

Prepared Testimony of Danny O'Brien  
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before the  
Senate Select Committee on E-Commerce, Wireless Technology  
and Consumer Driven Programming

of the

California Legislature

on the matter of the Goodmail/AOL CertifiedEmail proposal  
April 3rd, 2006

The Electronic Frontier Foundation appreciates this opportunity to testify regarding the adverse effects of AOL's email certification proposals. The EFF is a San Francisco-based organization dedicated to preserving and strengthening civil liberties online; we maintain one of the most linked-to Web sites in the world, <<http://www.eff.org/>> and have a membership of over 10,000 supporters.

## **Why Noncommercial Mass Mail is Vulnerable to Delivery Errors**

As part of our mission, we monitor anti-spam proposals for potential risks to free speech online.

In November 2004, we released a white paper, "Noncommercial Email Lists: Collateral Damage in the Fight Against Spam," which noted that **non-commercial mass mailers are particularly vulnerable to many of the anti-spam and anti-phishing techniques currently being developed.**

To battle phishing and spam, ISPs and mailbox providers are attempting to identify *unsolicited mass email*: that is, mail that is sent to many users, and which they did not agree to receive. Currently, from a mailbox provider's point-of-view, it is far easier

to detect mass email than it is to identify whether that mail is solicited or not. Consequently, mass mails to many recipients suffer from mischaracterization as spam or phishing to a far greater extent than individual mails, and risk being "bounced" (left undelivered), or sent to recipient's spam folders.

## **Goodmail/AOL's Proposed Solution**

Goodmail's service is one approach to fixing this state of affairs. Our concern is that by providing an "escape hatch" for those able to pay, **Goodmail/AOL's plan will increase the likelihood that other mass mailers will suffer from being misidentified as spam.**

AOL's deal with Goodmail creates a **perverse economic incentive** to allow the deliverability of non-commercial mass email to languish. If adopted by other mailbox providers, the service would artificially impede the development of alternative solutions that do not have these side effects. **Many of our reservations about this system would disappear if AOL simply gave up its cut of Goodmail's revenue.**

## **What's Good in Goodmail?**

Goodmail has designed a system that combines two services that, given certain circumstances, can be used in combating phishing and lessening the collateral damage of imperfect anti-spam filtering.

First, it provides the possibility of ***authenticating*** incoming mail: providing a token that guarantees that a particular email comes from a certain source.

As well as guaranteeing from whom the mail came, Goodmail also provides a ***certification*** service. Goodmail monitors that source's email practices, and affirms that they are good actors in the business and mailing community. Goodmail vouches that its customers are not spammers to ISPs.

Both *authentication* and *certification* are established approaches to providing greater confidence in email. Authentication helps reduce phishing by increasing consumer confidence in the origin of certain mails. Certification allows legitimate senders a way to bypass malfunctioning spam filters that might otherwise misidentify them as spam, by being able to assert to intermediaries like AOL that they are known good actors.

Many standards and businesses other than Goodmail are working to provide both authentication and certification services, either currently or in the future.<sup>1</sup> The best ongoing reaction to these problems, we believe, lies in a vibrant and competitive market for solutions -- not only among certification and authentication services like Goodmail, but also in competition with alternative solutions.<sup>2</sup> Like many Internet issues, it may transpire that the best fixes lie not in a commercially provided goods or services, but in collaboratively developed standards and open source software that anyone may use and improve for free.<sup>3</sup>

Our concern is that the structure of the Goodmail deal with AOL, and later with other ISPs and mailbox providers will distort and limit this market, setting bad examples for future entrants, and exclude other solutions (including efficient and ubiquitous free solutions) from acceptance by gateholder mailbox providers.

**We see the primary impediment for a functioning market to be Goodmail's agreement to share its per-email revenue with AOL. Removing this revenue share would permit all the potential technological benefits of Goodmail to accrue to end-users, while maintain a fair and corruption-free future market.**

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<sup>1</sup>Current established certification alternatives to Goodmail include Habeas and Bonded Sender. E-mail authentication can be provided by open standards such as DomainKeys, or S/MIME and PGP signatures.

<sup>2</sup> Only last week, MIT hosted an Anti-Spam Conference where many players introduced new techniques that could be adopted by senders, mailbox providers, and end-users:

[http://www.spamconference.org/2006\\_accepted\\_papers.html](http://www.spamconference.org/2006_accepted_papers.html)

<sup>3</sup> DomainKeys and S/MIME are both open standards.

## **What's Bad in the Goodmail/AOL Deal?**

Unlike most certification systems, AOL also takes a share of the revenue from the certification process itself. AOL receives around a quarter cent per Goodmail mail sent.

This revenue is continuous, unbounded in its upper limits, and linked to the level of Goodmail mail that AOL receives. In return for this income, AOL guarantees that Goodmail certified mail will bypass spam filters and be delivered directly to customer inboxes.

## **Mailbox Providers as Email Bouncers**

In a traditional certification market, the relationship of AOL to Goodmail would be very different. Goodmail would provide a service to AOL, not a source of income. AOL would look at Goodmail's seal of approval, and, based on an impartial assessment of Goodmail certifications past, would modify its opinion of how valuable the incoming mail was. In that, it would be working to the best interests of its end-user customers, those who own the inbox that AOL is being paid to protect.

The Goodmail/AOL revenue share muddies this clear relationship. To make the issue clearer, let me provide the example of another third-party who is given the role of protecting a private domain – a bouncer hired to protect a public event.

Our bouncer fulfils the same function for the event holder as AOL or another mailbox provider claims to offer to an end user with an inbox: he or she keeps out the disreputable types, while letting in the good guys.

Let's say a private company has started a system which is custom made for high-class partygoers, called GoodPass. Partiers pay for GoodPass, and in return, the GoodPass company makes sure you're a non-disruptive partygoer, then gives you a card that says as much that you can show any bouncer.

To encourage bouncers to respond positively to the GoodPass, bouncers receive a small cash payment for their troubles every time

they let a GoodPass customer into a event. Perhaps a dollar bill, wrapped around the GoodPass as subscribers hand it over to gain entry.

Most of us will have some instinctive issues with this cash arrangement. Why is the bouncer suddenly getting a cut to let in strangers? Shouldn't he or she solely in the pay of the event owner? And if GoodPass is as accurate as it claims, why do they need to pay off the bouncers? Should not the bouncers be letting in these good folk without the sweetener of additional cash?

A revenue share between certifiers and those who are meant to objectively judge their certification on behalf of customers looks too much like a bribe. It increases suspicion of the intermediaries, and makes them vulnerable to divided loyalties.

The existence of such bribes can have damaging effects on the wider certification market, also. Suppose another, better system for checking potential entrants. This is a great competitor to GoodPass – let's call it BetterCheck. Low fees for those signing up, better privacy policy. But BetterCheck has real problems getting take-up among local bouncers. Why? Well, the bouncers say there's no money in it for them. BetterCheck does everything, but pay the bouncer a cut. Why should the bouncers switch?

A revenue share, in other words, chills the market for cheap or free alternatives.

Finally, what about people without a GoodPass? The event holder doesn't want to lose them as attendees – he or she just wants to keep out the bad actors. We want our bouncers to be flexible. If my mother turns up I don't want bouncers demanding she join GoodPass just because otherwise he doesn't make his tip.

Yet letting non-GoodPassers in would lose the bouncer money. Indeed, it's only because bouncers sometimes reject good partygoers that anyone would pay for GoodPasses at all. The chances are that for borderline cases, the bouncers would at least encourage potential GoodPass customers to sign up to increase their income. At worst, bouncers may even begin to insist that you need to join their proprietary club just to enter their customers' events.

The truth is that mailboxes and public events are not the same. In an ideal world, we should not need third-parties like bouncers to protect our inboxes, because categorizing electronic mail is susceptible to software filtering – filters that we can potentially use entirely at the end-users' control. Under those cases, certification is not a binary decision that bouncers use, but a useful but not binding signal to end-users to help them make their decisions.

Whatever the future holds for mailbox providers and bouncers alike, **certification should be useful information, not a source of revenue.**

## **Does the Revenue Share Have a Negative Effect?**

Goodmail and AOL's have made two public counterarguments to this position. First, they say, the revenue share is negligible, especially compared to the far larger income from traditional customers. Real subscribers will always come first. The "bribe" is simply not sufficient to change their behavior:

"[The CertifiedMail system is] about as **much of a revenue stream as setting up a lemonade stand** on the corner," [AOL's Nicholas] Graham said. "Any revenue derived from this effort will be incremental and materially intangible."

Secondly, they say, if ISPs perverse incentives cause them to fail in their gatekeeper role the market will fix the problem. Valued subscribers will up and leave any ISPs who have divided loyalties.

Purposely degrading treatment of non-certified message makes no economic sense for a mailbox provider: any revenue from CertifiedEmail will be dwarfed by losses stemming from churn with dissatisfied customers leaving the mailbox provider in droves and switching to one of hundreds, if not thousands, of competitors.

– Daniel T. Dreyman, Goodmail Systems

<http://www.goodmailsystems.com/blog/2006/03/mercury-news-editorial.html>

## Potential Revenue from Goodmail for ISPs and Mailbox Providers is Unbounded, and Potentially very High

The simplest response to the claim of a low value revenue share is this: if the money is so negligible, why not give it up? The very fact there is a payment to intermediaries like AOL is enough to raise suspicion, no matter what the value. Other email certifiers such as Habeas and Bonded Sender<sup>4</sup> have been on the market for many months without the same level of antagonism caused by Goodmail. The very fact we are having hearings today points to the great unease felt by the market to the birth of a system where some players pay money to gain access to others' inboxes.

As an organizer of the DearAOL.com coalition, we have made it clear to AOL that the majority of our objections and protests would evaporate if the revenue share was dropped. Why then, has AOL not discarded the money from their lemonade stand?

The reason, we suspect, is due to the most worrying part of the Goomdail/AOL deal. The revenue share is relatively small now. Goodmail has only a few first-adopting customers, and charges only a quarter cent per mail. But with AOL earning each time a Goodmail is sent, the potential revenues are unbounded. Every new customer AOL pushes toward Goodmail, the more money it receives.

And what loyal customers these senders will be! Unlike normal AOL members, for whom one must provide Internet connectivity, offer spam-free inboxes, captivating content, and endless tech support, these senders cost nothing to support. They merely require that their mails make it over AOL's spam filters. Third-party senders cannot unsubscribe until ever one of their communicants leaves the ISP. You do not even need to spend money marketing or sending CDs to win these clients: these customers cold call *you* – whenever their mail goes undelivered.

No business solely counts current revenues in determining how to run their business. Future potential revenues, and the cost of acquiring them are far more important factors. According to

Goodmail themselves, those potential future incomes could be very high indeed:

“If all commercial messages today used certified email, we would be looking at an addressable market of close to \$2 billion,” [Goodmail's Gingras] said. “That will grow to some \$3.5 billion to \$4 billion per year over the next four years.”

<http://www.redherring.com/Article.aspx?a=14020>

**AOL's cut of such a market via revenue share would be measured in hundreds of millions of dollars per year.**

Even if that figure was unobtainable, it will not stop any ISP from noting that every complaining sender is now a potential revenue opportunity. And that now improving malfunctioning spam filters will not only cost money to maintain, but also lose them potential Goodmail revenue also.

### **Market Response to Badly Filtering Mailbox Providers is Slow, with Little Information**

But if mailbox providers do persist in forcing mailers to switch to Goodmail, or allow their spam filters to catch and reject too much legitimate mass mail, will their subscribers not leave in droves?

**There is strong evidence to suggest that the mailbox subscriber market is not as mobile as is required for a market correction to take place quickly.**

The largest and most obvious impediment to subscribers switching from one mailbox provider to another is the email address itself. Changing an email address is as awkward and cumbersome as changing a telephone number: an impediment to free market in telephony that required federal regulation to fix.

Second, it is unclear that end users are aware of the extent or cause of "missing emails". It is hard, by definition, to notice the non-arrival of unexpected email. Even when important mail goes

missing, most subscribers are inclined to blame the sender, not the invisible filtering of the intermediary.

Misdelivery (either non-delivery, or delivery to spam folders) of mass mail is currently surprisingly high. The following statistics are taken from a co-presentation between AOL and Pivotal Veracity, a third-party email deliverability consultant:<sup>5</sup>

	Legitimate mail sent to <b>Inbox</b>	Legitimate mail sent to <b>Spam</b>	Legitimate Mail <b>Undelivered</b> to end-user
AOL	91.7%	0.1%	8.2%
Yahoo	86.5%	5.5%	8.0%
MSN	81.0%	6.7%	12.2%
Hotmail	80.9%	7.1%	12%
Juno	74.0%	3.2%	22.8%
Gmail	73.5%	18.9%	7.6%

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<sup>5</sup> "How To Successfully Communicate with AOL Subscribers", Pivotal Veracity, AOL, February 2006.

<http://www.pivotalveracity.com/Pivotal%20Veracity%20and%20AOL%20webinar%20-%20February%202015%202006.pdf>

In the best light possible, AOL is still discarding with no notice to the subscriber almost one in ten of mass mails they have opted in to receive.

In another study by Pivotal Veracity, out of a hundred top firms, non-profits, and government agencies, 54% delivering on a permission basis suffered a miscategorization of their mass mail as spam.<sup>6</sup>

Mailbox providers do not have to let these mass mail deliverability rates decline to profit from a Goodmail revenue share: they merely need to keep them at these current poor levels to persuade any group who would benefit from a 10% increase in deliverability to switch.

The wide spread of deliverability between providers, and the lack of consumer knowledge about these poor statistics and that relative spread, indicates little competitive pressure between these services on this point.

Finally, it is worth noting that AOL itself does not have the best reputation for allowing customer mobility. Last year, New York Attorney General Eliot Spitzer investigated the organization for ignoring subscribers' wishes to cancel their accounts. AOL reformed its customer services practices, and paid the state \$1.25 million.<sup>7</sup>

## **Conclusion: a Question of Trust**

Much of the debate over the Goodmail/AOL deal revolves around trust. Goodmail's CertifiedEmail is intended to provide mail you can trust. AOL says that you can trust them to take Goodmail's revenue without letting that affect their business decisions. Goodmail says that we should trust that they will not make enough money to distort the market, nor will the company be influenced to lower its standards should they make too little.

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<sup>6</sup> "False Positives", Pivotal Veracity, May 2005 – <http://www.pivotalveracity.com/Pivotal%20Veracity%20-%20100%20Company%20False%20Positive%20Study%20-%20May%202005.pdf>

<sup>7</sup> See [http://chiefmarketer.com/crm\\_loop/aol-settlement-082505/](http://chiefmarketer.com/crm_loop/aol-settlement-082505/)

We would prefer a market where email users don't need to trust commercial concerns that have no contractual agreement with either the majority of senders, nor directly with email receivers. We would prefer a market where the market itself can push out bad actors, and develop better and more equitable anti-spam and anti-phishing systems.

We believe that certification is not the perfect answer to fighting the collateral damage caused by imperfect spam filters, nor is authentication the exclusive solution to the battle against phishers.

We are, however, confident that a fair, diverse and innovative market for alternative solutions will make that imperfection clear.

What we do not trust is that the current guardians of the majority of consumer inboxes will resist their stockholder-driven responsibilities to seek out sources of profit.

Our fear is that if the first widely-adopted certification system sets a precedent for revenue sharing, then such "cash sweeteners" to intermediaries will become the default in this market. These intermediaries will then choose a revenue-making solution above and instead of free and equitable solutions: even if those cheaper solutions are better for the end user. Moreover, they will encourage intermediaries let free email languish, and encourage all mass mailers – commercial and not – to move to a cumbersome and unnecessary pay-to-send system.

It is this challenge to the free email, the innovation which drives it, and the creation of a two-tier Internet, that concerns us.