mma
mobile marketing
association

Mobile Advertising Guidelines
October 2008

1.0 Overview

The MMA's *Mobile Advertising Guidelines* provide global formats, guidelines and best practices necessary to implement mobile advertising initiatives in a variety of mobile media channels, including Web, messaging, applications and video. The guidelines are intended to promote the development of advertising on mobile phones by (i) reducing the amount of creative effort required for a mobile advertising campaign, (ii) providing an effective and consistent experience on the majority of mobile phones worldwide and (iii) providing an engaging consumer experience.

The MMA's *Mobile Advertising Overview* provides an overview of the mobile media channels available to advertisers today, as well as the benefits of and considerations for optimizing campaign effectiveness and strengthening consumer satisfaction. The Mobile Advertising Overview can be located on the MMA Website at http://www.mmaglobal.com/mobileadoverview.pdf.

The MMA guidelines are the result of ongoing collaboration between MMA member companies and MMA Mobile Advertising Committees in the Asia Pacific (APAC), Europe, Latin America (LATAM), Middle East & Africa (EMEA), and North America (NA) regions. Committee members are representative of all parties in the mobile marketing ecosystem, including handset manufacturers, operators, content providers, agencies, brands and technology enablers.

The target audience for these guidelines is all companies and individuals involved in the commissioning, creation, distribution and hosting of mobile advertising. The MMA *Mobile Advertising Guidelines* present a baseline whose widespread adoption will accelerate market development and ensure consumer satisfaction.

2.0 Mobile Web

The MMA's *Mobile Advertising Guidelines* provide recommendations for the ad units broadly used in mobile advertising. This section focuses on the advertising units currently used in the Mobile Web. The guidelines provide recommendations for graphical banner advertising and text links, which are currently the most prevalent form of advertising on the Mobile Web.

The Mobile Web features graphics optimized to match the specific screen size and browser capabilities of each user's handset. This approach helps ensure a good user experience and increases process and campaign effectiveness. In order to accommodate the wide range of handset capabilities, advertisers are advised to produce and provide ad creative in a few pre-defined dimensions, which are discussed later in this section. The appropriately sized ad is selected from this set of pre-defined sizes based on a particular mobile phone model's capabilities and according to the "best-fit" principle.

So if the user has a smartphone with a high resolution screen, it can be served large, visually rich ads. Meanwhile, users with entry-level handsets would be served ads designed to be effective on small screens with limited resolution.

2.1 Mobile Web Advertising Creative Technical Specifications

In producing this recommendation, the MMA Mobile Advertising Committees sought to:

- Provide an engaging, non-intrusive consumer experience.
- Limit the effort required to produce creative material.
- Ensure that advertisements display effectively on the majority of phones.

The creative technical specifications consist of a series of recommendations around ad units, aspect ratios, formats, ad dimensions and sizes. When providing specifications, publishers should remember to also quantify those parameters they support.

2.1.1 Ad Units

The recommended ad units for Mobile Web are as follows:

- **Mobile Web Banner Ad** is the default color graphics ad type to be offered by all Mobile Web ad publishers. While most banner ads are still images, in some cases, particularly in Europe, animated banners are also available. A Mobile Web Banner Ad can be placed anywhere on a Mobile Web site among other content.

- **WAP 1.0 Banner Ad** is an optional black-and-white graphics ad type for use in campaigns that target older mobile phones.

- **Text Ad** is an additional optional Mobile Web ad unit displaying text instead of an image. Text ads may be used either in conjunction with graphical banners ads (text taglines) or used independently of graphical banner ads (text links). Text links are used either with older mobile phones not capable of supporting graphical images and/or by publishers that prefer to use text ads instead of graphical ads on their mobile sites.

2.1.2 Aspect Ratios

The recommended aspect ratios for Mobile Web Banner Ads are 6:1 (default) and 4:1 (extended). Key considerations for providing default and extended aspect ratios include:

- Keeping the aspect ratio constant simplifies resizing of images and reduces effort.
- Both are sufficiently large to provide an effective advertising experience, yet small enough not to be intrusive. Agencies should remember to verify the specifications with each publisher on their media plan, including the aspect ratio for their chosen placements.
- Having two aspect ratios gives publishers flexibility in terms of layout and positioning in different contexts.

- 6:1 is the default recommendation that every publisher should be able to deliver.
- 4:1 is the extended size for optional use in campaigns that have the possibility to offer bigger ad formats on the Mobile Web sites.

2.1.3 Formats

The recommended formats for banner ads are:
- .gif, .png or .jpg for static banners.
- .gif for animated banners.

Text ads are based on the default mobile handset character format.

2.1.4 Dimensions

The recommended Mobile Web banner ad widths are 120, 168, 216 and 300 pixels. An analysis of mobile phones across multiple markets found that most screens fall into one of those four widths. Providing set widths for banner creative has several benefits:

- Keeping the banner widths to four dimensions reduces the amount of time and resources spent on creative production.
- The four widths provide a good fit for the majority of mobile phones, limiting the amount of redundant "white space" left on the browser.
- The four widths provide for an exact pixel height for both ratios defined, which simplifies scaling of the creative.

Basic graphical banners are intended for use in mass-market campaigns where the goal is a good user experience across all mobile phone models, network technologies and data bandwidths. Enhanced graphical banners are intended for use in campaigns where it is imperative to convey a rich media experience through advanced graphics or image animation.

2.1.5 Size

2.1.5.1 Mobile Web Banner Ad Sizes

Although every publisher should be able to deliver at least basic banners, enhanced banners may be supported to create additional opportunities, such as using advanced graphics or animated banners.

The maximum graphic file size is dependent on the banner format chosen. Table 1 provides the maximum size recommendations across the banner types.

Table 1: Mobile Web Banner Ad Sizes				
Total Banner Dimension[1]	120 Pixels	168 Pixels	216 Pixels	300 Pixels
Max weight for basic static banners[1]	1 KB	2 KB	3 KB	5 KB
Max weight for enhanced banners[1, 2]	1.5 KB	3 KB	4.5 KB	7.5 KB

[1.] Includes ad indicator where applicable (see 2.3.1). (Note: This is not required

in North America.)
For i-mode, the recommended maximum size is 3 KB regardless of total banner size.
[2.] *Enhanced banners are considered to be advanced graphics or image animation. (Note: Animated banners are currently not widely used in North America)*

2.1.5.2 Text Tagline Sizes

Character limits (rather than file size limits) are applicable for text ads. Screen size has no effect on text tagline sizes, which Table 2 summarizes.

Table 2: Text Tagline Sizes				
Mobile Screen Size Groupings	120 Pixels	168 Pixels	216 Pixels	300 Pixels
Text Taglines maximum characters	10	12	18	24
Text Links	See 2.1.7	See 2.1.7	See 2.1.7	See 2.1.7

2.1.6 Summary

Tables 3 and 4 provide a summary of technical specifications for and examples of Mobile Web banner ads in the 4:1 and 6:1 aspect ratios.

Table 3: MMA Mobile Web Ad Guidelines Mobile Web Banners Ad in Default 6:1 Aspect Ratio		
Ad Size	Technical Specifications	Sample Creative (approx. size)
X-Large Image Banner	• 300 x 50 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <5 KB file size for basic banners • <7.5 KB file size for enhanced banners[2]	
Large Image Banner	• 216 x 36 pixels • .gif, .png, .jpg for still image • Animated gif for animation • <3 KB file size for basic banners • <4.5 KB file size for enhanced banners[2]	
Medium Image Banner	• 168 x 28 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <2 KB file size for basic banners • <3 KB file size for enhanced banners[2]	
Small Image Banner	• 120 x 20 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <1 KB file size for basic banners • <1.5 KB file size for enhanced banners[2]	
Text Tagline (optional)[1]	• Up to 24 characters for X-Large • Up to 18 characters for Large • Up to 12 characters for Medium • Up to 10 characters for Small	View Program

[1.] *There are regional differences in the use of text tag below the banner ad. See chapter 2.2.2.*
[2.] *Enhanced banners are considered to be advanced graphics or image animation.*

Table 4: MMA Extended Mobile Web Ad Guidelines Mobile Web Banner Ads in Extended 4:1 Aspect Ratio		
Ad Size	Technical Specifications	Sample Creative (approx. size)
X-Large Image Banner	• 300 x 75 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <5 KB file size for basic banners • <7.5 KB file size for enhanced banners[2]	
Large Image Banner	• 216 x 54 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <3 KB file size for basic banners • <4.5 KB file size for enhanced[2]	
Medium Image Banner	• 168 x 42 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <2 KB file size for basic banners • <3 KB file size for enhanced banners [2]	
Small Image Banner	• 120 x 30 pixels • .gif, .png, .jpg for still image • Animated .gif for animation • <1 KB file size for basic banners • <1.5 KB file size for enhanced banners[2]	
Text Tagline (optional) [1]	• Up to 24 characters for X-Large • Up to 18 characters for Large • Up to 12 characters for Medium • Up to 10 characters for Small	View Program

1. There are regional differences in the use of text tag below the banner ad. See chapter 2.2.2.
2. Enhanced banners are considered to be advanced graphics or image animation.

2.1.7 WAP 1.0 Ads

Table 5 provides a regional summarization of WAP 1.0 ad specifications. The MMA is developing a synchronized global specification that will be published in a future release.

Table 5: Technical Specifications–WAP 1.0		
Ad Unit	Technical Specifications	Sample Creative
Asia Pacific: Standard Text Link for 128 & 176 screen sizes	• 1 line of text maximum • Up to 8 characters maximum	ABCD酷炫网站

Table 5 Continued		
Asia Pacific: Text Link for 240 screen size	• 1 line of text maximum • Up to 12 characters maximum	ABCD广告片流帆
Europe, Middle East & Africa: Standard Text Banner	• 3 lines of text maximum • Up to 16 characters per line • Max. 35 characters total, including spaces	Family First!
Europe, Middle East & Africa and North America: Standard Image Banner	• 80 x 15 pixels • B&W, 1-bit bitmap • < 200 bytes file size	LEXUS
Europe, Middle East & Africa and North America: Standard Image/Text Combination Banner	• 80 x 12 pixels • B&W, 1-bit bitmap • Text: Up to 16 characters • < 200 bytes files size	WACHOVIA Find ATM/Branch
North America: Standard Text Banner	• 2 lines of text maximum • 12-16 characters per line • 32 characters total, including spaces	Family First!

Two factors to keep in mind are:

- Screen size has no effect on text link.
- Text link advertisements should be designed with reference to the overall design of the mobile site. The placement of links will vary by country and language.

2.2 Mobile Web Advertising Guidelines
2.2.1 Creative Design Principles

Mobile advertising does not require any particular design principles and style guides. Existing general guidelines should apply to Mobile Web sites containing image banners, as well as to Mobile Web sites that users reach via links in image banners (post-click), such as jump pages, campaign sites and self-contained, permanent third-party Mobile Web sites.

Web design principles and style guides have been available for years, and site owners and publishers are increasingly adopting them. Those principles include:

- Limiting the overall data volume of a Mobile Web page to no more than 20 KB so the download time isn't longer than most users will wait.
- Limiting the number of retrievals (e.g., of images) per Mobile Web page to 10 in order to reduce page loading delays caused by roundtrip times for each retrieval.
- Limiting user input to numeric or short sequences of text. This principle is based on the fact that most phones lack a QWERTY keyboard. The majority of users must enter text using their phone's numeric keypad.

More detailed design principles and style guides for Mobile Web sites can be found in the W3C Mobile Web Best Practices at http://www.w3.org/TR/mobile-bp. The MMA Mobile Advertising Committees also recommends that Mobile Web sites conform to W3C mobileOK Basic 1.0 Guidelines, which are available at http://www.w3.org/TR/mobileOK-basic10-tests.

2.2.2 Text Taglines

Text taglines are an optional feature that can be added to an image banner. (Note: Text taglines are prevalent in North America). Text taglines have several advantages and disadvantages:

Advantages:
- Most consumers are unfamiliar with image banners on Mobile Web sites. Many also don't realize that image banners can be navigated to and clicked on, as they already do with banners viewed on a PC. But they may have a much greater awareness that text taglines can be navigated to and clicked on.
- An image banner with a text tagline usually generates higher click rates.
- Some older browsers cannot navigate graphical elements at all. In those cases, a text tagline is required to make the image banner clickable. In the process, that enables the campaign to reach more mobile users, instead of just those with newer phones.

Disadvantages:
- Image banners with text taglines together use more real estate (space in the usable browser window), typically at the expense of other Web elements, such as navigation and content.

Media owners and publishers need to make a case-by-case decision about what best suits their business requirements. Irrespective of using additional text taglines, the MMA recommends that advertisements contain some form of call-to-action clearly identifiable by the user (e.g., "find out more" icon button).

2.3 Mobile Web Advertising Insertion and Delivery (as appropriate to the technology)

2.3.1 Ad Indicators

Some publishers and markets recommend or require the use of ad indicators (signifiers) when displaying either an image or text ad. The publisher or local market guidelines define the exact format and placement of the ad indicator. Indicators are used with both text and banner ads:

- Text link ad indicators, where text is used to indicate the text link is an ad. An example is the use of "Ad:" preceding the ad text link.
- Banner ad indicators, where part of the creative is used to display the ad indicator and thus make it clear that the banner is an ad rather than content. The indicator typically is located on the side or the corner of the creative and may use text (e.g., "AD" or "-w-") or an icon to indicate that the image is a banner ad.

The technical specifications in Section 2.2 include the ad indicator. The MMA recommends that when advertisers choose to use an ad indicator, it should be included with their creative image.

The convention varies by market and publisher.

2.3.2 Functionality
Animated banner images (Note: Not widely used in North America)

There are a number of guidelines recommended for animated image banners:

- Mobile phones that don't support image animation tend to render only the first image frame. For this reason, the MMA recommends that the first image frame should contain the entire advertising message, instead of leaving important information for subsequent frames.
- To date, automatic resizing of animated images does not always deliver ideal results. Therefore, the MMA does not recommend applying automatic resizing with animated image banners. The MMA is studying this issue in order to find a workable recommendation.
- There are several possible animation formats, including animated .gif, SVG, Flash, Silverlight and interlaced .jpg. Animated .gif currently is the most widely supported on mobile phones. The MMA is studying options for improvements that will be incorporated into future guidelines.

Automatic resizing of Mobile Web banners ads

Some publishers and ad-serving solutions provide this capability, where the ad creative is re-sized on the fly in order to match the mobile phone's screen size and capabilities. In order to optimize the banner creative, the MMA recommends that the basic and extended technical specifications for banner creative be applied in the case of automatic resizing. This will ensure that the creative is best suited for the specific mobile phone and that there are no additional creative format requirements for the advertisers.

In cases where the publisher or ad-serving solution requires only one banner image, the MMA recommends using the XLarge Mobile Web banner ad technical specifications as the default re-sizeable banner. It's important that the creative takes into account both the impact of image re-sizing (i.e. certain amount of degradation of image quality) and that the automatic resizing may not work well with animated banners.

3.0 Text Messaging (SMS)

Short Message Service (SMS), also referred to as "text messaging" or "texting", supports text messages of up to 160 characters each, although longer messages may be cut into 160-character sections. SMS messages can be sent and received across virtually

any operator's networks. Nearly every mobile phone sold over the past few years – even entry-level models – supports SMS, creating a large addressable market for SMS-based advertising campaigns. SMS supports messages sent from one user to another, as well as messages sent from a machine, such as a PC or server, to a user.

3.1 SMS Advertising Creative Technical Specifications

SMS ads feature text-only ad copy that is appended to the bottom of the message. As a result, the available space for ad copy depends on the number of characters used in the message's body. This will vary by provider. The publisher is responsible for ensuring that the number of characters does not exceed 160 maximum after the ad copy is appended.

3.1.1 SMS Ad Units

Two ad units are recommended for all publishers:

- **Short SMS Ad (Teaser) –** Short SMS Ad (Teaser) – The content (or body) portion of the SMS message is the core part of the message while the remaining space after the content portion can be made available for advertiser usage, as long as the advertising message does not negatively impact the content portion of the message. Where content uses the majority of the message is recommended that SMS ad providers reserve the last 20-40 characters for advertiser usage per message, including an advertising indicator. This length allows for reasonable advertiser messaging or branding, without compromising the value of the content portion of the message. Advertisers should be aware that shorter copy allows for increased publishing inventory availability. The ad copy should not be inserted before the content portion of the SMS. In cases where the sender uses a personal SMS signature, the ad should be inserted after the signature.
- **Complete SMS Ad (Full Message) –** Up to 160 characters are available for advertiser usage, typically delivered as a reply to a Short Ad call to action.

3.1.2 SMS Formats

As noted previously, SMS is a text-only medium. No rich media is supported, however some handsets with click-to-call or click-to-Mobile Web capability will display colored links and underlining of URLs and phone numbers.

3.2 SMS Advertising Guidelines

3.2.1 Creative Design Principles

The primary goal should be understandability. Use abbreviations and "text speak" (e.g., LOL) sparingly and avoid grammatical errors, which some users perceive as an indication of spam.

- Use punctuation when required for clarity or emphasis.
- Note that a carriage return may count as two characters.
- Conduct testing to ensure that the publishing network recognizes any non-Latin or accented letters prior to use.
- Note that URLs that are contained in the text may click

through to Mobile Web pages, depending on handset capability, and as such may appear underlined or in color.

Design Principles for Short SMS Ads

The Short SMS Ad unit is best used for a short calls to action, usually to "reply for more" information, or for branding messages (without call to action).

- If a URL is included in the teaser ad, use of a short (20-character) URL is recommended
- To optimize placement, the advertiser should develop several versions of ads with varying lengths, maximizing the ads' availability for insertion based on the length of the content portion of the message. For example, "Nike" or "Just do it - Nike."

Design Principles for Complete SMS Ads

The Complete SMS Ad unit can be used for any type of promotional message or call to action.

- The advertiser should be clearly identified in the copy.
- Creative may contain a URL. Use of short URLs is recommended to use reduce character count and maximize use of advertising space.
- The title or header of the message should reflect the consumer query or subscription that resulted in delivery of the full ad message copy. For example, if the consumer replied "HOME" to get more info on real estate, the resulting ad should have "HOME" in the first line. If the resulting ad is unfamiliar, the recipient may dismiss it as spam.

3.3 SMS Advertising Insertion and Delivery

3.3.1 SMS Ad Indicators

There should be a clear separation between the text message content and the ad. A carriage return or line break is recommended, however not all carriers support line breaks, so an ad indicator must also precede the ad copy. Acceptable ad indicators are:

- '★' (single asterisk
- `★★` (double-asterisk)
- "AD:" (or similar local language abbreviation)
- ` – ` (dash)

Note that a carriage return may count as two characters.

3.3.2 SMS Ad Functionality

Response (return SMS)
- Advertisers must respond to user SMS requests for additional messages/information within 12 hours or the request (opt-in) for that particular message will be deemed expired.
- Responses to user requests may be delivered by an alternate common short code or phone number, but the relationship to the original request must be identified within the message. (For information about short

codes, see the MMA *Common Short Code Primer*, available at http://www.mmaglobal.com/shortcodeprimer.pdf.)

Click to call
- Phone numbers must be local or domestic to the country that the ads are targeting.
- Phone numbers must be functional. Ensure that the numbers are in service before the campaign launches.
- Premium destination numbers that would result in a charge that exceeds normal mobile call charges to the end user are not permitted unless the terms are fully disclosed in the ad.
- Emergency numbers (e.g., 911 in the United States and Canada, or 112 in parts of Europe) or any unrelated service numbers are not allowed.

Link to Mobile Web sites
- Landing pages must be viewable in Mobile Web browsers.
- Content must be related to the advertisement.
- The landing page must be working properly.

4.0 Multimedia Messaging (MMS)

Multimedia Messaging Service (MMS) is a rich media messaging service that allows mobile users to send and receive messages that can include graphics, photos, audio video and text. It should be noted that unlike SMS, MMS is not yet universally supported by all operator networks and all mobile phones; however the market advertising opportunity is already significant.

4.1 MMS Advertising Creative Technical Specifications
MMS is an attractive vehicle for mobile advertising because it provides a variety of rich media experiences for increasing an ad's effectiveness. Another benefit is that unlike the Mobile Web, this media resides on the user's mobile phone, so a data connection isn't required to access the ad content once the message has been received.

This recommendation's goals are to:
- Provide an engaging, non-intrusive consumer experience.
- Reduce the effort required to produce creative material.
- Ensure that advertisements display effectively on the majority of phones.

The guideline consists of a set of ad unit dimensions, file formats and maximum file sizes, as well as additional considerations for advertisers and publishers.

4.1.1 MMS Ad Units
The recommended ad units for MMS are as follows:
- **The MMS Square Ad** has a 1:1 aspect ratio, meaning the horizontal and vertical dimensions are equal. The MMS Square ad is the default ad type that should be offered by all MMS ad publishers. A square aspect ratio means that the ad

will be fully visible on the vast majority of devices, without the need to scroll. This ad may be a still image or an animated image. An MMS Square Ad can be placed before the original content (pre-roll) or after (post-roll) on a separate slide. Mixing a square ad with other visual content on one slide is not recommended.
- **The MMS Banner Ad** is an additional optional MMS ad unit available for use alongside other content. The Mobile Web guidelines (Section 2.1.1) defines these ads' aspect ratios, which allow for re-use of Mobile Web creative material for MMS. The placement of the MMS Banner Ad as a separate slide can be a pre- or post-roll, similar to the Square ad, or the ad may be inserted on a text-only slide. There can only be one image per slide of an MMS message, so an MMS Banner may be injected only on a slide that otherwise contains only text. When an MMS Banner is injected on existing text-only slide, it may come before or after the text content in the slide, and the slide itself can be located at any part of the MMS message[2].
- **The MMS Audio Ad** is an audio clip that can be played in parallel to a Square Ad or Banner Ad.
  Note: The MMS Video Ad (as well as some additional, emerging ad types) are available, but best practices are still emerging. These formats are under study and will be added in future releases.

4.1.2 MMS Ad Aspect Ratio
Most mobile phones come equipped with square or portrait screen shapes. As a result, the MMA recommends using the square (1:1) aspect ratio for MMS Square Ad image ads to ensure the best fit on most mobile phones. Some mobile phones with landscape screen shapes may not render the square ad image completely visible, but they will allow vertical scrolling so users can discover the image area below the fold.

The MMS Ad Aspect Ratio is defined as follows:
- For the MMS Square Ad Unit – Aspect Ratio of 1:1
- For the MMS Banner Ad – Aspect Ratio as defined in Section 2.1

4.1.3 File Formats
File Formats for MMS ads are as follows:
- Images can be static images or animated.
- Static Images may be .jpg or .gif. The vast majority of devices support .gifs, which yield better quality when the ad content is in the form of an illustration.
- Animated Images should be in the animated .gif format.
- Audio formats that mobile devices support are typically different from the formats available to composers of ads for a PC environment. It is common to use transcoding on the

[2]This is required because the MMS 1.2 standard only supports a singe media file per slide.

network in order to adapt the PC composition formats to the mobile delivery format. If transcoding is available, the MMA recommends creating the ads in one of the composition formats listed in Table 6. The transcoding would produce the format best suited to the specific mobile phone model. In cases where transcoding is unavailable, use of suitable audio delivery formats (as defined in Table 6) is recommended.

Table 6: Audio File Formats	
Audio Formats Recommended for Composition	**Suitable Audio Delivery Formats**
MP3 .wav encoded as PCM **The committee recognizes that the common delivery formats (AMR, QCELP) are not supported by most composition tools today.**	Best suitable file for the device, which could be of the original format, aac, or aacPlus. If none of the above applies, the fallback formats below apply to all devices: On GSM Networks – AMR (aka AMR-NB) On CDMA Networks – QCELP

4.1.4 Dimensions
Table 7 lists the recommended MMS Ad dimensions:

Table 7: MMS Ad Dimensions		
Unit Name	**Unit Dimension**	**Dimension on Device**
MMS Square Ad (default)	320x320 pixels	May be resized to a smaller dimension
Small MMS Square Ad (if available)	120x120 pixels	May be resized to a smaller dimension
MMS Banner ad (if available)	Dimension for MMS banner ads are as per the X-Large Image Banner defined in section 2.2.1 of the Mobile Web advertising guidelines.	
MMS Video Ad	*Recommendations for dimensions for MMS video ads are not yet available.*	

Assume that the images will be scaled down on the majority of devices. Therefore, testing the quality and legibility of the creative material at different sizes is highly recommended. The MMA also recommends that ad delivery be tested on real phones prior to campaign execution[3].

In cases where the standard MMS Square Ad does not resize well down to a size of 120x120, the MMA suggests using an Small MMS Square Ad instead. The MMA Mobile Advertising Overview provides examples of the creative considerations when testing MMS Square Ads at different dimensions, and for the use of the optional Small MMS Square Ad unit.

Impact of Dynamic Resizing (or Transcoding)
Many mobile operators support transcoding, also known as media adaptation, which adapts content according to device

capabilities (e.g. screen resolutions, message size, formats). This ensures advertisements can be injected in an MMS and allows each mobile phone to receive the ad adjusted to a dimension that best matches its capabilities.

Mobile phones contain software that dynamically resizes received graphics to ensure that they are displayed completely within the MMS client's usable display. These on-the-fly resizing capabilities have a number of advantages that are relevant for the purpose of MMS advertising:

- They provide a good experience for users on almost all MMS-capable mobile phones.
- They allow creative material to be provided in one dimension only.

However, some caution is recommended:

- As a matter of principle, an image creative should be chosen that scales well all the way down to low-resolution screens. For example, tiny text and graphical details should be avoided.
- Extensive media adaptation (from very large graphics down to very small ones) can reduce the ad quality and render some elements invisible.
- Media adaptation may render some creative material into poor quality for low-resolution mobile phone screens. This situation applies primarily to graphics containing text, details, thin lines or color palettes with texture.
- Some mobile operators may support functions to deliver a separately designed image to mobile phones with low-resolution screens. In these cases, the MMA recommends using an optional "small" dimension as defined above.

4.1.5 Size
The maximum MMS message size available to advertisers depends on the following factors:

- The mobile phone's capabilities to receive MMS, which vary between 100 KB and 600 KB per MMS message.
- Mobile networks typically support MMS messages that are between 100 KB and 300 KB each. Networks are only just starting to increase the maximum message size beyond 300 KB.

In order to reach the broadest audience possible, the MMA recommends that the complete MMS size not exceed 100 KB. Maximum MMS size and maximum ad sizes are inclusive of all applicable elements (e.g., graphics, text and audio).

- For ads inserted to other content (MMS Slide Interstitial or MMS Slide Banner), the MMS ad size should not exceed 30 KB. This limit allows 70 KB or more for the original content. This size is typically enough for a good quality MMS Square Ad image but usually not for animated .gif in big dimensions such as 320x320.
- When the ad is not accompanied by any other content in the MMS, a maximum size of 100 KB is recommended. Sizes for MMS banner ads follow the X-Large Image Ban-

---

[3]*Typical dimensions for testing would be 240x240, 180x180 and 120x120.*

ner of the Mobile Web advertising guidelines (Section 2.1).
- Recommendations for MMS video ad sizes are not yet available.

4.2 MMS Advertising Guidelines
4.2.1 Creative Design Principles
Sender Identification

The sender of the MMS message should be clearly identified. Outside of the "from" field, the header should reflect the consumer request that resulted in delivery of the ad-supported content or full ad. For example, if the consumer requested a daily photo from Clairol, the ad should have "Clairol" in the first line or image. Ads that don't follow this guideline may be perceived as spam, undermining the campaign's effectiveness.

4.3 MMS Advertising Insertion and Delivery

4.3.1 Other Considerations

Inserting ads into MMS messages sent to users who are roaming abroad can generate additional costs for those users because they typically pay roaming fees for MMS data usage. The industry is still developing best practices for this situation. In the meantime, publishers should be aware of consumer sensitivity to unexpected data charges. Some MMS service providers/operators provide the ability to block ad injection and sending ad MMS messages to roaming users, thus ensuring a good customer experience.

5.0 Mobile Video and TV

Mobile operators and content publishers worldwide increasingly are launching video and TV services. The rapid adoption of handsets with mobile video/TV capabilities, combined with faster network data speeds and better quality video content, have all facilitated growth in mobile video/TV consumption in recent years.

5.1 Mobile Video and TV Advertising Creative Technical Specifications

When planning for a mobile video/TV campaign, the MMA recommends the following guidelines:

5.1.1 Ad Units

Table 8: Mobile Video & TV Ad Units		
Design model	**Advertisement placement**	**Description**
Bumper/Billboard	Before or after content	Short (less than 5 seconds) promo/logo bumper to introduce/close content on behalf of a sponsor
Pre-roll only	Before content	<30 sec video advertisement
Mid-roll only	During content	<30 sec video advertisement
Post-roll only	After content	<60 sec video advertisement

Table 8: Continued		
Book-ending	Before and after content	Pre-roll advertisement with a bumper at the end of the content of the same advertiser
Commercial Breaks	Within existing video or TV content (beginning, middle, end)	Typically 30 secs, but can be 5, 10, 15, 20, 40 and 60.
Overlay advertisements	During video playback	For example, a promo banner is shown at the bottom of the video for the whole duration or for a fraction of the duration (appear/disappear)

5.1.2 Aspect Ratios
- Aspect ratio: 4:3 or 16:9 (Although most handsets display portrait, video/TV content typically uses a landscape format, which has a 4:3 aspect ratio).

5.1.3 Formats
- File formats: .wmv, .avi, .mov, .mpg, .3gp
- Recommended audio quality: @ 16bit 44Khz stereo
- Recommended video quality: QVGA @ 250kbps, 20-30 frames per second

5.1.4 Resolutions
- QVGA, CIF, QCIF

5.1.5 Other Considerations
Advertisers should consider the following when developing mobile video/TV campaigns:
- Avoid using fast-moving videos
- Avoid rapid scene changes (many scene changes in a short period)
- Avoid using small letters for advertising messages
- Avoid dark shots
- Shoot made-for-mobile versions of commercials

Existing video advertising creative assets that have been shot for TV or online may not be optimal for mobile and could need re-editing. For instance, text may be difficult to read, and fast-moving action that is too far into the distance may not be visible or look good on the mobile screen.

Video/TV Ad Lengths Exceptions
Broadcast TV: Mobile TV is still nascent, so more research is necessary to ascertain consumer preferences regarding advertising lengths within mobile TV. Currently, "traditional" TV ad lengths can be used until research and consumer demand say otherwise.

Video downloads: The total file size is important, especially for consumers downloading them over 2G connections. For those with faster connections, the time before the file can be opened is important. For downloads, the MMA suggests shorter pre-rolls and a very short bumper, or vice versa (e.g., a 10-second pre-roll and a 3-second post-roll, or a 3-second pre-roll and a 10-second post-roll). On both 2G and 3G networks, large files also can

result in additional charges for users who are not on flat-rate, unlimited-use data plans.

5.2 Mobile Video and TV Standards

Mobile Video and TV standards and technologies are usually divided into two categories:

- The Mobile Digital Video Broadcast (DVB and DVB-like standards), which enable digital terrestrial television for mobile phones and other handheld devices.
- The video streaming standards, such as.3gp streaming, which use existing mobile >2.5G infrastructure for the video delivery.

Standards related to Mobile Digital Video Broadcast

- **DVB-H:** Developed by the DVB-Project and published by ETSI, Digital Video Broadcast Handheld consists of DVB-H bearer and IP DataCast (=service layer) specifications.
- **DVB-SH:** "Digital Video Broadcasting - satellite services to handheld devices" is the satellite variant of DVB-H.
- **DMB:** "Digital Multimedia Broadcast" is based on Digital Audio Broadcast (DAB) and is published by ETSI.
- **ISDB-T:** Developed by ARIB, "Integrated Services Digital Broadcasting-Terrestrial" is the Japanese digital broadcasting standard.
- **MediaFLO USA:** A broadcast system mainly developed by Qualcomm and ratified by the Telecommunications Industry Association (TIA).
- **JSR 272:** Broadcast specific middleware for terminals developed by the Java Community Process (JCP)

Codecs used in digital video broadcast systems

- **MPEG-2:** MPEG-2 is a standard for the generic coding of moving pictures and associated audio information. MPEG-2 is widely used as in digital television by terrestrial (over-the-air), cable, and direct broadcast satellite TV systems
- **Other codecs:** For IP transmission, other codecs may be used, such as as H.264 and MPEG-4.

Standards Related to Mobile Video Streaming (unicast and multicast)

- **MBMS:** The 3GPP developed the Multimedia Broadcast Multicast Service for point-to-multipoint (one-to-many broadcasts) service for 2.5G and 3G networks.
- **BCMCS:** The 3GPP2 developed the Broadcast Multicast Service for point-to-multipoint service for CDMA2000 networks.
- **RTSP:** The Real Time Streaming Protocol is used in streaming media systems to allow clients to remotely control a streaming media server, issue VCR-like commands such as play and pause and allow time-based access to files on a server. The 3GPP adopted the RTSP standard, and it is widely used in mobile video streaming, along with the .3gp file format.
- **.3GP:** File format specified by the 3GPP for delivering video and audio over wireless networks.

Codecs used in mobile video streaming

- **H.263/264:** Video codecs developed by the ITU and adopted by the SGPP standard as video codecs in the .3gp file format
- **ACC, AMR:** Audio codecs specified by ITU and 3GPP, adopted by the SGPP standard as audio codecs in the .3gp file format

Other General Standards

- **BCAST:** The OMA Mobile Broadcast Services Enabler Suite (BCAST) is an open global specification for mobile TV and on-demand video services that can be adapted to any IP-based mobile and peer-to-peer (P2P) content-delivery technology. BCAST is designed to support broadcast technologies such as DVB-H, 3GPP MBMS, 3GPP2 and mobile unicast streaming systems
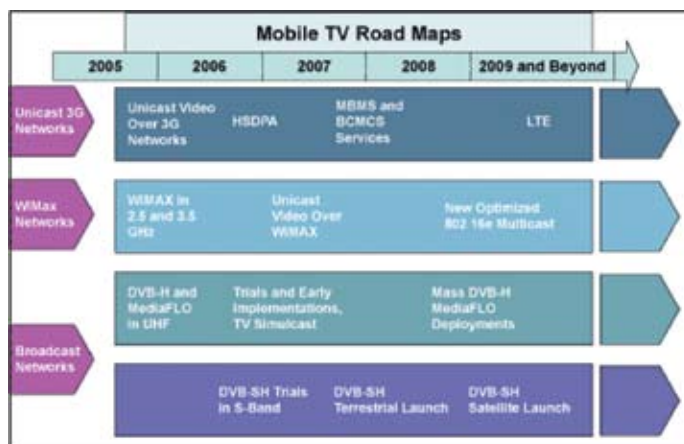
Source: Copyright © 2007 MRG, Inc.

6.0 Downloadable Applications (North America Only)

Mobile downloadable applications are a fast-developing segment of the global market. Consumers are habitually opting into subscription-based models, thus increasing the usage and market opportunity for downloadable applications.

Editor's Note: The Downloadables section is a result of committee output and collaboration from the North America branch of the MMA and includes best practices for advertising within mobile downloadable applications. The MMA anticipates that best practices and guidelines for downloadables will continue to evolve as we strive for global endorsement of and collaboration on the guidelines.

6.1 Selection of Ad Units

- Ads should be optimized and dynamically delivered based upon the mobile phone's characteristics. For downloadable applications, this will mean selecting from predefined sizes that fit most mobile phones.
- Creative sizes − In cases where the format is consistent with

banners (discussed in Section 6.2) and full pages, clients should provide the pre-set sizes to build their advertising campaign. Full ad pages (also called ad landing pages) provide opportunities for the user to receive additional information from the advertiser.

- Mobile developers, in conjunction with their advertising partners, will define and create multiple creatives of each ad. The most appropriate creative should be selected for delivery based on the mobile phone screen size and color depth, as determined by the advertiser and developer/publisher. This will typically be the largest screen size and resolution that fit and conform to the constrictions of the application, as well.
- Some small mobile phones may need to be excluded from banner ads based on the legibility of the specific logo or image built to specifications below.

6.2 Ad Unit Overview

- Ad banner – An ad banner is a static logo or image(s), text or combination of these that can appear anywhere within the application (e.g., on the application main menu page or subpages).
- Ad banners should meet the below pre-determined size requirements. Users can click on the ad banner to view more information about the sponsor/advertiser. These clickable banners are in what's known as an active state or non-static state.
- Ad full-page images – An ad page is a full-screen advertisement, which may be placed as a "bumper" screen for the launch and exit of the application, or as a splash or jump page (formerly called interstitials) within the application. It may be used as the landing page from an earlier ad banner or may be a stand-alone full page. This full page may also be active or static.
- General behavior – Both ad banners and ad full-page Images may be active and link either to places inside the application or to outside the application through links such as click-to-Mobile Web, -call or -text. If the advertisement moves the user outside the application, specific consumer warnings and guidelines are necessary (see below). Ad pages provide opportunities for the user to receive additional information from the advertiser. This functionality must be consistent with a mobile phone's capabilities (e.g., interactivity such as click to call, WAP push) and will be limited by both type of mobile phone and mobile phone connectivity.

6.3 Ad States

Ad banners typically have two states or combinations:

- Non–active/non–highlighted/static means that the ad is visible on screen, but it is not in the select state.
- Active/highlighted/non–static means that the banner is in the select state. Users can click on it for more information.

Types of capabilities available for an ad:

- Advertisements without actions supported on all mobile phones (full page and banner units).
- Advertisements with some common active actions (e.g., click to call, click through to Mobile Web) are suitable only for Java phones that are Mobile Information Device Profile 2.0 (MIDP2) compliant and BREW 2.x and above (non-smartphones only).
- Future advertising may leverage advanced features and application programming interfaces (APIs) that require specific device capabilities, such as JSR-179 for location on Java phones. Companies and ad networks that offer this kind of advanced functionality and proprietary actions should adhere to the principal of targeting only those phones that can support them.

6.4 Ad Specifications

6.4.1 Full Screen

Display on screen: Intended for display on a screen by itself or with minimal components of the application (e.g., title bar or soft–button labels).

6.4.1.1 Ad behavior

- Displayed in full, during which click–through actions are enabled. Impressions may be counted if they are fully resolved for any period of time or if the user clicks through.
- At any time the ad is displayed in full, the user should be able to click to continue past the ad into the content.
- For click–through ads that do not require a customer to leave the application and migrate to, for example, a Mobile Web browser:
  - The MMA recommends that where possible, and in mobile phones that support click through, users are returned to the place in the application that they left (e.g., World Series of Poker, with $1million in chips).
- For click–through ads that do require users to leave the application, the MMA recommends:
  - Clearly notifying users that they will be leaving the application environment to experience the advertisement.
  - Giving users the option of canceling out of that/getting off of the ad and going right back where they were before.
  - Clearly communicating that, in most cases, users will need to completely re-launch the application in the same way they started the application.
  - For applications and games whose flow may be greatly disrupted by a click–through, ads should display before the launch or exit of the application, or be queued until the end of the application experience, or avoided altogether.
  - A preliminary recommendation for full-screen ad display time is that the units disappear after a maximum of 5 seconds.

6.4.1.2 Graphics File Formats

- .png (required on Java phones), .jpg and .gif
- The file image may be dynamically changed based on mobile phone capabilities (image only, not size or color depth – e.g., new banner, same position or .jpg to .png).
- Static and animated images

6.4.1.3 Sizes

- Generally, full-screen ads should use as much of the screen area as possible.
- Keep the following in mind when creating size standards:
  - Square aspect ratios seem to allow the most flexibility for both Mobile Web and downloadable application platforms.
  - Square aspect ratios are convenient for advertisers.
  - Square aspect ratios leave room for title bar and/or soft-button labels – a key issue that cannot be ignored when addressing the downloadable application platforms.

6.4.2 Banners

Display on screen: Intended for display on a screen with content from the application.

6.4.2.1 Ad behavior

- Displayed with application content
  - The banner is displayed for as long as the customer is on this page of the application.
  - Impressions may be counted once the page is displayed and the ad is loaded/displayed in full. The MMA is considering defining a minimum display time for the ad to count as an impression.
  - The state of the ad (active or static) should be clearly apparent to the customer.
  - Best practice for placement of ad signifiers should be followed as described in the Mobile Web guidelines.

- The user may be able to click on the ad and be taken either to a jump page inside the application or external to the application (see above).
- Click-through banner ads should behave in the same way click-through full-page ads behave.

6.4.2.2 Graphics File Formats

- .png (required on Java phones), .jpg and .gif.
- The file image may be dynamically changed based on mobile phone capabilities (image only, not size or color depth – e.g., new banner, same position or .jpg to .png).
- Static and animated images.

6.4.2.3 Sizes

- Banner sizes should be as consistent as possible with established Mobile Web banner sizes.
- However, many downloadable-application advertising campaigns will continue to be custom designed to support the needs and expectations of the target audience.

6.5 Reporting

Downloadable applications operate in primarily two variations:

- Not-connected/never-aware applications pose unique challenges. These can have sponsorship-style advertising only. Ads are usually not refreshed during the lifetime of the application. Impression counting cannot apply here. The creative and size standards may still apply.
- Connected or occasionally connected applications (also known as intermittently aware) are the dominant downloadable application use cases. Intermittently aware applications also pose unique challenges:
  - The application must synchronize with the ad server or other entity (receiving) in order to transmit ad impression and/or click-through counters.
  - The application may receive and store the number of ads for rotation while the application is not network-aware.

The application must account for each ad served even if not in a network-aware-scenario (i.e., the application must synchronize with ad server or other entity sending).

In addition, current best practices include:

- Support for more than one advertisement (re-fresh) and ad rotation, including deletion of previously stored or prior ads.
- Frequency capping and story boarding.
- Support for ad-insertion rules (e.g., time of day, category, content type).
- Expiration dates for ad (e.g., an ad that runs only during the weeks leading up to the Super Bowl).
- Gathering and reporting of other information including mobile phone type, operator and unique ID.

Specifics on Counting Offline Behavior (mainly for connected/ intermittently aware applications)

Downloadable applications are commonly used in circumstances where an online connection to an ad server is not available. Therefore, some of the counting and monitoring functions of the ad server must be handled within the application or the mobile phone.

- To minimize discrepancies, the general principle is to report only impressions or actions that can be confidently reported after the fact. Actual enumeration is necessary for CPM-based sales rather than any type of statistical inference. An impression is counted only after each display of an ad meeting the impression guidelines defined earlier.
- If the user is doesn't have a data connection when the ad banner is selected, it is not possible to provide access to the full-screen ad page unless that page is cached. If it isn't cached, a message should be displayed that says there is no network connection. This impression may be counted toward a CPM only if the collected data is stored for retrieval later.

- Actions that can occur offline (e.g., e-mail or SMS opt-in forms) may be counted only after the mobile phone connects again and the offline event is included with similar events for the campaign that happen while online.
- Other impression guidelines (e.g., minimal display time) are also unchanged from the online case.

7.0 Technical Requirements for Mobile Advertisers

1. Advertiser/merchant site infrastructure
   - Advertisers will keep up with traffic demands and are responsible for all costs, communications, hosting, hardware and software, as well as all costs of implementation for their site or associated click-through pages.
2. Ad format serving
   - Ad-serving infrastructure will serve the formats defined in these guidelines to phones on-the-fly, based on device-type detection and according to the best-fit principle, where the format choice is based on what a particular mobile phone's screen can accommodate.
   - Content that cannot be displayed by a mobile phone should not be delivered. For example, if a mobile phone does not support .gif, then that format must not be served to that particular mobile phone.
3. Ad format testing
   - The MMA recommends that tests be conducted prior to launching a campaign.
4. Automatic resizing of ad formats (optional and to be verified)
   - Ad-serving infrastructure may be capable of performing automatic resizing, where a standard dimension is dynamically adjusted to match the phone's display while maintaining the aspect ratio of the standard ad unit.
   - Based on early experiences, automatic resizing works well for still images and provides value, such as the ability to support large screens. The absence of MMA guidelines should not stop companies from collecting experience in the field of automatic resizing by working along their own guidelines. Note that automatic resizing may not work well with animated banners.
   - Advertisers are advised to ensure that their creative is suitable for automatic resizing, especially in cases where visual detail is essential.

8.0 Who We Are

About the Mobile Marketing Association

The Mobile Marketing Association (MMA) is the premier global non-profit trade association established to lead the growth of mobile marketing and its associated technologies. The MMA is an action-oriented organization designed to clear obstacles to market development, establish mobile me-

dia guidelines and best practices for sustainable growth, and evangelize the use of the mobile channel. The more than 700 member companies, representing over forty countries around the globe, include all members of the mobile media ecosystem. The Mobile Marketing Association's global headquarters are located in the United States and it has regional chapters including North America (NA), Europe, Latin America (LATAM), Middle East & Africa (MEA) and Asia Pacific (APAC) branches. For more information, please visit www.mmaglobal.com.

About the MMA Mobile Advertising Committee

The MMA Mobile Advertising Committee, with active committee participation across the globe, has been established to create a library of format and policy guidelines for advertising within content on mobile phones. By creating mobile advertising guidelines, the MMA ensures that the industry is taking a proactive approach to keep user experience, content integrity and deployment simplicity as the driving forces behind all mobile advertising programs world-wide.

The MMA Mobile Advertising Committees, chaired by Ad Infuse, Inc., Madhouse, Inc., ScreenTonic, Verizon Wireless, Vodafone Group Services, Ltd. and Yahoo! developed these guidelines in collaboration with the following MMA member companies:

MMA Global Mobile Advertising Committee		
4INFO, Inc.	Microsoft (MSN and Windows Live)	ScreenTonic
Ad Infuse, Inc.	Millennial Media, Inc.	Sensei, Inc.
AT&T Mobility	Mobile Posse	Sharpcards
Buzzd	MobiTX, Inc.	Smarter Agent
Google	Mobixell Networks (Europe) Ltd	Smaato Inc.
Golden Gekko Ltd	Neustar, Inc.	State Farm Insurance
GoldSpot Media	News Over Wireless	Tapioca Mobile
Greystripe Incorporated	Nokia Corporation	Turkcell Iletisim Hizmetleri A.S.
GroupM	OpenMarket	Unkasoft Advergaming
JumpTap	Qualcomm	Verizon Wireless
Madhouse Inc.	R/GA	Vodafone Group Services Ltd.
MediaFLO USA, Inc.	Rhythm NewMedia	Yahoo!

9.0 References

The following links provide additional sources of information and reference:

- MMA Code of Conduct
  (http://www.mmaglobal.com/codeofconduct.pdf)

- MMA Consumer Best Practices Guidelines
  (http://www.mmaglobal.com/bestpractices.pdf)

- Mobile Marketing Association Website
  (http://www.mmaglobal.com)

- Mobile Advertising Overview
  (http://www.mmaglobal.com/mobileadoverview.pdf)

- Understanding Mobile Marketing: Technology & Reach
  (http://www.mmaglobal.com/uploads/MMAMobileMarketing102.pdf)

- Off Portal – An Introduction to the Market Opportunity
  (http://www.mmaglobal.com/offportal.pdf)

- Mobile Marketing Sweepstakes & Promotions Guide
  (http://www.mmaglobal.com/mobilepromotions.pdf)

- Mobile Search Use Cases
  (http://www.mmaglobal.com/mobilesearchintro.pdf)

- Introduction to Mobile Coupons
  (http://www.mmaglobal.com/mobilecoupons.pdf)

- Introduction to Mobile Search
  (http://www.mmaglobal.com/mobilesearchintro.pdf)

- Short Code Primer
  (http://www.mmaglobal.com/shortcodeprimer.pdf)

- W3C Mobile Web Best Practices
  (http://www.w3.org/TR/mobile-bp/)

- W3C mobileOK Basic 1.0 Guidelines
  (http://www.w3.org/TR/mobileOK-basic10-tests/)

- W3C mobileOK Checker
  (http://validator.w3.org/mobile)

10.0 MMA Guidelines Approval Process

The MMA implements a collaborative process for industry guidelines review and approval, prior to public release. The process not only considers feedback from industry leaders and experts but also helps to determine work streams for future releases. The summarized approval process is as follows:

- Committees generate a draft guidelines document developed and approved by MMA committee member companies ("Committee").
- Once the guidelines are approved by Committee, the guidelines are issued for public review. Public review will last a minimum of four weeks.
- Feedback from the public comment period is circulated to Committee for review and incorporation as appropriate. Note: In the event substantial revisions are suggested, the Committee must again approve the guidelines prior to release.
- Once all approvals and feedback is gathered, incorporated and approved, the guidelines are released.
- The guidelines are released every six months and are the result of collaboration across the MMA Mobile Advertising Committees in Asia Pacific (APAC), Europe, Latin America (LATAM), Middle East & Africa (MEA) and North America (NA). If deemed appropriate, the Committee may elect to release an interim revision of the guidelines.

11.0 Supporting Associations

The following associations currently support the *MMA Mobile Advertising Guidelines* in our collective mission to establish a consistent global guidelines and best practices for mobile advertising:

12.0 Contact Us

For more information, please contact:

Mobile Marketing Association
Email: mma@mmaglobal.com
www.mmaglobal.com

13.0 Contact Us

The MMA maintains a nomenclature glossary of all terms within MMA guidelines, education documents and research. The glossary is available at: http://www.mmaglobal.com/glossary.pdf

The Mobile Marketing Association (MMA) is the premier global association that strives to stimulate the growth of mobile marketing and its associated technologies. The MMA is a global organization with over 700 members representing over forty countries. MMA members include agencies, brands, content providers, hand held device manufacturers, operators, technology enablers, market research firms, as well as any company focused on the potential of marketing via mobile devices.