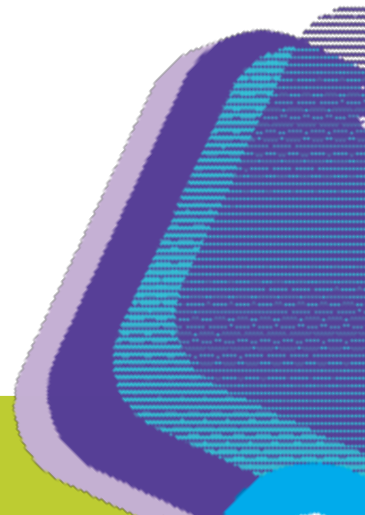# Best Practice Guidelines for Participation TV services using Mobile Shortcode Text and Voice Services

October 2008, Issue 1.1
(Voice Short Code Section updated August 2010)

Success in Interactive Media

CONTENTS

AIME - who we are

AIME is a UK based trade association that promotes excellence in the Interactive Media and Entertainment industry.

We uphold our Code of Ethics and create an environment of consumer trust and industry confidence within which our members' commerce can grow.

We are committed to furthering the interests of Interactive Media and Entertainment through the regular exchange of information and communication throughout the value chain, effective engagement with regulators and legislators and the presentation of a successful industry image to media.

We are the only trade association with membership across all elements of the Interactive Media value chain, including Broadcasters, Networks, Service Providers and Information Providers.

For more information, please visit **www.aimelink.org**

aime

association for interactive media & entertainment

President's foreword

The most significant observation to arise out of the well-publicised Participation-TV issues throughout 2007 was the clear need for the entire Industry value chain to improve communications and to fully understand the responsibilities of all parties involved. Broadcasters, Producers, Mobile Network Operators and Service Providers must work together to ensure the quality and integrity of services using mobile phones that are aimed at TV audiences.

In the spirit of co-operation and common interest for the benefit of this dynamic Industry, the complete value chain for Participation-TV services have come together under the auspices of AIME's Interactive Broadcast Forum to share their specialist knowledge from different parts of the industry and to create a document that has major application for the industry.

I cannot over-emphasise the fantastic effort made by all the parties involved to overcome commercial and competitive sensitivities to produce a set of practical Guidelines that will be genuinely helpful in achieving a greater level of cross-industry understanding, transparency and the necessary service compliance requirements.

I thank everyone for their effort and input to produce something of vital importance and benefit to this dynamic Industry of which we all play a part.

It is therefore with great pleasure and pride on behalf of AIME, to offer these Best Practice Guidelines to all those involved in bringing these important and popular services to market.

Roy Ellyatt
AIME President

Introduction

In 2007, a significant number of issues arose with premium rated Participation TV Services, some due to production or management issues, some due to mis-understanding of the capabilities of the underlying technology and some due to technical issues with the underlying technology.

As a result, in 2008, regulatory involvement brought focus to the correct conduct of premium rated Participation services and broadcasters retreated to utilising the "tried and trusted" fixed line technology and stopped using mobile services despite the proportionally small number of technical issues that had existed.

This guideline document, compiled with collective information from the 5 UK Mobile Network Operators and after consultation with key Broadcasters and Service Providers is aimed at the complete value chain for mobile Participation TV services that includes Broadcasters, Production Companies, Service Providers and Mobile Networks. The guideline provides sufficient background information on the underlying mobile technologies of shortcode Text and shortcode Voice services and makes recommendations on how to utilise these technologies in a fair and safe way with particular emphasis on the new regulatory requirements for robust, transparent and effectively operated mobile services.

This document does not provide guidance to the production elements of Participation services to fulfil the requirements of honesty and fairness as this is widely covered elsewhere in generic guidance and is not an issue specific to mobile.

This document does not provide regulatory compliance advice and all parties seeking to provide premium rated Participation TV services should seek independent legal advice as appropriate.

In this guideline the value chain are described as:

Broadcasters; Participants who are promoting the call to action primarily TV but could also include radio.

Service Providers; Participants who design and operate the service for the Broadcaster and have technical and commercial connectivity with the Mobile Networks

MNOs; The 5 UK licensed mobile network operators and the MVNO Virgin.

Users; The Broadcasters' audience who are participating using their mobile devices.

Glossery of terms

090	Numbering convention for long-dial premium rate numbers e.g. 09066111222
CLI	Calling Line Identity: The number of the caller to a service passed to the recipient of the call
IOM	Isle of Man
MNO	Mobile Network Operator
MVNO	Mobile Virtual Network Operator
PSTN	Public Switched Telephone Network
PTV	Participation TV
ROI	Republic of Ireland
SMS	Short message service. A text message typed by the user of a mobile phone and sent to a shortcode or long number
SP	Service Provider (the company that interfaces between the Broadcasters and the MNOs)
Shortcode	A 5 (usually) digit number e.g. 63123
VSC	Voice shortcode. A 5 digit shortcode that can be called using mobile phone as alternative to long number and can be premium rated.
TTR	Time to Receive

1. Understanding Messaging (SMS) and Capacity

When a call is made to a telephony service that has (say) a capacity of 64 simultaneous calls, the 65th call will get a "busy" tone and be blocked from Participation. The caller hangs up and tries again. This is known as a real-time system and although some users may not have been able to get through, all connected calls are able to be counted. After the "lines are closed" announcement the system can be configured to prevent further Participation by blocking all calls.

Mobile Messaging however is a store and forward system designed to cope with peak loads by buffering messages inside the mobile network instead of blocking. Dependant on the speed of the output from the mobile network, the buffer will gradually unload until the speed of input matches the speed of the output. This is analogous to the postal system during a peak time such as Christmas. Any excessive amount of post is eventually delivered, possibly after Christmas (late) and the originator does not know this has happened until after the event and will not be refunded the price of the stamp.

In any PTV programme format that will generate a significant peak in mobile Participation over a very short duration, there is a possibility of delay in the delivery of messages from the MNO to the Service Provider caused by either the output speed from the MNO to the Service Provider or the Service Providers speed of collecting and processing the output. Output running at a lesser rate than the combined users input, will cause messages to be buffered inside the network. The network will unload the messages to the Service Provider as fast as possible, but the tail end of the traffic may arrive later than anticipated.

1.1 Understanding mobile billing systems

There are two potential charges for mobile Participation in a TV programme. The first charge occurs when users send their text to the advertised shortcode. This is known as mobile originate or MO charge. The second is when the Service Provider who has received the user's message sends a response to the user and charges the user for the response. This is known as mobile terminate or MT charge.

When a MT charge is made, the Service Provider needs to be informed of the successful charge to ensure that the vote recorded is valid. This requirement creates another message from the MNO to the Service Provider and is known as a Delivery Receipt.

Therefore, each vote using MO and MT charging takes three messages and two billing instructions. This can cause additional delays to processing Participation traffic and may compromise the integrity of the vote if the billing receipts are not used to count the successful votes.

In a Participation format where the charge is made only on the MO message and any response is free to the user, the MNO and Service Provider processing capacity significantly increases.

1.2   Understanding the size of a Participation event

Voting events usually have a high peak of Participation over a short period of time and differ in traffic profile to other Participation programmes such as competitions or interacting with the studio. These tend to spread the Participation across the whole programme duration.

Participation events can be broken down into three main categories that have different profile for traffic peaks.

High Volume: Typically demands a 3 million audience or more and expects to generate more than 100,000 text messages over a short period (10 minutes or less). This has the most significant effect on the peak of Participation traffic and needs special attention to the programme format design to cater for the peak effect. Traffic usually driven by voting for candidates.

Medium Volume: Typically demands between 300,000 and 3 million audience and generates around 10,000 text messages but over a longer timeframe due to staggered calls to action and longer duration of the programme. A Medium volume event may lead to a High Volume event as the programme series reaches its climax. Traffic usually driven by voting, or time critical competition entries.

Low Volume: Small audience under 300,000 or user Participation is secondary to programme format. Time duration for Participation is long. Traffic usually driven by studio Participation or low level competitions.

For each of the Participation events there will be three time factors to consider;

Participation Window: This starts from the first call to action and ends when the "lines are closed" announcement is made.

Time to receive: This is the time during which the text messages created during the Participation Window are streamed from the MNO to the Service Provider and then the Service Provider system is able to count the votes. Where a Participation format uses MT based charging, then "Time to Receive" has to be extended to cater for confirmation of the MT billing being applied to the user.

Duplication: This is the effect of votes for different candidates from the same source and can be triggered by parading each candidate in turn and inviting audience Participation sequentially.

1.3   Recommended best practice

Prior to the design stage for a programme format which contains a Participation element, Broadcasters and their Service Providers must work together and calculate the "Time to Receive" factor based on individual MNO capacity, Service Provider system capacity, Participation Window length, Participation event size (large to small) and the potential for Duplication.

"Time to Receive" is the time it takes from the initial call to action to the receipt and counting of the final vote cast during the Participation Window.

This calculation must determine the point at which a result of the Participation event (e.g. a vote) can be announced to the audience ensuring that all valid responses by users were given every opportunity to be fully considered towards the result.

The length of Participation "Time to Receive" is severely impacted by the use of MT charging due to the additional billing and confirmation of billing that is required. MNOs have therefore recommended MO only based billing for medium and high volume Participation events which has a requirement for Participation results within a short time period.

There is no universal (across MNOs) method of time stamping messages, so the minimisation of buffering through an adequate Participation Window is essential to be able to establish which votes have been submitted by users outside of the Participation Window.

To achieve the calculation of the Time to Receive;

> • Request from each MNO, their message throughput capabilities and proportion of potential audience (based on proportion of overall mobile consumers).

> • Calculate if the programme format will generate low, medium or high volume Participation (possibly medium moving to high during the series).

> • Calculate the anticipated volume of messages in overall quantity per show and also in terms of peak messages per second.

> • Calculate the anticipated proportion of text messages per MNO.

> • Plan the Participation Window length to ensure that votes submitted can be output from each MNO and processed by the Service Provider with minimal buffering.

> • Using declared throughput capacity of MNO plus known throughput capacity of Service Provider system, calculate the "Time to Receive" factor for each MNOs share of text messages.

• Take the worst case (highest split of votes and / or lowest MNO throughput) and add a "comfort factor" of 30% (this can be reduced later through real live experience).

• Ensure that the Service Provider receiving and processing systems are able to process the combined quantity of votes from the MNOs without adding any latency or that the latency is built into the "Time to Receive" calculation.

• The Time to Receive calculation must be built into the programme format to allow for the significant majority of votes to be collected and counted before any results are announced.

• If the programme format will stimulate a High or Medium volume vote then MT based charging should not be used as it will compromise the use of available mobile network capacity.

All UK MNOs with sufficient notice, will assist Service Providers in capacity planning for these differing programme formats. A summary checklist for Service Provider's running SMS PTV votes can be found in Appendix 1.

1.4   MNO specific information (public) on network capacity

3	Documentation is available for SP's on request detailing maximum capacity of network. Correct planning shows the point at which delays will start to occur and can govern the size of the Participation window. Eliminating dependency on Mobile terminate charging will create additional throughput capacity.
V	Vodafone have documentation available that details maximum throughput available using a direct connection to our systems. Prior planning will be required to ensure that connectivity is optimised for maximum throughput.
TM	T-Mobile have documentation available about throughput and capacity of messaging platform and SMSCs. T-Mobile has validated this capacity with existing Service Providers.
OR	Orange can detail on request the maximum capacity of network via supporting documentation and observed throughput. Prior planning will be required to ensure that connectivity is optimised for maximum throughput. Removing MT charging will create additional throughput.
O2	O2 insists on the sole use of MO text for all TV voting propositions as this avoids network billing congestion for larger volume votes and enables clear and effective pricing information to be communicated to O2 subscribers. O2 undertakes capacity planning, link configurations, etc as a matter of course for all votes and for major votes (expected O2 votes in excess of 500k+) we provide enhanced network monitoring and live updates to SP during programmes.

2. Preventing or blocking user Participation

It is a regulatory requirement to prevent Participation from users outside of the Participation time window.

In fixed line premium rate (090 numbering) terms, a technical fix is available to allow prevention of calls and charging outside of the window.

In MNO technology, no such facility exists on a universal basis. Therefore techniques can be deployed for mid or low PTV events which use MT based charging or refund policies must exist for MO charged Participation.

2.1 Recommendation for best practice for preventing user Participation or effecting refunds

MT based charging

By creating a Participation format that uses MT based charging (recommended only in low volume events), the Service Provider can either send a free-to-user response for texts received from users outside of the Participation Window (e.g. "Sorry the vote has now closed") or to not respond at all. The maximum cost to the user will be the cost of sending the MO message. Texts sent and received inside the Participation Window can be sent the chargeable MT response as advertised.

Where the only cost to a user to participate outside of the Participation Window is the standard network charge or the message came out of the bundle provided by their MNO and the MNO is not providing a revenue share to the Service Provider for this charge, then there is no regulatory requirement to offer a refund in this instance.

MO based charging

For programme formats where MO based charging is used or where the MO charge carried a revenue share arrangement between the MNO and the Service Provider, a robust refund policy previously agreed with all the participants must be in place prior to the PTV event for all votes sent outside of the Participation Window.

The refund matrix below recommends the situations where refunds may need to be made and who should take responsibility for the refund.

It is good practice to send users who are eligible for a refund, a free text message advising them of the planned refund and any specific mechanics for collecting the refund.

Recommendations for how refund responsibility should be agreed between all participants

POTENTIAL SITUATION	BROADCASTER OR SERVICE PROVIDER PROVIDES REFUND?	MNO PROVIDES REFUND?
The user has participated outside of the Participation Window and their vote was not accepted to the final count.	Yes, but can be operated so that users have to request the refund.	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below
The user participated inside the Participation Window and their vote was not received counted due to unpredicted traffic volumes.	Yes, automatic	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below
There was a technical issue in the MNO causing text messages to not be counted	No	Yes, automatic. MNO and Service Provider work together to build database of affected users
There was a technical issue downstream of the MNO causing text messages to not be counted	Yes, automatic	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below
The call to action was not removed from future programme repeats and the Participation is invalid	Yes, automatic	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below
The MO or MT price quoted onscreen was incorrect or missing	Yes, automatic	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below
The user was invited to participate when there was no opportunity for their Participation to be considered.	Yes, automatic	No, but some MNOs offer a facility for Service Providers to request bulk refunds for users. See table below

The ideal method for refund for users is to apply credit to the user's phone bill or pre-pay balance. However this facility may not be universally available across all MNOs and a postal or other appropriate method of refund should be considered as an alternative. The table below shows the MNO position on refund requests.

2.2   MNO refund information (public)

3	3 supports a batch refund process which can be run in one working day if requested, regardless of "fault" and prefers this method of refund for Users.
V	A manual batch process exists that will allow Vodafone to credit consumers for messages delivered where a fault in the Vodafone network has prevented the message delivery.
TM	T-Mobile supports a manual batch refund and is planning to support an automated batch refund process in the future
OR	Orange supports a batch refund process which can be turned around within 5 working days or possibly quicker depending on the number of accounts being refunded. Orange would prefer to refund all customers using this method regardless of how the requirement to refund the customer arises.
O2	O2 can provide automatic refunds by batch at our cost where the O2 network is deemed to have failed or at the broadcaster and/or SP's cost otherwise.

3. Pricing and Promotion

It is an MNO and regulatory requirement that pricing for potential users of mobile Participation services is clear and unambiguous. The range of price points that MNOs provide to their Service Providers allow for common price points to be selected to enable consistent pricing across all mobile networks.

Pricing for MO messages as "network standard rate" does however vary across networks and will make the on-screen message ambiguous.

3.1 Recommendation for best practice for pricing and promotion

Broadcasters / Production Companies should consider methods of reducing or eliminating ambiguous pricing statements that may cause consumer confusion.

One method of ensuring complete pricing transparency for mobile services is to set up shortcodes on networks so that any MO and/or MT prices use a common price point and do not use "network standard rate" which can vary across mobile networks. The combined MO and MT pricing can then be declared on screen.

For example, a 10p MO can be combined with a 35p MT so that the price on screen is 45p (35p MT plus 10p MO) representing the total charge the user will expect and is clearer that "costs 35p plus network standard rate"

Broadcasters that do not plan to rate the MO part as a fixed rate but wish for the MO to be a normal text message, (no revenue share, usage comes from message bundle if appropriate, standard rate if out of bundle), must request this from the MNOs. However, at the time of writing, not all MNOs can support messages to shortcodes coming out of bundles.

Retail price points for both MO and MT messages for each mobile network are detailed below.

3.2   MNO specific information

The 5 UK MNOs have released for the purposes of this document, information that is normally held under confidentiality clauses and ask for respect for the confidential nature of this information.

3	Retail price points for MO and MT messaging (pence) 0, 10, 12, 15, 20, 25, 30, 35, 50, 60, 75, 100,120,150 and 200 through to 1000 in 50p increments. We can also support in-bundle non-revenue share MO pricing on request
V	Supports price points for premium SMS services (pence): 10, 12, 15, 18, 20, 25, 30, 35, 50, 60, 75, 100,120,150, 200 through to 500 in 50p increments plus a £10 price point which is only available upon request.
TM	Supports MO rates of (pence) 10, 12, 13, 15, 20, 25, 30, 35, 50, 60, 75, 100, 120, 150, 200, 250, 300, 400 and 500 and MT rates the same as MO including 350 and 450 through to 1000 in 50p increments.
OR	Supports price points for premium SMS services (pence): 10, 12, 13, 15, 18, 20, 25, 35, 50, 60, 75, 100, 120, 150, 200 through to 500 in 50p increments plus a £10 price point
O2	Supports MO rates of (pence) 0, 10, 15, 20, 25, 35, 50 100, 120, 150 and MT rates of (pence) 6, 10, 12, 13, 15, 18, 20, 25, 30, 35, 40, 50, 60, 75, 100, 120, 129, 150, 200, 250, 300, 350, 400, 450, 500, 1000
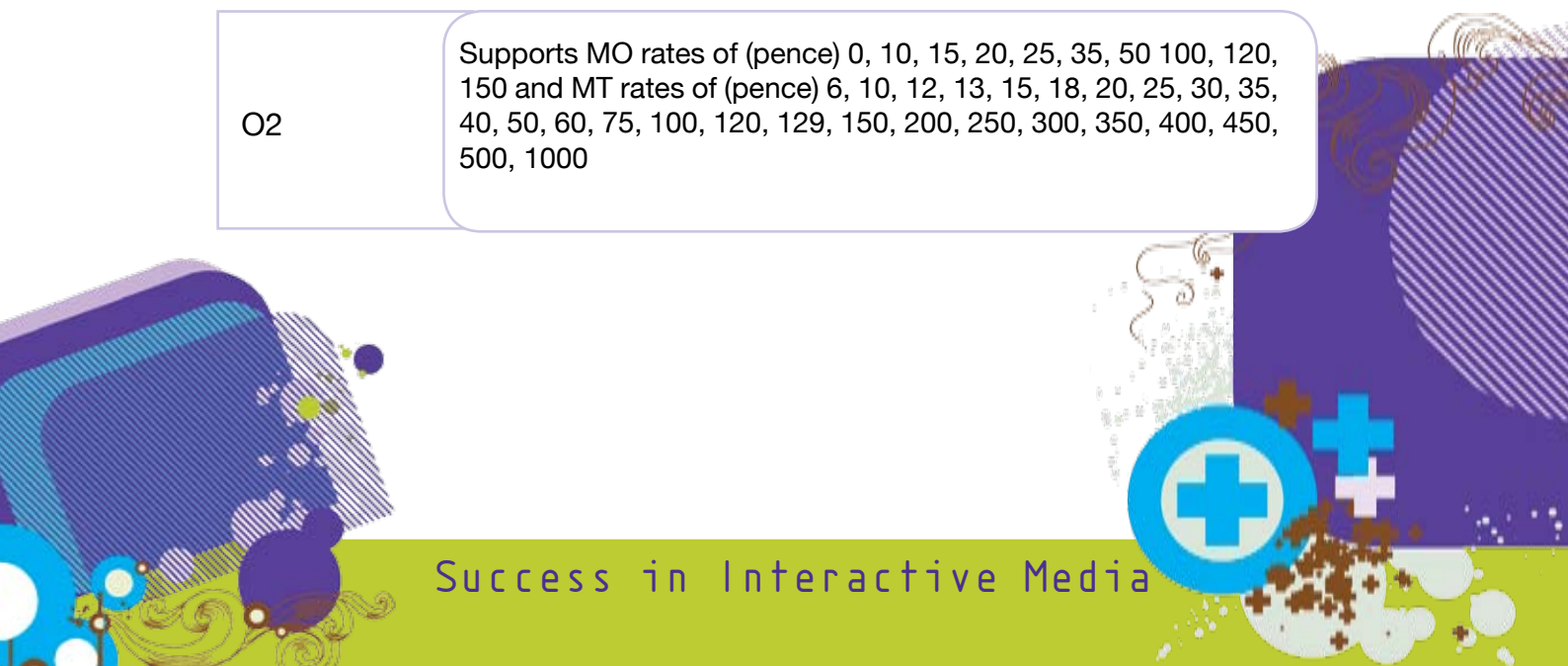
4.   Technical failures or delays

There is always the potential for technical failures or delays from the origination of the user's messages to the final count of the Participation. Knowledge of the potential elements for failure or delay will enable contingency planning for those eventualities.

4.1   Recommendation for best practice to deal with technical failures / delays

Service Providers together with MNOs should plan for categories of Participation events ranging from high profile, peak loading events to low level events and cater for failures or congestion in the end to end technology.

Service Providers should develop techniques for establishing if votes are not being received or are being partly received from an MNO based on historical knowledge of the percentage split of votes that each MNO generates. This will give an early indication of potential issues that need to be mitigated.

Service Providers should consider catering for the content of the messages not following precisely the on-screen instructions and deploy "fuzzy logic" to work out what a user intended to reduce the potential for "spoiled" votes.

It is recommended that Broadcasters and Service Providers agree with the MNOs the levels of support during PTV events, the circumstances under which the MNO will contact the Broadcaster / Service Provider or vice versa regarding technical failures or other conditions that can compromise the Participation process.

Once the design of the Participation Service has been executed, involving all parties where relevant, Service Providers (acting on behalf of their customers, the Broadcasters) should contact MNO account managers at least 6 weeks in advance (if Participation event is predicted to be High or Medium volume) to notify of the forthcoming Participation event.

MNOs and Service Providers should;

> • Configure network to provide text message throughput appropriate for the forecasted volumes for the Service Provider

> • Agree enhanced monitoring and communication to alert Service Provider to MNO or connectivity issues during event and vice versa

> • If the Service Provider or Broadcaster requires an independent technical audit of the end to end processes, agree the date and process of the audit and the responsibilities of the recommended changes

The design of the service should include planning for potential technology failures which all parties have agreed to in advance and in particular;

- The on-screen messages that will be broadcast during technical failures in a live show

- The contingency plan for cancelling or recounting a vote in the event of a technical failure or other anomaly

- The customer support strategy in the event of a failure

- The customer refund processes for all failure scenarios

Additionally MNOs should be invited to be involved at all post event reviews between Service Provider and Broadcaster to ensure the full value chain is represented. Where it is impractical to involve all MNOs, the Shortcode Management Group should be invited to send a single representative for all MNOs. Where this is inappropriate due to network specific technical or commercial issues then MNOs should address this individually with the post-event review working group.

4.2   Specific MNO information on end-to end support is;

3	The framework for this is in place and will need minor enhancements to proactive information gathering process before the next PTV voting service. We will allow third party audit or processes by appropriately skilled personnel if required
V	Vodafone have a process for configuring and running voting services that will need slight alterations for any new PTV event to incorporate proactive measures for network monitoring.
TM	T-Mobile have a process for configuring and running voting services that will need slight alterations for any new PTV event to incorporate proactive measures for network monitoring.
OR	The framework for this is in place and will need only minor enhancements to provide a proactive information gathering process before the next PTV voting service. A Service Request form is available for high volume events.
O2	O2 undertakes capacity planning, link configurations, etc as a matter of course for all votes and for major votes (expected O2 votes in excess of 500k+). We provide enhanced network monitoring and live updates to SP during programmes

5.   Customer Service arrangements

MNOs are traditionally the first point of contact for mobile users when they have issues with a service and most MNOs encourage users to speak to the promoter of the service first, and then revert to the MNO if this has not been successful.

It is understood that Broadcasters also receive a high volume of calls if an event has issues associated with it and that users also would approach PhonepayPlus for advice.

5.1   Recommendation for best practice for Customer Service

All participants should agree in advance the customer support procedures assuming both a successful event and an event with issues so that end users are treated fairly. If an event has serious issues, PhonepayPlus will need to be advised so that their call centre can be briefed and the users handled correctly.

Each MNO will need to advise their call centre of forthcoming events and of any issues that arose during an event and what to advise users in the event of an enquiry.

6.   Other UK and non UK Networks

Broadcasters and Service Providers must consider that the broadcaster footprint may exceed that of the UK 5 MNOs to ROI and reach to the Channel Islands, IOM and ROI.

ROI networks are capable of running 5xxxx series SMS shortcodes and under a UK MNO arrangement, the same 5xxxx shortcode can be run in the UK meaning an identical call to action for UK and ROI with the exception that pricing will be in Pence and Eurocents respectively.

ROI and UK premium rate services fall under two separate regulators although they have principally the same regulatory requirements.

Islands networks can technically run text and voice shortcodes although there is no knowledge here of their plans to do so and fixed line PRS remains the default.

VOICE SHORTCODES

7.   Using Voice Shortcodes

Voice shortcodes are simply a mobile network mapping of a 5 digit shortcode to a PSTN long number and carry most of the range of price points that MNOs offer on text shortcode services. This means that pricing clarity on the call to action can be provided to mobile users of Participation services without the ambiguity of "other networks may vary". Broadcasters can select the price points best suited to their needs.

Voice shortcodes provide an alternative call to action to either texting or calling a 09 premium rate number and the three separate calls to action can be rotated during the show.

At present (Oct. 2008), there is no MNO experience in running high volume events across voice shortcodes and usage of this technology should be tested first in low to medium volume events.

MNOs need to be fully involved with the first proposals for utilisation of voice short-codes in PTV formats to ensure all possible commercial and technical considerations are covered.

7.1   Recommendation for best practice for using Voice Shortcodes

Prior to using voice shortcodes, participants should consider;

> • The capacity of the mobile network to route voice shortcode traffic to an IVR or call counting system against the anticipated vote traffic

> • The expected loading of the mobile networks during the programme format (number of calls, duration of calls, peak calls per second)

> • Whether to use a drop charge or price per minute service. Drop charges are supported by 3, VF, O2 and TM. The latter requires calls to be force terminated in less than 59 seconds

> • Whether to have a shortcode per candidate (in a voting format) or to use an IVR to process the votes. The former reduces the duration of the calls.

> • If calls can be blocked (busied) outside of Participation window and how that affects call billing (if at all)

7.2   Specific MNO information on Voice Shortcodes

	V	OR	TM	3	O2
MNO SUPPORTS VOICE SHORTCODES?	Yes	Yes	Yes	Yes	Yes
CAN THE SHORTCODE BE THE SAME AS THE TEXT SHORTCODE?	Yes	Yes	Yes	Yes	Yes, There are 4 matching SMS MO price points if required (25/50/100/150 ppm)
CAN THE VSC HAVE DIFFERENT PRICING TO TEXT SHORTCODE?	Yes	Yes	Yes	Yes	Yes
WHAT ARE THE PRICE POINTS PER MINUTE IN PENCE	0, 5, 10, 12, 15, 20, 25, 35, 50, 60, 75, 100, 120, 150 and 200	0, 10, 15, 20, 25, 35, 40, 50, 60, 75, 100, 120 and 150	10, 25, 35, 50, 60, 75,100, 150 and 200	0, 5, 10, 12, 15, 20, 25, 30, 35, 50, 75, 100, 120, 150 and 50p increments up to £5.00	0, 25, 60 (DQ only), 65, 80, 100, 150, 200
DO YOU OFFER ZERO RATE?	Yes	Yes	No	Yes	Yes
DO YOU OFFER DROP CHARGE /SINGLE CHARGE?	Yes, 45 days notice to set up	No	Yes, by using per minute rate and making call terminate in less than 59 seconds.	Yes, 30 days notice to set up	Yes, 2 tariffs
WHAT ARE THE DROP CHARGE PRICE POINTS IN PENCE?	12, 15, 25, 35, 50, 75, 100 and 150	n/a	10, 25, 35, 50, 60, 75,100, 150 and 200	35, 50, 75, 100 others on demand	50, 80
CAN THE PSTN ROUTING GO TO PRIVATE NUMBERS E.G. 0899X XXXXXX? (SEE NOTE BELOW)	No	Not at the moment although we have a way of barring direct dial to DDI numbers.	This is preferred	Yes	Not required as routing is to premium rated numbers
CAN THE PSTN ROUTING GO TO 09 PRS NUMBERS?	No	No	No	No	Not only will PSTN routing go to 09 PRS numbers, but we will also support routing to 01 and 02 geographical numbers and low rate 0345 and 0500 numbers.

	V	OR	TM	3	O2
WILL YOU SUPPORT PSMS MT CHARGING AS A RESULT OF THE VSC CALL? (This may be an alternative to cross network availability of drop charge and only applicable in low volume scenarios)	No	As long as user has elected to receive the charge.	As long as user has elected to receive the charge	As long as user has elected to receive the charge	n/a
DOES CLI GET TRANSFERRED IF USER HAS KEYED 141 OR USED HANDSET MENU OPTION TO HIDE CLI PRIOR TO CALL?	No	No	No	No	Will need to check and revert
ARE THERE ANY OTHER LIMITATIONS?	No	Short codes must be within the agreed cross network ranges 6XXXX and 8XXXX.	No	Minimal, billing description has to be the same for voice and sms shortcode	Short codes must be within the agreed cross network ranges.

Note based on current information: The non public range 0899 xxxxxx is available from Ofcom for internal network operator or intra network operator use and any NO can reserve a sub-range from the remaining allocation.

Success in Interactive Media

8.   Regulatory Environment

Ofcom and PhonepayPlus have introduced new requirements for Participation TV services including a Prior Permission regime for Service Providers of PTV services.

Where these published requirements are relevant to mobile technologies, they are referenced below and then cross referenced to the best practice recommendations detailed in this document.

For further information from Ofcom and PhonepayPlus please see:
www.ofcom.org.uk/consult/condocs/participationtv/statement/ptvstatement.pdf
www.phonepayplus.org.uk/pdfs_news/Participation_TV_Prior_Permissions_Notice.pdf

1.   The stage at which short-listing or selecting winners should be planned in advance to take voting technology into consideration [See section 1.3]

2.   Pricing information must be clear [See section 3]

3.   Service Providers must ensure that all valid responses sent by viewers are available in sufficient time to be fully considered and reflected in any outcome of an event. [See sections 1.3 and 4.1]

4.   Where a service provider has made arrangements for the handling of excess peak traffic by third parties, these arrangements must ensure that all valid responses so handled are treated equally with those received by the service provider. [See section 1.3]

5.   Calls and SMS entries must not be charged or counted as a relevant entry before lines have been announced as opened or be charged or counted as a relevant entry after an announcement that lines are closed has been made. Immediately after an announcement that the lines have been closed has been made the lines must be closed provided that calls made but uncompleted at the time of the closure announcement must be allowed to be completed. [See sections 1.3 and 2]

6.   Phone lines must not remain open when programmes are repeated.
[See section 2]

7.   Customer service arrangements for handling participant enquiries must be in place. [See section 5]

8.   Contractual arrangements between Service Providers and any parties with which they contract in respect of the provision of the relevant Broadcast PRS must clearly and coherently identify which party is responsible for the performance or management of each activity associated with the service. [See section 4]

9.   Procedures must exist for the backup of all operational systems and to deal with predictable problems inherent in providing Broadcast PRS.
[See section 4]

APPENDIX 1
CHECKLIST FOR SERVICE PROVIDER RUNNING SHORTCODE TEXT PARTICIPTION TV VOTE

CHECKLIST SOURCE: MOBILE INTERACTIVE GROUP

#	ACTION	DETAIL	OWNERS	TIMELINE
1	Assess the volume of the Vote anticipated	Expected volume for final show must be guideline for the whole show	Broadcaster and Service Provider	> 6 weeks before the event
2	Check short codes are ordered and price points are common on all MNOs	Order new short codes if necessary and / or change tariffs	Service Provider	6 -12 weeks before the event
3	Calculate the 'Time to Receive'	* See calculation below	Service Provider	> 6 weeks before the event
4	Confirm with Broadcaster that the show follows the TTR guideline	* See calculation below	Service Provider and Broadcaster	> 6 weeks before the event
5	Agree the category of vote	Low, Medium, or High	Service Provider	4 - 6 weeks before vote
6	Agree the support procedures to follow according to Vote category	Service Provider with MNO	Service Provider and MNO	4 - 6 weeks before vote
7	Produce 'Vote Notification Document' to send to MNO's	State: Show details Connection details Billing and short codes Operational requirements Category of vote TTR, etc.	Service Provider	> 4 weeks before the event
8	Optimise Gateway connections with each network	If relevant, increase connection speeds to cope with high volume votes or different short codes	Service Provider and MNO	2-4 weeks before the vote
9	Confirm Broadcaster has contingency in place to respond to incident management	• What happens if a network goes down? • What happens if SP gateway fails? • What message will go out on air/ screen?	Service Provider and Broadcaster	Before the vote
10	Confirm operational readiness with each network before vote	Confirm no incidents or change management affecting messaging systems	Service Provider and MNO	Immediately before show
11	Follow Operational Support Process	As agreed as part of # 5. See table below.	Service Provider and MNO	In live
12	Post Project Review	Report on: Volumes received Speed of process Incidents Refunds applicable	Service Provider and MNO	< 2 days after the show
13	Issue Refunds	For any viewer whose legitimate vote did not come in on time	Service Provider to assess affected viewers	Within 1 month of show

How to calculate Time To Receive (TTR)

Preparation

To calculate the Time to Receive (TTR), these measurements must be taken:

• Observed throughput per second per network over continuous period (e.g 5 minutes) to pass through the Service Provider's gateway.

(*this shows how many messages a service provider can handle from each network over a sustained period of time following a Call to Action*).

• Typical observed percentage market share per network in volume. *(e.g. Vodafone 21%, Orange 20%, Three 10% etc.)*

TTR Calculation

• Take the number of Votes expected

• Divide this number into the expected volumes per network (according to market share)

• Divide these figures by the observed capacity throughputs per network over (e.g.) 5 minutes through the service

• This gives you TTR for each network.

• Take the highest time value and add contingency time (e.g. 25%).

• This number is your Time to Receive

**APPENDIX 2
EDITORIAL WORKING GROUP**

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Key consulting parties:

Steve Ricketts, Phil Mulligan - **Orange**
Stephen Hunter, Reg Cox - **Vodafone**
Gavin Dent, Amanda Tansey - **T-Mobile**
Iain McCallum, Mike Round - **O2**
Tim Sandars – **MIG**
Sally Weatherall – **WIN**
Toby Padgham – **AIME**

Plus the SMS/VSC working group of the AIME Interactive Broadcast Forum:

ITV, BBC, Five, Fremantle Media, 3, O2, T-Mobile, Vodafone, Orange, Virgin Mobile, MIG, WIN, Dialogue, MX Telecom, Opal Telecom Carphone Warehouse, Thus.

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