

# Use of AMD - Economic Impact

Prepared for Ofcom

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## 1. Introduction

You have asked that we provide analysis into the ongoing review of Silent Call Regulations. The options under consideration are:

1. No change – requirements stay as they are.
2. Ban AMD.
3. Messages on AM disconnects (with a suitable delay).
4. Messages on AM disconnects (with a suitable delay) and a 24-hour rule for these calls.
5. 24-hour rule for AM disconnects.
6. Extension of the 72-hour rule to cover abandoned calls and AM disconnects.

You have asked that we consider the economic impacts of each of these options. This report includes input from industry participators to identify real life scenarios and examples.

Given the variety of solutions available and the limited nature of this research our review can be indicative only and should be read as such.

## 2. Economic Effect

We have broken down the economic impact of the options into three areas:

1. Cost of Set Up – the cost for operations to introduce systems, process and technology to ensure compliance. This is principally a technology matter and may include the consideration of the cost of previously purchased and now redundant equipment.
2. Ongoing Support costs – the support cost increment for each of the solutions, be it a fixed or volume based cost. This might include telecoms, technology and operational management costs.
3. Ongoing Performance – The effect of each of the solutions on operational efficiency and effectiveness. We have considered both productivity (agent talk time) and call outcomes (sales/debt collected).

This section provides a detailed analysis of each option. We have summarised our findings in a table in section 3.

### **Background – Impact on Performance**

For a detailed analysis of the economic impact of AMD we would draw your attention to section 8 of the Verint Final Report on Research into the Accuracy of Answer Machine Detection Technology (28 July 2009).

The economic effect on performance of amending the regulations has to be considered from two perspectives.

### **Operational Productivity**

Firstly the economic effect needs to be considered as a function of the operational productivity of the centre. AMD equipment has been popular as it can cut out large elements of agent activity when they are not talking to consumers (i.e. when they are listening to and cutting off AM calls). Any reduction or limitation in the use of AMD will reduce this benefit to productivity.

Equally operations are more productive if they have large calling pools of data that are not segmented. Any rules applied to calling (such as time limiting call backs) will complicate the calling algorithms and is likely to reduce productivity, in short the records are likely to be allocated to agents less efficiently.

### **Call Outcome**

Secondly, and more subjectively, is the effect on the success of the call (debt collection or sale) and more widely the effect on brand of the calling organisation. We term this “outcome-based” assessment. As explained in the Verint report there is some evidence that AMD has a detrimental effect on sales conversion rates due to the stilted nature of the conversation that occurs due to the “AMD pause”.

As far as we could ascertain, this is not true of debt collection calls, due to the subject matter of the call and the type of conversation undertaken. Within this category the wider brand damage of the proposed solutions needs to be considered (e.g. half messages being left, poor sales/collection calls).

## 2.1 No change – requirements stay as they are.

No incremental costs have been attributed to this solution as it is the baseline scenario against which other options are compared.

It is of note that a number of the operators to whom we talked suggested that they had already, or were in the process of, investing significantly in technology to keep within the 2008 guidelines. It is clear that over time and as the Guidelines have received greater attention (recently accelerated by the potential uplift in fine cap to £2m) some organisations have changed their behavior in an attempt to remain compliant.

This is evidently going to be truer of the organisations who wish to be compliant (and who incidentally are likely to be willing to talk to us) and may not apply to many of the less compliant organisations.

However overall and significantly more widespread than during the last research of April 2009, we believe the Guidelines **have** changed behavior in the marketplace for many organisations.

## 2.2 Ban AMD

### 2.2.1 Ban AMD – Cost Of Setup

There appears to be little or no direct cost of implementing this option. All diallers we have come across have the ability to have AMD switched on or off, generally under the end users control.

However potential cost areas have been suggested to us as follows:

- Redundant equipment – as mentioned above many organisations have invested in order to be compliant to AMD regulations. Some feel that if AMD was subsequently to be banned on the third version of the Guidelines this cost should be recognized. Numbers quoted to us varied from £10,000 to the full price of a new dialler (not told to us directly but indicated as being in the £250k region). We believe that much of this cost can be discounted as diallers are purchased for many operational reasons beyond AMD, but it is certainly likely that the desire to be compliant to the Guidelines with respect to AMD has led to some degree of increased investment that would then be made redundant under this option.
- Redundant Staff – Debt collection agencies in particular believe that banning AMD would force them to lose significant numbers of staff (see 2.2.3 below) and their redundancy costs should be considered.

### 2.2.2 Ban AMD – Ongoing Support Costs

#### Telecomms

Banning AMD technology would mean that all AM calls would be passed to agents. This would increase the call length whilst the agent identified that it was an AM and disconnected. However we believe that this period is roughly equivalent to the AMD analysis time (not more than 2 seconds) and as such there would be no incremental or reduced charge for these calls.

#### Other Costs

We are not aware of any material change to other cost captions. Suggestions were made to us that management levels may need to rise as increased team sizes will be required to handle the AMD calls. However we believe this factor is covered in the analysis of operational performance below.

### 2.2.3 Ban AMD – Operational Performance

The Verint Report quoted industry benchmark figures as summarized below:

	Answer Machine Rate			
	20%	30%	40%	50%
Live Talk Time AMD On	75%	75%	74%	73%
Live Talk Time AMD Off	73%	71%	68%	60%
Variance (%age)	2%	4%	6%	13%
Variance (Minutes)	1 min	2min	4min	8min

The effect on productivity varies as the Answer Machine Rate <sup>1</sup>varies. The higher this percentage the more beneficial is AMD as more AM calls can be removed.

In terms of operational cost this can be quantified roughly as follows using annual costs for a 100 seat operation assuming a low end calling window to reflect the nature of many outbound operations:

	Answer Machine Rate			
	20%	30%	40%	50%
Typical operational Cost Per Hour	£12	£12	£12	£12
Annual cost for 100 seat operation	£1.6m	£1.6m	£1.6m	£1.6m
Additional cost without AMD	£32k	£64k	£96k	£208k

We have been able to provide some real life examples of the impact of switching off AMD to add to this analysis. The examples we quote are as follows:

- A debt collection agency that switched off AMD for a 6 week period and compared results,
- A company who switched off AMD from their sales operations for compliance reasons and wanted to “assess the damage”,
- A company who switched off AMD for their sales operations for a period of 2 weeks.

<sup>1</sup> Answer Machine Rate is the percentage of calls that are answered by Answer Machines at the consumer end.

The sampling and the testing methodology are clearly not statistically robust and findings can be taken as indicative only.

**Table 1 – Effect of banning AMD**

	Effect on Productivity	Effect on Outcomes	Overall Performance
<b>Company 1 – Debt Recovery</b>	137% reduction in records called.(1)  36% reduction in right party contacts  Reduced headcount requirement for same database of a third	No discernable difference in effective outcomes / contact or overall in rate of cash collection.  No perceived benefit in outcomes from removal of the AMD pause at start of call	Significant decrease in agent productivity (ratio of time talking to target customers) without any counterbalancing increase in success percentage.  Overall significant increase in cost per pound collected.
<b>Company 2 – Sales</b>	23% reduction in right party contacts.  Contacts per hour dropped from 6 per hour to 5 per hour	33% increase in sales per contact.  This suggests that the conversations undertaken without the AMD pause were more successful in driving sales	Overall increase in sales per hour of 2%.  This should transfer directly to a reduced cost per sale of 2%.  However sales will take longer to be delivered and this benefit may be compromised by need to refresh data and restrictions on calling periods for datasets.
<b>Company 3 – Sales</b>	13% reduction in completes per hour	35% increase in sales per completed call	Overall increase in sales per hour of 14%.  This should transfer directly to a reduced cost per sale of 14%.  However sales will take longer to be delivered and this benefit may be compromised by need to refresh data and restrictions on calling periods for datasets.

**NOTES**

(1) – Company 1 has very high level of Answer Machine / mobile number unobtainable calls.

It appears clear that banning AMD would have a significant impact on centre productivity. The examples we have found from industry are generally higher (but within scope) of the standard numbers quoted in the Verint report. The 36% quoted by Company 1 may be explained by their higher rate of AM and mobile unobtainable calls. This is a factor generally common across debt collection operations when compared to sales activity.

However for sales operations this cost increase appears to be offset by an improvement in conversion rates. We do not have the data to conclude whether this factor is generally true but we were unable to find an operation that had not seen a conversion rate increase, or indeed had seen a decrease, when AMD was switched off on its campaigns. Whether in all cases this increment outweighs the decrease in productivity is uncertain.

This mitigating performance uplift does not appear to be present at all in debt collection operations where success rates per contact and cash collected per contact remain constant with or without AMD.



## 2.3 Messages on AM disconnects (with a suitable delay)

This option aims to leave a message on all AM identified calls so that FP consumers can hear the message and true AMs will record it. The issue with this solution is the timing and length of the message played to ensure half messages are not left on AMs.

We believe the most suitable solution is to play a message at the later of i) identification of the beep if this functionality is available and ii) a suitable period after pick up e.g. 5 seconds.

For operations where the dialler can identify the beep this option is clearly more attractive. However in all operations we believe it is likely to create a number of part messages being left that are likely to be a significant nuisance in their own right.

### 2.3.1 Messages on AM Disconnects – Cost of Setup

The cost of setup of this option falls into 2 categories

- **Cost of Functionality** – All our interviewees stated that the cost should be minimal as the functionality exists in their solutions. All their diallers had the ability to play messages and this could be programmed to occur on AM identified calls. The ability to leave messages after the beep was known to exist for some operations and was unclear for others. In the event that this was required by the regulations and not within the current solution specifications, significant cost may be incurred in upgrading/replacing. Again this was quoted as anything from thousands of pounds to “a new dialler”.
- **Process cost** – there would be a cost of planning and implementing the required process and technological changes. This was generally described as being a sunk cost and deliverable from existing teams, but costed on a man hour basis may amount to c£5-10,000.
- **Cost of Monitoring** – Most interviewees believed that whilst they could implement the functionality easily they would be reliant on manufacturers to create the exception reporting and general monitoring that would be required to manage it. This was expected to be in the thousands of pounds although some suggested that this may be presented to them as a product upgrade at significantly more cost.

### 2.3.2. Messages on AM Disconnects – Ongoing Support Costs

#### Telecomms Costs

This cost is created by the increased call length of leaving the message on the AM call. We have modelled some scenarios and validated them with our interviewees.

**Table 2 – Leaving AM Messages - Telecomms cost increment**

	AM rate at 30% of Connects	AM rate of 60% of Connects
Increase in call costs pa	£5,000	£12,000
Percentage increase in Telecomms cost	6.4%	21%
Percentage increase in overall cost	0.2%	0.4%

#### Assumptions

- Additional call length on AM identified calls 15 seconds.
- 100 seat operation working 8 hours per day 6 days per week.
- Operational 48 weeks per year.
- Telephony cost 1.5 pence per minute on average.
- Trunks purchased to cater for increased line usage.

### 2.3.3 Message on AM Disconnects– Operational Performance

There should be no impact on operational performance under this option. Live calls passed to agents will be exactly the same as under the baseline scenario. The only impact might be the risk of slower dialling and reduced efficiency as trunks are taken up playing the AM message. However we have assumed that operations would purchase more trunks to cater for this (see above).

There is likely to be an effect on the overall brand perception of companies who leave such messages. If done properly and sensitively this effect may be positive, however we believe there is a significant risk of brand damage if half-messages or repeat messages are left.



However we have been unable to quantify this within the scope and time limits of this report and believe it would be specific to each operation.

## **2.4 Messages on AM disconnects (with a suitable delay) and a 24-hour rule for these calls**

This option incorporates option 2.3 above and 2.5 below.

We are not aware of any different impact there might be of combining the two factors and so believe the impact of this option should be the sum of options 2.3 and 2.5.

A summary is provided in the table at section 3.

## 2.5 24-hour rule for all AM detected calls

This option would forbid operations from redialing any record within 24 hours that had been identified as going to AM without a guaranteed agent being present. This would eliminate the issue of repeat and frequent FPs.

### 2.5.1 24 Hour Rule – Cost of set up

- **Cost of Functionality** – All our interviewees stated that the cost should be minimal to provide this option. All their diallers had the ability to delay recalling records and this could be programmed to occur on AM identified calls and frequently already is.
- **Process cost** – there would be a cost of planning and implementing the required process and technological changes. This was generally described as being a sunk cost and deliverable from existing teams, but costed on a man hour basis may amount to c£5-10,000.
- **Cost of Monitoring** – Most interviewees believed that whilst they could implement the functionality easily they would be reliant on manufacturers to create the exception reporting that would be required to monitor it. This was expected to be in the thousands of pounds although some suggested that this may be presented to them as a product upgrade at significantly more cost.

### 2.4.2 24 Hour Rule – Ongoing Support Costs

We believe ongoing cost increment would be restricted to the following areas:

- **Management** – There is likely to be an increased management overhead due to the complexity for planning for delayed calls. Once set up and running this may be reduced but is likely to remain a factor.
- **Monitoring** – Additional cost of monitoring compliance.

It is hard to quantify these factors and respondees were reluctant to commit to hard numbers. However suggestions were that they are likely to be in the region of c£30,000 pa per operating site.

### 2.4.3 24 Hour Rule – Ongoing Performance

Dialler operations are more efficient the larger the pool of records to be called. Imposing rules on callbacks breaks up the calling pool and reduces the efficiency of calling. This will lead to reduced agent efficiency as the agents wait for records to be delivered to them. For larger operations where the AM rate is low, the impact will be low. However where AM rates are high (and by implication the use of AMD most valuable) we believe the effect may be significant.

Another way to look at the same problem is to consider penetration rates of calling files. Typically an operation will call a file for a period of time (say three weeks). As calling progresses and more consumers are contacted the AM rate increases. At the start of the calling window delaying callbacks is likely to have little impact as there will be other, new records to call. However towards the end of the window when AM rates are high it will have a significant impact. This will probably result in campaigns being stopped sooner and therefore less penetration and less sales or debt recovery taking place.

Our interviewees were reluctant to commit to definite numbers on the increase in costs, principally, we believe due to the difficulty in modeling the outcomes. However some views expressed were as follows:

- No effect – policy to not callback within 24 hours already in place
- Campaign data sets likely to be pulled 10-15% earlier (measured either in time or in dial attempts) – this would result in a significant drop in sales made but probably a reduction in cost per sale as the less efficient calling at the end of a campaign is dropped.
- c5% loss in overall productivity (agent talk time) over our typical call profile.

The impact of this option would be dependent on a number of variables. These include: nature of campaign, current dialing rules, ability to flex resource, ability to blend different datasets, value of sale/debt profile.

It is of note that debt collection agencies pointed out to us that the main sufferer under this option (and the 72 hour option below) would be the consumer. Generally agencies are given a limited time to contact debtors. Failure to contact them and arrange repayment terms will result in the escalation of their case to the next level of the collection process. Any time-delay on redialing is likely to increase the number of escalations as less people will be contacted in the timeframe given. As such consumers will suffer more onerous collection procedures. We cannot provide an opinion on the details and quantum of this argument, but it does appear to be logical.

## **2.6 Extension of the 72-hour rule to cover abandoned calls and AM disconnects.**

This option has very similar implications as option 2.5. This section highlights only the differences between option 2.6 and 2.5.

### **2.6.1 72 Hour Rule - Set Up Cost Implications**

As per 2.5.1 above

### **2.6.2 72 Hour Rule – Ongoing Cost Implications**

As per 2.5.2 above with the following exception. The estimated ongoing cost of management is likely to be increased marginally, say to c£40,000 pa.

### **2.6.3 72 Hour Rule – Ongoing Performance**

The factors described in 2.5.3 above will be exacerbated.

Again interviewees were unwilling to commit to too much detail, but opinions were as follows:

- Campaign data sets likely to be pulled 15-20% earlier (measured either in time or in dial attempts) – this would result in a significant drop in sales made but probably a reduction in cost per sale as the less efficient calling at the end of a campaign is dropped.
- C5-10% loss in overall productivity (agent talk time) over our typical call profile if all else remained unchanged.

### 3. Summary Table

This section summarises the analysis provided in section 2 above. It should be read in conjunction with the more detailed analysis available. Findings included in this table are indicative only.

	Option	Set Up Costs	Ongoing Support Costs	Operational Productivity
1	No Change	<ul style="list-style-type: none"> <li>No Impact.</li> </ul>	<ul style="list-style-type: none"> <li>No Impact.</li> </ul>	<ul style="list-style-type: none"> <li>No Impact.</li> </ul>
2	Ban AMD	<ul style="list-style-type: none"> <li>No direct impact.</li> <li>Claims of opportunity cost of new investment made redundant - £10k-£250k, although we are cautious of these claims.</li> <li>Claims for staff redundancy and loss of profit (particularly debt recovery) as operations scaled back.</li> </ul>	<ul style="list-style-type: none"> <li>No impact on telecoms cost.</li> <li>Technology maintenance costs unaffected.</li> <li>Management costs likely to remain unchanged.</li> </ul>	<ul style="list-style-type: none"> <li>Agent productivity – reductions recorded between 13% and 36% (the latter driven by high AM rates in the calling profile).</li> <li>Outcomes – 33-35% increase in conversion rates for sales operations. No benefit witnessed by debt recovery examples.</li> <li>Overall – this evidence suggests that sales operations with AMD off can run at no disadvantage, but that debt recovery operations with AMD off are at significant disadvantage.</li> </ul>
3	Message On AMD after beep/suitable delay	<ul style="list-style-type: none"> <li>Limited or no cost for functionality – simple programme amend.</li> <li>Cost in £000s to create reporting suite to identify exceptions and dependent on manufacturers to write patch (they may require an upgrade purchase).</li> <li>Project implementation costs quoted at c£5-10k.</li> </ul>	<ul style="list-style-type: none"> <li>Estimated 6-21% increase in telecoms costs based on scenario modelled (see section 2.3.2). Variance driven by AM ratio in calling pool.</li> <li>This equates to estimated 0.2-0.4% increase in total cost.</li> <li>Limited additional cost of management, not quantified.</li> </ul>	<ul style="list-style-type: none"> <li>No impact.</li> <li>Only suggested effect was reduction in dialling pacing as trunks are tied up leaving messages, but mitigation of this (more trunks) factored into telecoms costs.</li> <li>Unquantified effect on brand</li> </ul>





	Option	Set Up Costs	Ongoing Support Costs	Operational Productivity
4	Message On AMD after beep/suitable delay and No Call Back Rule Within 24 hours	<ul style="list-style-type: none"><li>Minimal cost for functionality – simple programme amends.</li><li>Cost in £000s to create reporting suite to identify exceptions and dependent on manufacturers to write patch (they may force an upgrade purchase).</li><li>Project implementation costs quoted at c£10k.</li></ul>	<p>Messaging</p> <ul style="list-style-type: none"><li>Estimated 6-21% increase in telecoms costs based on scenario modelled (see section 2.3.2). Variance driven by AM ratio in calling pool.</li><li>This equates to estimated 0.2-0.4% increase in total cost.</li><li>Limited additional cost of management, not quantified.</li></ul> <p>24 Hour Rule</p> <ul style="list-style-type: none"><li>Increased management of more complex calling pools.</li><li>Estimated incremental annual cost in region of c£30,000.</li></ul>	<p>Messaging</p> <ul style="list-style-type: none"><li>No impact.</li><li>24 Hour Rule</li><li>Estimates of no effect as 24 rule already in place, campaigns ended c10-15% earlier as dialling becomes uneconomic, and 5% drop in productivity.</li><li>Effect will vary significantly based on factors such as size, type of calling, AM rates, calling strategies currently in place.</li><li>Note effect on consumers of debt agencies not able to chase and potential more rapid escalation of their cases.</li></ul>
5	No Call Back Rule Within 24 hours	<ul style="list-style-type: none"><li>Limited or no cost for functionality – simple programme amend.</li><li>Cost in £000s to create reporting suite to identify exceptions and dependent on manufacturers to write patch (they may force an upgrade purchase).</li><li>Project implementation costs quoted at c£5-10k.</li></ul>	<ul style="list-style-type: none"><li>Increased management of more complex calling pools.</li><li>Estimated incremental annual cost in region of c£30,000.</li></ul>	<ul style="list-style-type: none"><li>Estimates of no effect as 24 hour rule already in place, campaigns ended c10-15% earlier as dialling becomes uneconomic, and 5% drop in productivity.</li><li>Effect will vary significantly based on factors such as size, type of calling, AM rates, calling strategies currently in place.</li><li>Note effect on consumers of debt agencies not able to chase and potential more rapid escalation of their cases.</li></ul>



	Option	Set Up Costs	Ongoing Support Costs	Operational Productivity
6	No Call Back Rule Within 72 hours	<ul style="list-style-type: none"><li>Limited or no cost for functionality – simple programme amend.</li><li>Cost in £000s to create reporting suite to identify exceptions and dependent on manufacturers to write patch (they may force an upgrade purchase).</li><li>Project implementation costs quoted at c£5-10k.</li></ul>	<ul style="list-style-type: none"><li>Increased management of more complex calling pools.</li><li>Estimated incremental annual cost in region of £40,000.</li></ul>	<ul style="list-style-type: none"><li>Estimates of campaigns ended c10-15% earlier as dialling becomes uneconomic, and 5-10% drop in productivity.</li><li>Effect will vary significantly based on factors such as size, type of calling, AM rates, calling strategies currently in place.</li><li>Note effect on consumers of debt agencies not able to chase and potential more rapid escalation of their cases.</li></ul>