems will be solved, this is the line of thought used in many situations. However this does not always equal what the consumer wants or requires. The telecom industry is neither market focused nor market led and the mass adoption of SMS surprised the complete industry for exactly this reason - SMS only offers the ability to send a limited amount of plain text in a technology obsessed environment the telecom industry could not envision its appeal, the market thought differently. At present the industry is now obsessed with MMS, the risk is that the industry has again missed what the market wants now and will again be taken by surprise. A move to mms is a fatal mistake as this may not be what the consumer really wants.

Another issue facing the move from SMS to MMS is the potential disappointment awaiting consumers, with all the current talk surrounding MMS this eagerly awaited technology runs the risk of disappointing the market. If a user is promised the ability to have pictures on their device, they may be expecting full colour with large jpeg formatted images, if however the device is only capable of 256 colour 100x100 images they will be disappointed and hence fell negatively toward the overall technology.

The mobile industry for some time has suffered from the tendency to over promote a technology or service. Recent examples include the user experience of WAP that was promoted as being the Internet on a phone and the bandwidth expected from GPRS (General Packet Radio Service); in my opinion MMS suffers from the same syndrome. With this in mind consumers will increasingly be wary of the MMS technology.

These are just some of the issues and problems which are in my opinion of great concern when discussing the potential move from SMS to MMS these problems and design faults help to reinforce the case against the transition; it has been shown that although there are many likely benefits to be met from a potential move there are also many pitfalls which act as a strong deterrent. Although this report is not designed to be an exhaust on the subject, it has highlighted some interesting points which need to be investigated further.

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## CONCLUSION

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So in conclusion there is no doubt in anybody's mind that the market for Mobile messaging is huge and there is no doubt that the market will continue to grow through the coming years; the only doubt is whether it will still be driven by the plain text of SMS, or be over taken by the multimedia phase of MMS. This report has attempted to show that although SMS is rudimentary simple by nature it is extremely effective and conventional by design. SMS has already proven its strengths it serves as the most popular real and profitable data service in the market place today. The strengths found in SMS through its simplicity have shown the underlining faults and problems associated with much published MMS. Presented as the future of mobile messaging and the next big thing MMS suffers from many problems which clearly outweigh its potential benefits a victim of the hype syndrome MMS is nothing more than a passing fad a "white" elephant. The old phrase "if it isn't broke why fix it" comes to mind, SMS is here to stay the fact that the growth of SMS surprised the industry serves to further illustrate the difficulty of forecasting the future as SMS continues to flourish MMS will simply fall by the wayside. Industry does not dictate which application will be the killer, we do.

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## EVALUATION

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In the process of conducting this report extensive research was carried out, this included analysing various articles, journals and white papers from the web. My main source of information came from using Internet search engines such as *Yahoo*, *Lycos* and *Google*. I found the Google search engine to be the best source for information, however in general many company sites presented biased views e.g. towards a move from SMS to MMS and general white papers, by only presenting the advantages of these using MMS. I completed the report and attempted to build a case for not moving to MMS from SMS based on the research I undertook; I feel I managed to portray some of the potential pitfalls and show why moving from SMS to MMS would cause many problems.



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## REFERENCES

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