

# OFFICIAL TRANSCRIPT OF PROCEEDINGS BEFORE THE POSTAL RATE COMMISSION

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In the Matter of: )  
ELECTRONIC POSTMARK ) Docket No. C2004-2  
COMPLAINT )

VOLUME #1

Date: August 15, 2006  
Place: Washington, D.C.  
Pages: 1 through 274

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POSTAL RATE COMMISSION

In the Matter of: )  
 ) Docket No. C2004-2  
 ELECTRONIC POSTMARK )  
 COMPLAINT )

Suite 200  
 Postal Rate Commission  
 901 New York Avenue, N.W.  
 Washington, D.C.

Volume 1  
 Tuesday, August 15, 2006

The above-entitled matter came on for hearing  
 pursuant to notice, at 9:31 a.m.

BEFORE:

HON. TONY HAMMOND, COMMISSIONER, Presiding  
 HON. GEORGE A. OMAS, CHAIRMAN  
 HON. DAWN TISDALE, VICE-CHAIRMAN  
 HON. RUTH Y. GOLDWAY, COMMISSIONER

APPEARANCES:

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On behalf of David B. Popkin:

(No Appearance.)

C O N T E N T S

## WITNESSES APPEARING:

RICK BORGERS  
THOMAS FOTI

<u>WITNESSES:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>	<u>VOIR DIRE</u>
Rick Borgers	7	--	--	--	--
By Mr. Koetting	--	25	--	--	--
Thomas J. Foti	48	--	266 270	269 270	--
By Mr. Borgers	--	170			
By Ms. Dreifuss	--	237			

<u>DOCUMENTS TRANSCRIBED INTO THE RECORD</u>	<u>PAGE</u>
Corrected direct testimony of Rick Borgers on behalf of DigiStamp, Inc., DS-T-1	9
Responses of Witness Borgers Auth/DS-T-1-1, 6, 8 and 11 and USPS/DS-T-1-1 through 6 and 8 through 10	27
Corrected rebuttal testimony of Thomas J. Foti on behalf of the United States Postal Service, USPS-RT-1	50
Corrected designated written cross-examination of Thomas J. Foti, USPS-RT-1	61
Cross-examination exhibit of DigiStamp, Inc., XE-Foti-1	259

E X H I B I T S

<u>EXHIBITS AND/OR TESTIMONY</u>	<u>IDENTIFIED</u>	<u>RECEIVED</u>
Corrected direct testimony of Rick Borgers on behalf of DigiStamp, Inc., DS-T-1	7	8
Responses of Witness Borgers to Auth/DS-T-1-1, 6, 8 and 11 and USPS/DS-T-1-1 through 6 and 8 through 10	25	26
Corrected rebuttal testimony of Thomas J. Foti on behalf of the United States Postal Service, USPS-RT-1	47	49
Corrected designated written cross-examination of Thomas J. Foti, USPS-RT-1	60	60
Cross-examination exhibit of DigiStamp, Inc., XE-Foti-1	171	258

P R O C E E D I N G S

(9:31 a.m.)

1  
2  
3           COMMISSIONER HAMMOND: Good morning. This  
4 is a hearing in Docket No. C2004-2 considering the  
5 complaint on electronic postmark filed by DigiStamp,  
6 Inc. I'm Tony Hammond. I am presiding officer in  
7 this case. With me this morning is our Chairman,  
8 George Omas, and Vice Chairman Dawn Tisdale.

9           The reporter in this case is Heritage  
10 Reporting Corporation. There are forms for noting  
11 appearances available on the table as you enter the  
12 hearing room. If you wish to purchase transcripts,  
13 you should see the reporter after today's conference  
14 or call (202) 628-4888.

15           At this point I would like to ask counsel to  
16 identify themselves for the record. First, DigiStamp?

17           MR. BORGERS: I'm Rick Borgers with  
18 DigiStamp.

19           COMMISSIONER HAMMOND: And AuthentiDate,  
20 Inc.?

21           MS. VAVONESE: Andrea Vavonese with  
22 AuthentiDate.

23           COMMISSIONER HAMMOND: The Office of  
24 Consumer Advocate?

25           MS. DREIFUSS: I'm Shelley Dreifuss with the  
Heritage Reporting Corporation  
(202) 628-4888

1 Office of the Consumer Advocate.

2 COMMISSIONER HAMMOND: David B. Popkin?

3 (No response.)

4 COMMISSIONER HAMMOND: The United States  
5 Postal Service?

6 MR. KOETTING: Eric Koetting for the Postal  
7 Service, Commissioner Hammond, and with me is my  
8 colleague, Joe Wackerman, who spent many years here  
9 from the early 1980s through the mid 1990s, but has  
10 moved on to other parts of the Postal Service since.

11 COMMISSIONER HAMMOND: Okay. Is there any  
12 participant that I have missed?

13 (No response.)

14 COMMISSIONER HAMMOND: Does anyone have a  
15 procedural matter to discuss before we begin?

16 (No response.)

17 COMMISSIONER HAMMOND: Okay. Today's  
18 hearing was scheduled to receive testimony in rebuttal  
19 to the complaint. The Postal Service has filed the  
20 rebuttal testimony of Thomas Foti.

21 With the concurrence of the participants, we  
22 did not convene a formal hearing to receive the  
23 testimony filed in support of the complaint. The  
24 Presiding Officer's Ruling No. 6 indicated that it  
25 might be appropriate to receive that testimony today.

1 Ms. Dreifuss, will you assist us with that?

2 MS. DREIFUSS: I would be happy to,  
3 Commissioner Hammond.

4 I'm going to ask Rick Borgers, the  
5 Complainant, to take the witness stand.

6 COMMISSIONER HAMMOND: Would you stand, Mr.  
7 Borgers?

8 MR. BORGERS: Certainly.  
9 Whereupon,

10 RICK BORGERS

11 having been duly sworn, was called as a  
12 witness and was examined and testified as follows:

13 COMMISSIONER HAMMOND: You may be seated.

14 I would note that Commissioner Goldway has  
15 joined us also. Welcome.

16 Ms. Dreifuss?

17 DIRECT EXAMINATION

18 (The document referred to was  
19 marked for identification as  
20 Exhibit No. DS-T-1.)

21 BY MS. DREIFUSS:

22 Q Mr. Borgers, would you identify yourself and  
23 explain your relationship to DigiStamp?

24 A This is my testimony that I gave in this  
25 complaint following the Commission's Order 1455. This

1 testimony represents both myself and the company,  
2 DigiStamp, Inc. I'm the lead developer and CEO of the  
3 company.

4 Q Okay. Mr. Borgers, you've got two copies of  
5 your written testimony in front of you, do you not?

6 A Yes.

7 Q If you were to testify orally today, would  
8 that be your testimony?

9 A Yes, it would be.

10 MS. DREIFUSS: Commissioner Hammond, I'm  
11 going to hand these two copies to the reporter and ask  
12 that they be received into evidence.

13 COMMISSIONER HAMMOND: Without objection.

14 Mr. Borgers, would you remember this  
15 morning, please, to speak into the microphone?

16 THE WITNESS: Very good. I'll do that.

17 COMMISSIONER HAMMOND: Thank you.

18 Having heard none, you've provided the  
19 reporter with two copies of the corrected direct  
20 testimony of Rick Borgers, and that testimony is  
21 received and will be transcribed into evidence.

22 (The document referred to,  
23 previously identified as  
24 Exhibit No. DS-T-1, was  
25 received in evidence.)

Postal Rate Commission  
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Filing ID: 48315  
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Before The  
POSTAL RATE COMMISSION  
WASHINGTON, D.C. 20268-0001

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Complaint on Electronic Postmark®  
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Docket No. C2004-2

DIRECT TESTIMONY OF RICK BORGERS,  
ON BEHALF OF DIGISTAMP, INC.

(DS-T-1)

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Evidence requested by Order No. 1455:

Has the Postal Service introduced a new postal service  
ignoring the Commission's oversight and failing to create public good?

(April 17, 2006)  
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*Just when I thought I'd joined the ranks of successful, cutting-edge innovators making our country better, I got squashed by the USPS.*

Back in 1998, I was making good career progress as a business consultant and computer engineer, but I really wanted to be on the cutting edge of creating the new world of electronic communications.

It occurred to me that one absolutely foundational need of electronic communications would be the ability to prove who created what, and said or sent what, to whom, when. So I set to work creating a product and a company to do that.

Using standards developed by the Internet Engineering Task Force, my company, called DigiStamp, developed the e-TimeStamp seven years ago. The e-TimeStamp electronically certifies the time and date a document is created. DigiStamp created a profitable, growing business by selling our service to companies, research organizations, and governments.

*Just when it looked like I was on the way to solid success, the USPS decided to get in on the act. In 2004, the USPS began offering the same service, calling it the "USPS Electronic Postmark Service."*

I thought—"No way. This isn't right, and it isn't smart. The USPS has no right to barge into a market created by private business. And the USPS can't provide this service as well as I can. All it can do is wreak havoc, when government competes with private industry."

Wreak havoc, it did. Prospective customers quit calling, employee morale collapsed, and potential investors wondered out loud about whether it was smart to "compete with the Postal Service." Funding dried up for me and everyone else in the market segment.

*That's obviously not good for those of us who had created the product and the market. But it isn't good for our country, either.*

Providing good service in electronic communications requires the ability to innovate, quickly and effectively, as customer needs emerge and as new technologies make new products possible. The fast-moving world of electronic communications depends even more than most industries on the ability to make a better product, or provide better service, when competitors catch up.

In electronic communications, the USPS can only blunt our country by replacing innovative, nimble, competitive businesses like mine with a slow, bloated, bureaucracy-burdened service.

And it has.

The Commission has the power and the responsibility to do something about this.

Digistamp, Inc, contends that the Postal Service created a new postal service by instituting Electronic Postmark® (EPM), and that the Postal Service introduced the EPM in violation of statutory requirements that any new postal service be approved by the Commission.

In the testimony I present to the Commission, I will establish that Electronic Postmark® (EPM) is a postal service under the definition recently adopted by the Commission. This testimony supplements the evidence that is provided in the original complaint<sup>1</sup>. I request that the Commission move quickly to decide the initial jurisdictional question: Clearly, the Postal Service does not have the right to enter any business it chooses--without review by the organization created by Congress to oversee it.

*I will be working to encourage that Congress take note of these proceedings: "The Postal Service lost a total of \$85 million [on new business], showing a profit on only one of these many services. Who do you think paid for that? The Postal Service consumer." Rep. John McHuch, R-N.Y. before an April 29, 1999 vote in the Government Reform committee. I need my government to police a level playing field and foster private enterprise, innovation.*

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<sup>1</sup> As requested by the commission in Order 1455 at 17 "The facts necessary to support the parties' contentions need to be developed on the record."

## **I. Overview of evidence: Electronic Postmark® is the Electronic Equivalent of First-Class Mail with Certified Mail**

According to the Commission, *postal service* means the receipt, transmission, or delivery by the USPS of correspondence, including, but not limited to, letters, printed matter, and like materials; mailable packages; or other services incidental thereto.<sup>2</sup> The Commission has concluded that services in which the Postal Service receives, transmits, or delivers correspondence, including electronic communication services, constitute postal services under the Act.<sup>3</sup>

The Commission noted, however, that “inclusion of [electronic] services in the definition should not be read as a conclusion that all such services are jurisdictional; only such services that entail correspondence become postal services.” *Id.* at 4.

Consequently, whether or not electronic postmark service is postal or not turns on the nature of the service provided.<sup>4</sup>

EPM is marketed by the Postal Service, and used by its customers, in the same manner as traditional mail. Two mail services, particularly, are the functional equivalents of EPM.

In section 3623(d) of title 39 of the U.S. Code, Congress required the Postal Service to maintain one or more classes of mail for the transmission of letters sealed against inspection. First-Class Mail is the class of mail “sealed against inspection.” First-Class Mail is used to ensure the security, privacy, and confidentiality of communications between senders and recipients. EPM is used (and marketed) for the same purpose: to provide security, privacy, and confidentiality for electronic communications.

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<sup>2</sup> PRC Order No. 1449, January 4, 2006.

<sup>3</sup> PRC Order No. 1424, *supra*, at 31-39

<sup>4</sup> PRC Order No. 1455 at 13

The second mail service that functions identically to EPM is Certified Mail. Section 941.1 of the Domestic Mail Classification Schedule (DMCS) states that: "Certified Mail provides a mailer with evidence of mailing and, upon request, electronic confirmation that an article was delivered or that a delivery attempt was made, and guarantees retention of a record of delivery by the Postal Service for a period specified by the Postal Service." Section 941.21 of the DMCS makes available Certified Mail for "matter mailed as First-Class Mail." When a mailer adds Certified Mail to First Class, the mailer will also obtain proof of when the sealed, confidential document entered the postal system and when delivery has been attempted. These features are also all part of EPM. A customer using EPM can obtain a receipt to prove that a communication was created, sent or received. The Postal Service retains a record of the message content for a period that it has specified.

**In its marketing, sales, policy, and practices, USPS has consistently asserted, affirmed, and advocated that the EPM is a postal service.**

THE USPS states plainly on the home page of the EPM web site that "Certified Electronic Communication has arrived". <http://www.uspsepm.com/> The USPS software provided by, and downloaded from, the USPS web site clearly indicates that the software provides "Certified Electronic Communication."<sup>5</sup>

The USPS calls its timestamp an "electronic *post* mark" for a reason—namely, that it wants prospective purchasers to recognize immediately that EPM added to an electronic communication, will serve the same purpose as First-Class Mail with Certified Mail service. These are the statements at the Postal Service's web site to describe EPM:

The advent of the Internet increased the need for efficient communication of electronic information with the same level of trust and value that the United States has come to expect from the USPS in the physical world. Created to facilitate secure electronic communication for government and commercial

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<sup>5</sup> Postal Service web site [www.uspsepm.com](http://www.uspsepm.com)

systems, the USPS EPM service has the potential to strengthen the security, privacy, and productivity of communication in the nation's electronic future.<sup>6</sup>

As an added feature, you can also request a receipt from the USPS as proof of electronic mailing and delivery of documents bearing the EPM.

The State of South Carolina has enacted legislation recognizing the USPS EPM Service as an option for electronic communications between State agencies and within the legal community.

Receipt from USPS verifying proof of document integrity, electronic mailing and delivery for courts, compliance or auditing.<sup>7</sup>

It is evident from these statements that the Postal Service views (and wants prospective customers to view) EPM as equivalent to the "trust and value" that the USPS provides with physical mail in the "physical world." As with sealed First-Class Mail, EPM is intended to provide security and document integrity. To conform to legal requirements of courts, State agencies, and other legal entities, the Postal Service can provide a receipt verifying proof of document integrity, electronic mailing and delivery.

**The consistent practice of the USPS is to sell and deploy the EPM as a validator of communications.**

For example, the first use of the EPM was by the Social Security Administration as a feature of the PosteCS service in 2000.<sup>8</sup> In 2003, the Social Security Administration had become the largest user of the EPM, under the name *Secure Transport Service*.<sup>9</sup>

For another example, a 2004 EPM sales proposal by the USPS to the Securities and Exchange Commission (SEC) states

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<sup>6</sup> Main "home" page of the Postal Service web site for the EPM service  
<https://www.uspsepm.com/info/main.adate>

From the "home" page of the Postal Service web site for the EPM service click on "About EPM" for their summary of the service. <https://www.uspsepm.com/info/about.adate>

<sup>7</sup> United States Postal Service 2001 Comprehensive Statement on Postal Operations, page 60

<sup>9</sup> The Electronic Post Mark: security for cyberspace mail *Universal Postal Union 2003* page 2

The EPM can prove that orders are neither altered nor discarded once the order is postmarked. A post trader audit of trades against the EPM repository can verify that all orders are accounted for.<sup>10</sup>

Obviously, an order is a communication—a transmission and receipt of information—the proof of the order's content is transferred to a Postal Service repository.

**The USPS claims and exercises legal authority to investigate any counterfeiting, tampering, or other misuse of EPM precisely because it asserts that the EPM is postal in nature:**

USPS [states] that under its recent delegation of authority from the Attorney General, the Inspection Service would investigate illegal interception or tampering involving the USPS electronic postmark (EPM), including cases where the USPS EPM is used by a private company that recently purchased the EPM for inclusion with some of its electronic communications. Any such efforts would be based on the provision in this delegation that specifically defines "criminal conduct that has a detrimental effect upon the operations of the Postal Service" to mean "conduct that directly affects the counterfeiting or misuse of any electronic postmarks used by the Postal Service." In this regard, USPS told us that the Inspection Service has no authority to investigate electronic communications that do not "have a postal nexus." Finally, USPS said that violations of federal law relating to electronic communications without the EPM would be investigated by other federal law enforcement agencies.<sup>11</sup>

**THE USPS has lobbied State legislators to recognize the EPM as a validator of communications.** Such lobbying includes South Carolina, West Virginia, Maryland, Nebraska, Pennsylvania, and New Jersey. In the case of South Carolina, the USPS has already succeeded, with the South Carolina Uniform Electronic Transaction Act, which

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<sup>10</sup> Postal Service White Paper on Mutual Fund Reform and the USPS Electronic Postmark page 4 Feb 2, 2004

<sup>11</sup> September 2000 GAO/GGD-00-188 USPS' E-Commerce Activities and Laws

*also excludes any service provider other than the Postal Service and extends the government monopoly into an electronic communications market.*

On November 12, 2004, I filed a Motion to Notify the Postal Rate Commission of a Recent Example Where the Use of USPS EPM Replaces Traditional Mail Service. I attached an article from Business Wire reporting that "South Carolina is First State to Make E-Mail with United States Postal Service Electronic Postmark Equivalent to Certified or Registered Mail." A reading of the article reveals that the Postal Service is attempting to engineer a non-statutory monopoly for the security and validity of e-mailed communications that includes verification of mailing and receipt. In effect, the Postal Service is cannibalizing its physical First-Class Mail, with Certified Mail service, in its efforts to convince courts, states agencies, and other legal and commercial customers to substitute the equivalent EPM product.

The Postal Service argued in its Motion to Dismiss my complaint, on April 26, 2004, at page 12, that "the transfer of something from a sender to a recipient . . . is not part of an USPS EPM transaction." Nothing could be farther from the truth. It is clear from the use that South Carolina and other states may make of EPM that it is almost always used in connection with a communication. The Postal Service's argument that EPM fails to involve a "transfer" of something is baffling. Of course there is a transfer – of information. That is the purpose of EPM and the reason that a customer is willing to pay for the security and verification that EPM provides. It is proof of the integrity of the transfer of information that customers are paying for; and, in any case, EPM is surely a "service incidental" to the transmission of information. In the vast majority of cases (ninety percent, for Digistamp), EPM is used as part of a sender-to-recipient communication.

**The nature of digital time stamps is to validate the transmission of communications. Without the transmission of documents, the EPM is pointless and without use.**

The USPS claims that the EPM is not postal, but more like a notary function:

Given its general purpose of protecting the integrity of electronic data, the nonelectronic services most analogous to USPS EPM service are those provided by a notary public.<sup>12</sup>

While the analogy with a notary can be useful in explaining time stamps to a layman, for the purposes of this complaint, the analogy is simply spurious. A notary cannot certify the transmission of anything.<sup>13</sup>

If an EPM is simply a notary function, all of the USPS marketing, sales, regulation and investigation of EPM use, and promises to state legislatures are simply deceptive.

I know from seven years of experience in this business that the vast majority of digital timestamp transactions involve a communication made from a sender (mailer) to a recipient which the purchaser wants to ensure is secure (has not been tampered with) and often wants to be able to prove it has been mailed or received. This is true of nearly every type of communication sent via First-Class Mail. For instance, bills and statements contain private, confidential information that the sender and recipient want to be "sealed" against tampering by others. Legal and business documents are frequently sent through the mail, with the understanding that their valuable and/or confidential contents will not be tampered with nor backdated.

THE USPS claims that

Of critical significance, not only does USPS EPM service require no transmission of content, but it accomplishes no transmission of content.<sup>14</sup>

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<sup>12</sup> Postal Service Motion to Dismiss page 15-16

<sup>13</sup> It's worth noting, in this regard, that in DigiStamp's original business plan we believed that during our first year that 3% of the transactions would be used for a notary function, more specifically the function of "witnessing of intellectual property". And then decreasing. Those estimates proved to be correct. Our customers have shown us that the true function—the nature—of this tool is to certify communication. This is an empirical fact, not a speculative argument.

<sup>14</sup> Postal Service Motion to Dismiss DigiStamp complaint at 14.

The USPS might as well claim that a hammer does not drive nails.

The nature of a tool—of any artifact—is its use. People use hammers to drive nails (though they may at times use them for other things, as well), even if the hammer itself doesn't require or accomplish the driving of nails.

**In fact, the principal use of all digital time stamps, including USPS EPMs, is to certify the transmission of information.**

While we do not have access to USPS records, in the experience of Digistamp, more than ninety percent of all time stamps are used to certify the transmission of communications. We suggest that an independent assay of USPS records would show the same to be true.

USPS customers certainly understand the nature of the EPM to be certifying transmission of information. A few examples<sup>15</sup>:

Liberty Healthcare Group Inc., a national medical products company that is a subsidiary of PolyMedica Corporation (NASDAQ: PLMD), uses EPMs to verify Doctor Orders that it receives via fax every day. It is anticipated that the Liberty implementation will utilize 1.5 to 2 million EPMs annually.<sup>16</sup>

Kodak states that "Integrating the USPS Electronic Postmark Service can bring a new level of trust and integrity to our Secure Email Service enabling customers to take full advantage of its speed and simplicity to securely deliver patient data."

Patrick Faure, Privacy and Security Services Manager for Kodak's Health Group.<sup>17</sup>

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<sup>15</sup> It is worth noting, in each example, that the customer buys and licenses the EPM service directly from the USPS, not Authentidate, and the Postal Service sets the price. This is a postal service, Postal Service. These are more recent examples to supplement similar examples given in the original DigiStamp complaint.

<sup>16</sup> Authentidate press release Apr 13, 2005 (BUSINESS WIRE)

<sup>17</sup> Authentidate press release Mar 10, 2005 (BUSINESS WIRE)

CareCert, which certifies doctors orders for the home medical equipment industry, integrates the United States Electronic Postmark(R) (USPS EPM(R)) into its product to legal trust and security to each transaction. CareCert offers healthcare providers a secure, speedy and efficient solution to process forms online.<sup>18</sup>

CareFax integrates EPMs into fax transmissions, according to Suren Pai, President and CEO, Authentidate Holding Corp, to "increase . . . confidence in the integrity of the information sent and received via fax."<sup>19</sup>

***The USPS clearly knows that the point, purpose, use, and value of its EPM lies with certifying the transmission of communications.***

***For it to claim otherwise in the current proceedings contradicts its own marketing, sales practices, products, policies, and practices.***

***Furthermore, it is simply factually true that time stamp customers use the product predominantly in service to communication. This is demonstrably true in the experience of private industry, and the available information on how the USPS sells, regulates, and protects its product indicates that the same is true for USPS customers.***

## **II. The Postal Service should not extend its government monopoly status to compete in the electronic communications industry**

One responsibility of the Commission is to prevent the USPS from using its monopoly power to the detriment of the public. While the USPS EPM is a postal service under the

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<sup>18</sup> Authentidate press release Jan 6, 2005 (BUSINESS WIRE)

<sup>19</sup> Authentidate press release October 18, 2005

definition established by the Commission, it is a service that the USPS provides without justification, badly, and to the public detriment.

**The proper role of the USPS, like all government-created programs, is to create a "public good"—something from which citizens benefit but which private business does not have the resources or self-interest to create. The USPS has not created a public good, but seeks to usurp, exploit, and profit from the work of private business, and does so in an ineffective manner.**

**The technology for digital time stamps was developed entirely by private industry, with standards created by industry members working as the Internet Engineering Task Force (IETF)<sup>20</sup> in the late 1990s. The USPS was not a contributor to this work.**

**The digital time stamp product, and the market for the product, were effectively created before the USPS ever entered the market.**

In 1999, DigiStamp delivered a working service. By 2002, when the USPS posted in the Federal Registry for a technical partner to develop a digital time stamp, DigiStamp had already provided service to thousands of customers, including the States of Washington and Ohio, and even the Mexican Government.<sup>21</sup>

**The USPS now uses engineering that was done by private industry. The USPS did not develop an independent product, but hired a private business, AuthentiDate, to create its EPM.**

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<sup>20</sup> The Internet Engineering Task Force (IETF) has responsibility for developing and reviewing specifications intended as Internet Standards. It is an international community (non-governmental) that is open to any interested individual; thousands of volunteers from private industry and academia. In 1999, DigiStamp built a test implementation of the early time stamp protocol drafts and a test environment that was used for interoperability testing.

<sup>21</sup> It is worth noting that the public solicitation was open for only 3 weeks and there was no attempt to encourage additional bids. DigiStamp has repeatedly inquired about the "exclusive" nature of this contract and has never received a response from the Postal Service about the inquiries.

**Interestingly, many of the Postal Service's peripheral product lines operate at a huge loss.**

The electronic postmark has cost the postal service more than \$30 million. Reports show by 1997 a cost of \$20M for R&D and then by 2002, \$9 million trying to develop the service. When compared to DigiStamp's costs, this sounds like another case of public money being spent freely by a bureaucratic agency.

**Digital timestamps are a valuable service created, supplied by, and rightfully profited-from by private business.** From the indisputable facts that private industry created digital time stamps, created the market for digital time stamps, and serves that market effectively and efficiently, it follows that **digital time stamps are not a "public good."**

In fact, ***the USPS EPM does not even work correctly. Far from doing a better job than private business can do, the USPS does a worse job.*** As DigiStamp will prove, the USPS EPM service allows a person to get a "certified receipt" from the USPS for a document that, in fact, was never received.

The Commission should order the USPS to desist offering the EPM for the simple, straightforward reason that **USPS sidestepped the legal authority of the Commission by ever offering the EPM.**

**The Commission should forbid the USPS from any further offering of EPMs. Far from providing a public good, the USPS EPM undermines the welfare of citizens who need certification and legally-sound proof of delivery of electronic documents.**

If the USPS is allowed to offer digital time stamps, we can foresee the USPS extending a strategy to skim profits from the work of private industry; all based on the marketing jingle "backed by the federal government" claim it already uses. This will drive private industry from the market, since we do not have the USPS multi-billion-dollar brand or the thousands of outlets (Post Offices) that the USPS can exploit. The consequent loss of competition will insure higher prices for time stamps, decreased innovation, and loss of tax revenue to local, state, and federal governments.

Respectfully submitted,

---

Rick Borgers  
Lead Technologist, CEO  
DigiStamp, Inc.  
[www.digistamp.com](http://www.digistamp.com)

Appendix

www.usps.com

USER ID:

PASSWORD:

Log In

**NEW USERS**

Enroll here to start using the USPS EPM Service. See how easy it is to get started.

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**Get the Electronic Postmark Service**

**BUY BLOCKS OF EPMs NOW**

## Electronic Postmark Service

Make Your Electronic Documents Trusted and Protected

The United States Postal Service's Electronic Postmark Service (USPS EPM) is an electronic authentication service.

Join the USPS EPM Extension

Now with the USPS EPM Extension, you can electronically sign and postmark, ensuring that any tampering or alteration is detected. Download the software for FREE!

**Created to:** facilitate secure electronic communication for government and commercial applications; the USPS EPM Service has the potential to strengthen the security, privacy, and productivity of communication in the nation's electronic future.

**When your electronic communication contains an Electronic Postmark, you know it's authentic because it's stamped with the same information as a physical document in the physical world.**

Now with a new feature of the USPS EPM Service, you can be sure that your document was electronically mailed. You can request an email receipt from the USPS notifying you when your document was electronically mailed. As an additional feature, you can verify when your document was sent online by accessing the Certificate of USPS EPM Verification, view this Certificate electronically or print it out for your records. Now you can take advantage of certified or registered mail online.

**Electronic Postmark**

Certified Electronic Communication has arrived.

Done www.usps.com

Software Developers: [Click here to download the Software Development Kit \(SDK\).](#)

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[.NET Momentum in the Public Sector](#)

***United States Postal Service: United States Postal Service Creates Electronic Postmarks for Documents***

The United States Postal Service (USPS) was founded in the late eighteenth century with the mission of supplying a reliable and trusted means of communication for the nation. In recent years, the agency has used technology to support that mission, such as using bar-code scanners to speed the sorting of mail and deploying an award-winning public Web site. With e-mail becoming a common means of communication, the USPS wanted to provide a way for consumers and businesses to use electronic postmarks (EPMs) to conduct electronic transactions securely over the Internet. The key to widespread adoption of EPMS, however, was to make the technology easy for people to use.

[Top of page](#)

**Leo Campbell,**  
 EPM Program  
 Manager,  
 United States Postal  
 Service

### **Creating Digital Signatures**

The USPS created a solution that lets people easily and quickly add electronic postmarks within Microsoft Office Word documents. Based on the Microsoft Visual Studio .NET 2002 development system and the Microsoft Office System, the solution enables users to add a digital signature with a time stamp to a document and then lock the document. This prevents any alterations to the document and provides proof of when it was created. Because a document can contain multiple EPMS, the service can be used in transactions that require multiple signatures—for example, in contracts involving two or more parties.

[View the original document](#)

1                   COMMISSIONER HAMMOND: Is there any cross-  
2 examination for Witness Borgers?

3                   MR. KOETTING: Commissioner Hammond, the  
4 Postal Service would like to enter the written cross-  
5 examination responses previously received from this  
6 witness, so I'd like to do that at this time.

7                   COMMISSIONER HAMMOND: Okay. Is there  
8 objection?

9                   (No response.)

10                  COMMISSIONER HAMMOND: So ordered.

11   (The documents referred to  
12   were marked for  
13   identification as Exhibit  
14   Nos. Auth/DS-T-1-1, 6, 8 and  
15   11 and USPS/DS-T-1-1 through  
16   6 and 8 through 10.)

17   CROSS-EXAMINATION

18                   BY MR. KOETTING:

19                   Q     Mr. Borgers, I've just handed you two copies  
20 of your responses to AuthentiDate/DigiStamp-T-1-1, 6,  
21 8 and 11, as well as USPS/DigiStamp-T-1, Questions 1  
22 through 6 and 8 through 10.

23   If you were asked those questions today,  
24 would your responses be the same?

25                   A     Yes, they would be.

1                   MR. KOETTING: With that, Mr. Chairman, the  
2 Postal Service would move those responses into  
3 evidence.

4                   COMMISSIONER HAMMOND: Okay. Without  
5 objection. Those are now admitted into evidence, and  
6 we direct that they be transcribed.

7   (The documents referred to,  
8   previously identified as  
9   Exhibit Nos. Auth/DS-T-1-1,  
10    6, 8 and 11 and USPS/DS-T-1-1  
11    through 6 and 8 through 10,  
12    were received in evidence.)

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RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

**AUTH/DS-T1-1.** Describe the e-TimeStamp product. Please explain fully.

a. Does DigiStamp hold any patents related to the e-TimeStamp product? If so, provide the patent number.

**RESPONSE:**

DigiStamp provides an extensive website at <http://www.digistamp.com> that

describes the product. Specifically the page

<http://www.digistamp.com/timestamp.htm> then the title *How a digital time stamp*

*works*. There is a detailed technical description of the time stamp service in the

Internet Engineering Task Force document titled *Internet X.509 Public Key*

*Infrastructure Time-Stamp Protocol (TSP) RFC 3161 August 2001* (copy is at:

<http://www.ietf.org/rfc/rfc3161.txt> ).

a. DigiStamp does not hold any patents related to the e-TimeStamp product.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

**AUTH/DS-T1-6.** Identify each prospective customer of DigiStamp's that became a user of the EPM instead of the DigiStamp e-TimeStamp product. Please explain fully.

a. For each such prospective customer, identify who DigiStamp had contact with at that prospective customer and when such contact was made.

DigiStamp does not know the answer to this question. For example, DigiStamp does not have information that allows us to count these events: a person visits the DigiStamp website, then visits the Postal Service's website and then chooses to sign-up for an EPM account. In general, I don't think any merchant could know the list of "prospective customers"; those that considered using their service.

To overcome the inherent problem in answering this question, consider a more feasible approach: the Postal Service supplies a list of their customers so that DigiStamp can identify those that may have contacted DigiStamp directly. This would be a portion of the list that Authentidate seeks.

As an alternative, consider that at a summary level, DigiStamp's transaction volumes increased annually from 1999 to 2003, with a 200% increase in 2003. In 2004 transaction volumes decreased for the first time and growth has stalled since then. Given that the EPM rollout was in early 2004 then Authentidate may be able to infer an answer to their question.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET  
OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

**AUTH/DS-T1-8.** In how many time stamp transactions has DigiStamp's product been used? Please explain fully.

- a. What percentage of such transactions were communications?
- b. What was the total revenue derived from such transactions?

**RESPONSE:**

Objections filed to the predicate question (concerning the number of DigiStamp time transactions), as well as item "b."

- a. As stated in my testimony, the percentage of transactions that involve communication is more than 90 percent at DigiStamp (unnumbered line 22 of page 8).

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

**AUTH/DS-T1-11.** Identify each time that DigiStamp has demonstrated through a transmission to the USPS or a governmental identity that a person can "get a certified receipt from the USPS for a document that, in fact, was never received." Please explain fully.

a. For each transmission, describe (i) the date of the transmission, (ii) the recipient of the transmission and (iii) what DigiStamp did to create the false certified receipt.

b. Have you or anyone else at DigiStamp ever attempted to obtain a certified receipt for a document that was, in fact, never received and failed to obtain the certified receipt?

**RESPONSE:**

a. For each transmission, what DigiStamp did to create the false certified receipt is described in this Docket named DIGISTAMP RESPONSE TO ORDER NO. 1455 (March 20, 2006). See pages 5 and 6 for the section titled "Here are the simple instructions to create an acknowledgement for a document that is not received".

As background for Authentidate's question, in a press release on May 17, 2005 the public was assured that the Postal Service had reviewed and approved this flawed receipt capability:

May 17, 2005 Authentidate Holding Corp. (NASDAQ: ADAT) today announced that the United States Postal Service has approved an updated version of the USPS Electronic Postmark(R) (USPS EPM) Service. The new version offers enhancements including an optional return-receipt capability that allows users to track delivery and acceptance of electronic content.

I note that Authentidate's question is limited to examples of transmissions to "the USPS or a governmental identity". There were 2 transmissions to people in government positions and about 20 others in non-government positions. The 2 government transmissions:

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

1. A Postal Service "certified electronic communication"<sup>1</sup> email was sent using the USPS EPM service to Shelley Dreifuss, Director, Office of the Consumer Advocate at the Postal Rate Commission on 4/29/2008 to her email address dreifusss@prc.gov. This transmission is described in DIGISTAMP RESPONSE TO ORDER NO. 1455 (March 20, 2006) on page 5.

I was able to confirm by a phone call with Shelley Dreifuss that she had not actually opened or displayed the content of the Microsoft Word document that was sent to her by me using the USPS EPM service. But, I was easily able to create a certified receipt that is digitally signed by the Postal Service that said that the Word document that I emailed was acknowledged and then opened or displayed by her. If you would like to see Shelley's false receipt, here is the Word document with the digitally signed receipt ( [www.digistamp.com/epm/ShelleyTest.doc](http://www.digistamp.com/epm/ShelleyTest.doc) ), and you will need the USPS EPM Microsoft Word plug-in from the Postal Service web site [www.uspsepm.com](http://www.uspsepm.com) .

2. A Postal Service "certified electronic communication" email was sent using the USPS EPM service to Maryland Delegate Jeannie Haddaway on 05/08/2005 to her email address: [jeannie\\_haddaway@house.state.md.us](mailto:jeannie_haddaway@house.state.md.us) Additionally, at about the same time I sent another email to that same address not using the EPM service and got a response from [postmaster@mail.state.md.us](mailto:postmaster@mail.state.md.us) saying that the "User mailbox exceeds allowed size". This means that no emails were being delivered to this email address. Even though, by using USPS EPM service I was easily able to get a digitally signed receipt from the United States Postal Service that falsely states:

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<sup>1</sup> Postal Service web site at <https://www.uspsepm.com/info/main.adate>

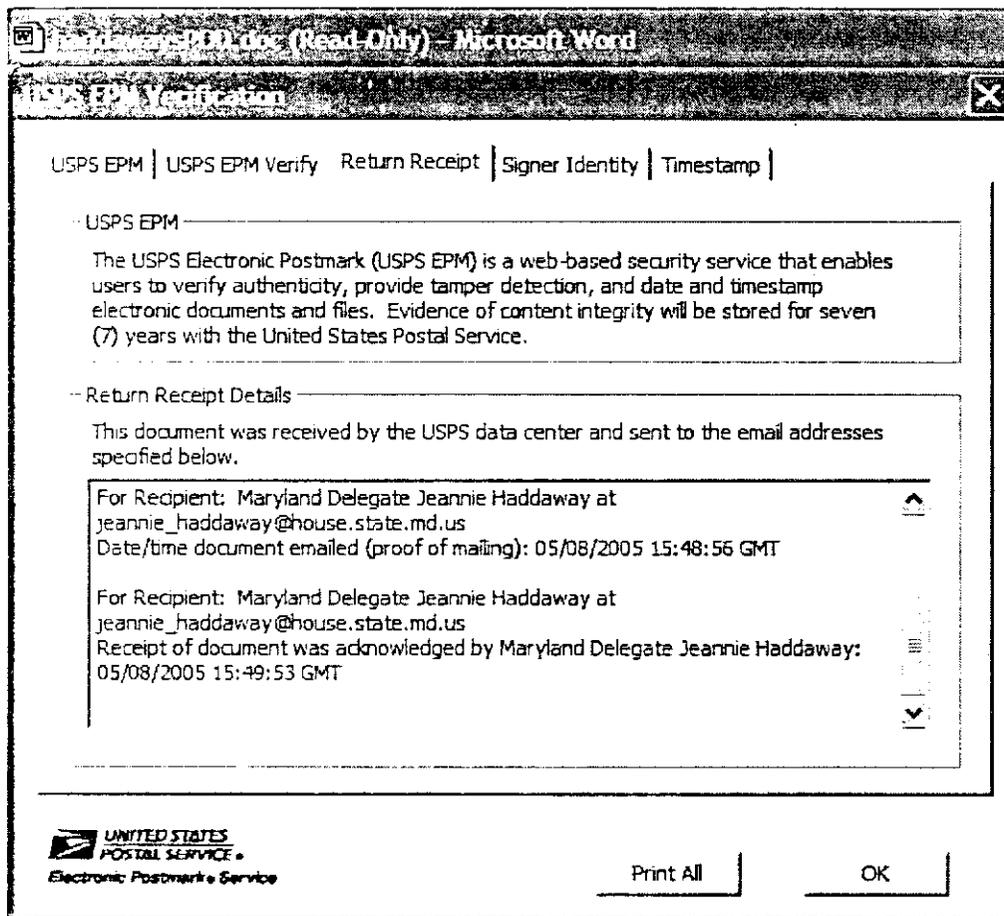
RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

You requested a return receipt notice from the United States Postal Service when your document was electronically delivered (opened or displayed).

Document Sender: Rick Borgers (rick.borgers@digistamp.com)

Document Recipient: Maryland Delegate Jeannie Haddaway (jeannie\_haddaway@house.state.md.us)

Given that her mailbox was full and did not accept emails then clearly she had no opportunity to actually receive the email. The display of the signed receipt looks like this:



If you would like to see Delegate Haddaway's false receipt, here is the Word document with the digitally signed proof-of-delivery receipt ( [www.digistamp.com/epm/haddawaysPOD.doc](http://www.digistamp.com/epm/haddawaysPOD.doc) ), and you will need the USPS

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO AUTHENTIDATE'S FIRST SET  
OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS

EPM Microsoft Word plug-in from the Postal Service web site

[www.uspsepm.com](http://www.uspsepm.com) .

As additional background to fully answer Authentidate's question, Maureen O'Gara, G2 News Editor, published an article titled "Rival Claims USPS-Authentidate EPM Upgrade Flawed" on May 20, 2005. I spoke with her about research for the article and she described to me that she had spoken with the Postal Service and Authentidate EPM support team members and they understood how I created the false receipts. I did another test about 3 months later and the flaw still existed.

b. No, to the best of my knowledge, no one at DigiStamp has tested the scenario that you describe in your question.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-1.** On unnumbered line 3 on page 1 of your testimony, you state that in 1998 you decided that you wanted to be on the cutting edge of creating new technology.

- a. At that time were you aware of any other companies or entities that were offering digital time stamp or other similar services? Please explain fully, and identify any such companies or entities.
- b. Were you aware of any patents for these types of digital time stamp or other similar services? Please explain fully.

**RESPONSE:**

- a. Yes. A list of companies that were in my records at about that time period:
  1. Surety Technologies
  2. FirstUse
  3. MediaRegistry
  4. Entropia Internet Notary Service
  5. I.T. Consultancy Limited
  6. U.S. Postal Service – My notes of that time state that I thought this service required documents to be sent outside the user's computer and that it may include delivery guarantees. I also thought that a legal suit had been brought saying that the USPS cannot compete with private industry and should not be allowed to offer this service.
  7. Document Delivery Services - e.g. Pitney Bowes, United Parcel Service
  8. Others - There were potential competitors from companies that deliver related products to the marketplace. Digital signature providers, VeriSign and GTE, were likely competitors. Public-Key Infrastructure (Entrust, CertCo)

Additionally, the engineering work being recorded in the public forums at the IETF<sup>1</sup> included volunteers that were associated with companies that might, in the future, offer a time stamp solution but were not offering digital time stamps at that time.

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<sup>1</sup> The engineering design work was done via an all-volunteer effort within the Internet Engineering Task Force (IETF). The IETF is an independent, international activity associated with the Internet Society.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

By 1999, I was aware of the USPS Post E.C.S. development effort and the complaint before the commission in Docket C99-1<sup>2</sup>. I believed that the Post E.C.S. development effort included a time stamp function as part of a document delivery offering. Also, I had read the article provided in my original complaint as Exhibit B. at about the time it was published in May 1999. From that article:

“The Postal Service (www.usps.gov) took its biggest losses on its plans to offer online authentication and security from 1995 to 1997, it spent \$20.3 million to develop an “electronic postmark” service that would secure and authenticate e-mail. Development efforts ended in November 1997”

b. The IETF Internet Draft Time Stamp Protocols<sup>3</sup> dated June 4, 1998, which I was following closely at the time, listed these patents:

- # 4309569 Method of Providing Digital Signatures
- # 5001752 Public/Key Date-Time Notary Facility
- # 5022080 Electronic Notary
- # 5136643 Public/Key Date-Time Notary Facility
- # 5136646 Digital Document Time-Stamping with Catenate Certificate
- # 5136647 Method for Secure Time-Stamping of Digital Documents

In June 1998 I developed a patent application for a time stamp methodology. In my research for that patent I knew of additional patents that would potentially need to be cited.

- # 4868877 Public key/signature cryptosystem with enhanced digital signature certification
- # 4881264 Digital signature system and method based on a conventional encryption function

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<sup>2</sup> 10/98 UPS files complaint at Commission titled “Complaint of United Parcel Service on Post Electronic Courier Service”

<sup>3</sup> Internet Draft Time Stamp Protocols <draft-adams-time-stamp-02.txt> June 4, 1998 C. Adams(Entrust Technologies), P. Cain (BBN), D. Pinkas (Bull), R. Zuccherato(Entrust Technologies)

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

- # 4991210 Unpredictable blind signature systems
- # 5157726 Document copy authentication
- # 5189700 Devices to (1) supply authenticated time and (2) time stamp and authenticate digital documents
- # 5231668 Digital signature algorithm
- # 5373561 Method of extending the validity of a cryptographic certificate.
- # 5422953 Personal date/time notary device
- # 5434917 Unforgeable identification device, identification device reader and method of identification
- # 5444780 Client/server based secure timekeeping system
- # 5500897 Client/server based secure timekeeping system
- # 5619571 Method for securely storing electronic records
- # 5675649 Process for cryptographic key generation and safekeeping
- # 5745555 System and method using personal identification numbers and associated prompts for controlling unauthorized use of a security device and unauthorized access to a resource
- # 5748738 System and method for electronic transmission, storage and retrieval of authenticated documents
- # 5754659 Generation of cryptographic signatures using hash keys
- # 5781629 Digital document authentication system
- # 5781630 Method and device for accurately dating an electronic document
- # RE34954 Method for secure time-stamping of digital documents

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-2.** Are you aware of any patents filed by the Postal Service relating to digital time-stamp or electronic authentication services? Please explain fully.

**RESPONSE:**

I first became aware of USPS patents in May or June of 2004. Here is the list:

20040117684 Systems and methods for electronic postmarking including ancillary data  
20040034780 Electronic postmarking without directly utilizing an electronic postmark server  
20030177357 Apparatus and methods for the secure transfer of electronic data

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-3.** Did you apply for any patents for the "e-TimeStamp" service or product you mention on unnumbered line 2 of page 2 of your testimony? If so, were any patents awarded for this service or product? Whether or not the patent was awarded, please briefly describe any service or products for which you sought a patent.

**RESPONSE:**

In June 1998 I wrote a patent application with the assistance of an attorney that was submitted to the United States Patent and Trademark Office (USPTO). The patent was not awarded because I abandoned the application. The invention was a method of securing encryption keys for the purpose of time stamping data.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-4.** Did you apply for any trademarks for the "e-TimeStamp" service or product you mention on unnumbered line 2 of page 2 of your testimony? If so, were any trademarks registered for this service or product? Whether or not the trademark was awarded, please briefly describe any service or products for which you sought a trademark.

**RESPONSE:**

In May 1996, the name "DigiStamp" was registered via an Assumed Name Certificate in Tarrant county Texas, which may qualify as a common law trademark.

In January 1998, I applied for a trademark of e-TimeStamp that was later awarded by the USPTO.

In February 1998, DigiStamp registered the Internet domain names of "digistamp.com," "e-timestamp.com" and "etimestamp.com." The use of these domain names may qualify as a common law trademark.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-5.** On unnumbered line 7 of page 2 of your testimony, you state that: "In 2004, the USPS began offering the same service, calling it the 'USPS Electronic Postmark Service.'" Please answer the following questions concerning this statement:

- a. When did you first learn of the "USPS Electronic Postmark Service?"
- b. What information did you receive about the service, and what was the source of the information?
- c. Were you aware of any previous use of the term "USPS Electronic Postmark Service", or any similar name for a time and date stamp service offered by the Postal Service? Please explain fully.

**RESPONSE:**

a. In my response to question USPS/DS-T1-1 above, I describe that in 1998 I knew that the Postal Service had considered developing time stamps for electronic communications during the 1995-1999 time frame.

b. In the intervening years, from 2000 up to late 2003, I do not remember hearing much, if anything, about the USPS being a competitor except for the conclusion of Docket No. C99-1. In November 2003, the DigiStamp support staff received an email from a person that had visited our website and asked us to compare DigiStamp's service with that of the USPS EPM. This was the first time I realized that the USPS was planning a public offering for time stamps for early 2004 and that their time stamp solution was built using the IETF specification. At about that time, I also read trade magazine article(s) and a press release related to the "rollout of the United States Postal Service Electronic PostMark(R) (EPM) service".<sup>4</sup> At about that time I learned about the case of UNITED STATES POSTAL SERVICE v. FLAMINGO INDUSTRIES (USA) LTD. ET AL. Shortly thereafter I filed this complaint at the Commission.

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<sup>4</sup> SCHENECTADY, N.Y.--(BUSINESS WIRE)--Sept. 29, 2003

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

c. Yes, I was aware the term related to being part of the Post E.C.S technology and a program within the Postal Service (see my response in USPS/DS-T1-1). My understanding is that prior to 2004, the development efforts had not been completed and/or were not made available to the public.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-6.** Do you have any knowledge of the following Postal Service products:

- a. NetPost.Certified
- b. PostECS

If so, please explain your understanding of those products, including the timeframe in which they were offered.

**RESPONSE:**

Yes, I am aware of both programs, more so of the Post E.C.S program. There is related information in my response USPS/DS-T1-1. My understanding is that these electronic document delivery services were never actually offered to the public. As of 2002 I believed the Postal Service had exited the electronic document delivery business given the results of Commission Docket No. C99-1.

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-8.** On unnumbered line 15 of page 8 of your testimony, you state that the USPS EPM is “almost always used in connection with a communication.” Are you aware of any applications for the USPS EPM which do not involve a communication? Please identify them.

**RESPONSE:**

Yes, I assume that the USPS EPM has customers that use the service for intellectual property protection.<sup>6</sup> I make this assumption due to DigiStamp’s experience in the same market space. As described in my testimony, the experience at DigiStamp has been that this usage is less than 10 percent of DigiStamp transactions.

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<sup>6</sup> Earlier in the proceeding, DigiStamp had described this usage of the USPS EPM “...time/date stamps are also analogous to current practices with hard copy mail – retaining the envelope with the document you received or enclosing a document in a First-Class envelope, mailing it to oneself, and leaving it sealed as proof that the document existed in a certain configuration on a particular date, as evidenced by the postmark.” DigiStamp Answer in Response To Motion of the United States Postal Service to Dismiss 5/2004

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-9.** On unnumbered line 15 of page 8 of your testimony, you state that the USPS EPM is "almost always used in connection with a communication." What was the total volume of transactions using a Digistamp time date stamp? What was the percentage of those transactions that involved a "communication." In your answer, please define the term "communication."

**RESPONSE:**

I am defining the term "communication" as the process of exchanging information. The process entails the sender composing the information, transmission through some medium (electronic in this case) and then another party receives the information.

Objection filed for the question "What was the total volume of transactions using a Digistamp time date stamp?"

In response to the second question, as stated in my testimony, the percentage of transactions that involve communication is more than 90 percent at DigiStamp (unnumbered line 22 of page 8).

Two examples that apply my definition of "communication": A customer buying health insurance on-line, fills-in a form on his/her Internet browser. The insurance provider receives that electronic form on the website and time stamps it to authenticate the communication. A similar example is creating receipts for fax communications in electronic workflows. Together, these examples account for more than 90 percent of the time stamp transactions at DigiStamp in the past year.

Your question begins with the quote "USPS EPM is 'almost always used in connection with a communication.'" In April 2005, a press release was issued that announced a significant increase in sales of EPMs to Liberty Healthcare

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

Group Inc to verify doctor's orders sent via digital fax (this customer usage was given as an example in my testimony on page 10). Given a previous rate of EPM sales at about 1000-2000 per month,<sup>7</sup> then this new customer would represent more than 90% of EPM transactions.

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<sup>7</sup> Authentidate SEC 10Q filing

RESPONSES OF DIGISTAMP WITNESS RICK BORGERS TO  
INTERROGATORIES OF THE UNITED STATES POSTAL SERVICE

**USPS/DS-T1-10.** On unnumbered line 10 of page 12 of your testimony, you state that the Postal Service was not a contributor to the work of the Internet Engineering Task Force (IETF) in the late 1990s. Are you aware of any efforts by the Postal Service to support the development of public policy for *authentication of electronic communications during this period*? If so, please identify such efforts, and any public documents to which the Postal Service contributed.

**RESPONSE:**

I am not aware of Postal Service efforts during the period when the work at the IETF to design a time-stamp standard evolved from a draft to a published international standard. My main source of information on this subject was by reading user postings on a public newsgroups service maintained by the IETF for the purpose of recording the design work.

1 COMMISSIONER HAMMOND: Thank you, Mr.  
2 Borgers.

3 THE WITNESS: You're welcome.

4 COMMISSIONER HAMMOND: You're excused.  
5 (Witness excused.)

6 COMMISSIONER HAMMOND: Okay. We will now  
7 move to receiving rebuttal testimony.

8 Mr. Koetting, would you call your witness,  
9 please?

10 MR. KOETTING: Thank you, Commissioner  
11 Hammond. The Postal Service calls as its witness  
12 Thomas J. Foti.

13 COMMISSIONER HAMMOND: If you would remain  
14 standing for a moment?

15 Whereupon,

16 THOMAS J. FOTI

17 having been duly sworn, was called as a  
18 witness and was examined and testified as follows:

19 COMMISSIONER HAMMOND: Thank you. You may  
20 be seated.

21 (The document referred to was  
22 marked for identification as  
23 Exhibit No. USPS-RT-1.)

24 //

25 //

## 1 DIRECT EXAMINATION

2 BY MR. KOETTING:

3 Q Mr. Foti, could you please state your full  
4 name and your position title for the record?5 A My name is Thomas J. Foti. I am the manager  
6 of Integration and Planning for the United States  
7 Postal Service.8 Q Mr. Foti, I've just handed you two copies of  
9 a document entitled Rebuttal Testimony of Thomas J.  
10 Foti on Behalf of the United States Postal Service,  
11 which has been designated as USPS-RT-1. Are you  
12 familiar with that document?

13 A Yes, I am.

14 Q Was it prepared by you or under your  
15 supervision?

16 A Yes.

17 Q If you were to testify orally today, would  
18 this be your testimony?

19 A Yes.

20 MR. KOETTING: Mr. Chairman, with that the  
21 Postal Service would request that the rebuttal  
22 testimony of Thomas J. Foti on behalf of the United  
23 States Postal Service, USPS-RT-1, be admitted into  
24 evidence.

25 COMMISSIONER HAMMOND: Is there any

1 objection?

2 (No response.)

3 COMMISSIONER HAMMOND: Hearing none, I will  
4 direct counsel to provide the reporter with two copies  
5 of the corrected rebuttal testimony of Thomas J. Foti.

6 That testimony is received and will be  
7 transcribed into evidence.

8 (The document referred to,  
9 previously identified as  
10 Exhibit No. USPS-RT-1, was  
11 received in evidence.)

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USPS-RT-1

BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON, DC 20268-0001

**Complaint on Electronic Postmark®**

Docket No. C2004-2

REBUTTAL TESTIMONY OF  
THOMAS J. FOTI  
ON BEHALF OF THE  
UNITED STATES POSTAL SERVICE

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### **Autobiographical Sketch**

My name is Thomas J. Foti. I have not previously provided testimony before the Postal Rate Commission.

I began working for the Postal Service as a summer intern in 1988 at the Headquarters' building in Washington DC. I became a permanent Postal employee in 1990 and have served in numerous staff positions in Operations Support, Engineering and Marketing. In 2000, I was promoted to the executive ranks as Manager of Equipment Requirements and Economic Analysis in the USPS Engineering organization. I presently serve as the Manager of Integration and Planning in Product Development. I have had this post since 2002. In 2005, I assumed the responsibility for the functional group which manages the USPS Electronic Postmark (EPM).

I have a Bachelor of Science degree in Management Science from the State University of New York at Geneseo and Master of Business Administration degree from the University of Maryland.

1

## 2 **2. History**

3

4 The concept of an electronic postmark was first presented to the United States  
5 Postal Service in 1991 in a report commissioned by the Postal Service and  
6 prepared by a consulting firm. A survey was conducted of the needs of the  
7 Postal Service and its customers, and potential technological product offerings  
8 that the Postal Service should explore. In this report, the consultant used the  
9 name 'electronic postmark' and clearly described the function of an electronic  
10 postmark as a secure time and date applied to electronic messages and  
11 documents. The report also discussed potential applications of the product.

12

13 In 1993, the Postal Service created a new internal group called Technology  
14 Applications. This group was tasked with developing technology-based  
15 applications, products, or services-oriented capabilities that would enable the  
16 Postal Service to better serve its customers. An electronic postmark service was  
17 one of these initiatives.

18

19 During 1995, Technology Applications commissioned focus group research on  
20 the project. Among the topics the focus group moderator was directed to discuss  
21 with participants was the notion of electronically time and date stamping  
22 electronic documents and messages. The results of the focus groups indicated  
23 that the participants were receptive to the concept of applying a secure neutral-

- 1       3. successfully archived this hash on a secure server so that it could be
- 2             validated at a later time, using software that customers/users would install
- 3             on their personal computers.
- 4       4. successfully created system logs and documentation of the system for
- 5             Postal Service review and acceptance.

6

7   In May of 1996, this first iteration of an Electronic Postmark System was

8   demonstrated -- live and in real time -- in Palo Alto, California at Aegis Star, an

9   electronic archiving company. In June 1996, the system was further successfully

10   demonstrated in New York City at the offices of Foote, Cohn, Belding.

11

12   Simultaneous with this system's development, another project underway was the

13   development of a very large PKI-based Certificate Authority (CA) system. By the

14   fall of 1996, the selected CA contractor, Cylink, Inc of Sunnyvale, California,

15   began working with CygnaCom to build EPM capability into the CA system. The

16   objective was that every Certificate issuance, deletion, revocation, expiration,

17   and other important 'events' related to certificates would be 'postmarked'. This

18   was an example of inserting one piece of technology into a larger one for the

19   benefit of both systems, and hence adding value for all customer applications.

20   The EPM was successfully integrated with the Certificate Authority System at the

21   time the earliest version of the CA was completed in mid-1997.

22

- 1        1. During these trade shows, the Postal Service collected several hundred  
2            names of individuals representing hundreds of companies and  
3            organizations that expressed interest in using the EPM; and,
- 4        2. As a result of the publicity in the technical press, the Postal Service  
5            received dozens of calls from IT developers who wanted to know how they  
6            could 'build the next EPM system' or 'embed EPM into their applications'.
- 7        3. As a result of the publicity campaign, the Postal Service met with  
8            Microsoft, IBM (and Lotus), Digital, Hewlett-Packard, Verisign, eTrade,  
9            Entrust, over a dozen top law firms, the EDI community, and a host of  
10           government agencies, all of whom wanted to know more about the EPM  
11           and how they might work with the Postal Service.

12

### 13        **3. Industry Development**

14        From 1994 through 1997, the Technical Applications group met with several  
15        companies that offered time and date stamping services. During that time  
16        period, there probably were no more than a half dozen small companies actively  
17        participating in this sector. To say that an 'industry' existed would be incorrect;  
18        an industry had not yet developed.

19

20        Now, in 2006, the Postal Service can identify over two dozen active participants  
21        in this sector. In nearly a decade, then, during which time the Postal Service has  
22        been actively engaged in trying to build an electronic postmarking (time and date  
23        stamping) service, the number of participants has quadrupled. The Postal

1 First, the X.9 time stamping standards that the financial services community is  
2 trying to finalize will, for the first time, engage not only an entire industry  
3 (financial), but will also embrace all electronic financial transactions. This means  
4 that the CFO's offices within the manufacturing industry, the Bursar and  
5 Treasurer's offices within the education community, the reports due periodically  
6 to the SEC, etc., will have to be time and date stamped in accordance with the  
7 proposed X.9 standards. This standard is being promulgated by the Information  
8 Assurance community, which works closely with the financial community. With  
9 the recent re-emergence of the importance of accurate financial reporting data on  
10 the part of both publicly-held and privately-held firms, adoption of this standard  
11 may lead to its widespread acceptance by the relevant oversight agencies.

12

13 Secondly, the Universal Postal Union (Bern, Switzerland), has recently adopted a  
14 set of time and date stamping standards under the rubric of 'digital postmarking.'  
15 The world's postal administrations hope that this standard will be readily adopted  
16 and accepted by this community of users. The Postal Service has been active in  
17 helping to create these postmarking standards, providing comments, guidance  
18 and feedback.

19

20 Thus, over the past decade there has been an increase in the number of service  
21 providers in the time and date stamping industry. There has been a convergence  
22 towards 'standards' and there is a growing understanding on the part of business

1 Creation and use of the worldwide web changed everything with respect to  
2 communicating and storing information. The earliest USPS EPM systems  
3 enabled 'more secure' electronic communications between senders and  
4 receivers. It now appears that embedding the Electronic Postmark® into a  
5 specific software solution—where a business need already exists—is a more  
6 promising application environment. In this concept, the need is already there,  
7 and an Electronic Postmark® can either be embedded in such a way that the  
8 user does not have to make a choice to use the EPM, or can be embedded so  
9 that the user invokes an Electronic Postmark® at a certain point in a transaction,  
10 if needed. Most early adopters are using the Electronic Postmark® as proof of  
11 content or integrity of content, regardless of whether the content is sent to  
12 anyone else. In fact, 97 percent of all Electronic Postmark® uses, since 2003,  
13 have been in conjunction with protecting content integrity of an electronic file —  
14 and not in the transmission of a message.

15

16 The current largest customer of the USPS EPM is using it for content integrity in  
17 a compliance process, and not as part of an electronic communications process.  
18 This company has integrated the USPS Electronic Postmark® into an existing  
19 business process that is used to verify electronic content of faxes received; which  
20 then initiates additional business compliance activities. In this case, the USPS  
21 Electronic Postmark® provides proof not of time and date sent, but of content  
22 integrity and of a time and date that triggers a business process for the recipient.

23

1

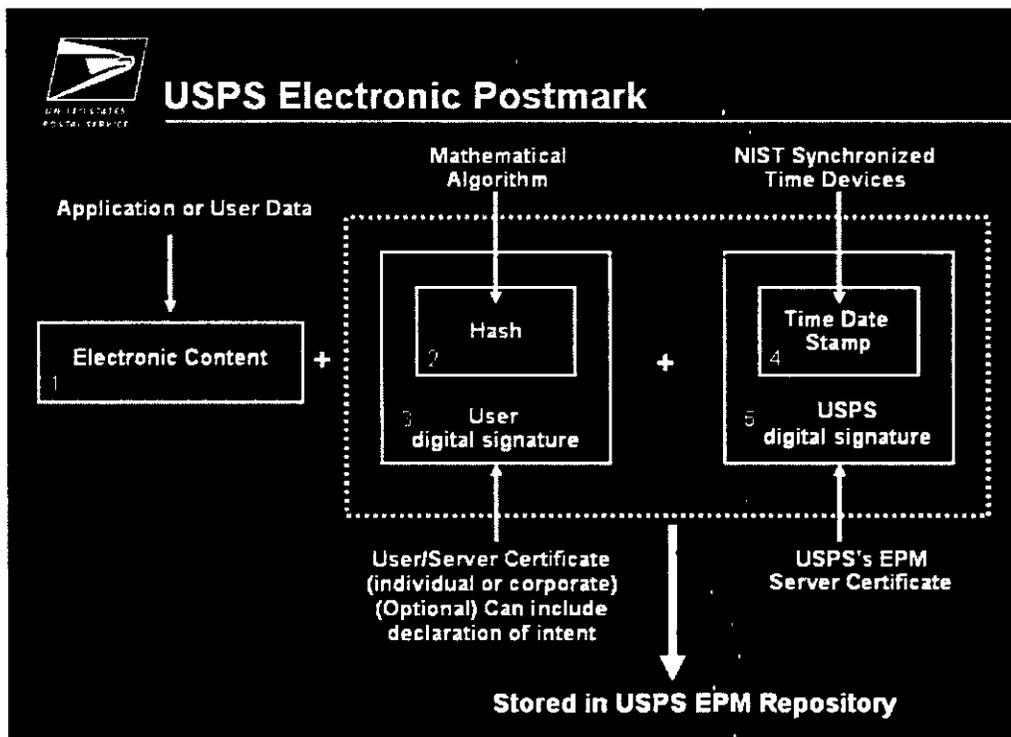
2 The USPS Electronic Postmark® provides two very significant elements that add  
3 to a business process. The USPS Electronic Postmark® time and date can be  
4 considered irrefutable. It doesn't matter whether a document or file is ever  
5 transmitted anywhere, the originator (or other interested party) can say with an  
6 extremely high certainty that, at a certain point in time, a specific electronic file  
7 did exist. It also provides for content integrity. Not only did the document/file  
8 exist, its content at that point in time was X. One of the features customers want  
9 when it comes to validating content integrity is the ability to validate the content  
10 5, 10, or even 50 years from now. The Postal Service is structured to meet those  
11 long term needs.

12

13 The Postal Service is committed to creating and operating affordable,  
14 dependable, reliable products and services, of which the USPS Electronic  
15 Postmark® over the past four years has been one. Customers perceive value  
16 similarly. Customers require that their supplier be available, affordable,  
17 dependable, reliable and—in this case—have longevity. The USPS Electronic  
18 Postmark® fulfills this value proposition on all counts. The online world needs an  
19 independent, third party provider of time and date services, along with message  
20 (or content) integrity. The Postal Service has the experience and understanding  
21 to provide this in a reasonable manner to all who need such a service.

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1. Electronic content is created from any application.
2. The electronic content is submitted for an Electronic Postmark® through the USPS EPM SDK (via a client application). The USPS SDK then creates a hash code of the electronic content (a unique fingerprint of the file, but does not include the file itself).
3. The hash code is signed by the user/server digital certificate.
4. A signed code is sent by the USPS EPM SDK to the USPS EPM Data Center for time stamping. Once the Data Center receives the signed hash, the user/server's digital certificate is checked for validity. Next, a trusted time stamp is obtained from the USPS EPM Time Stamp Server (which is synchronized to the National Institute for Standards and Technology – NIST). The time synchronization events are logged by the

1                   COMMISSIONER HAMMOND: Mr. Foti, have you  
2 had an opportunity to examine the packet of designated  
3 written cross-examination that was made available to  
4 you in the hearing room this morning?

5                   THE WITNESS: Yes.

6                   COMMISSIONER HAMMOND: If the questions  
7 contained in that packet were posed to you orally  
8 today, would your answers be the same as those  
9 previously provided in writing?

10                  THE WITNESS: Yes, they would.

11                  COMMISSIONER HAMMOND: Are there any  
12 corrections or additions that you would like to make  
13 to those answers?

14                  THE WITNESS: Yes. There's two typos that  
15 I'd like to make changes to.

16                  They are DigiStamp-1-3 -- hold on. 1-3-1,  
17 Question 1. The date referenced in the response to a  
18 HIPAA security rule that currently it states  
19 February 20, 2004, it should be February 20, 2003.

20                  COMMISSIONER HAMMOND: Okay. Counsel, would  
21 you please provide two copies of the corrected  
22 designated witness cross-examination of Witness Foti  
23 to the reporter?

24                  That material will then be received into  
25 evidence and transcribed into the record.

1 MR. KOETTING: Yes, Your Honor.

2 THE WITNESS: I have one more.

3 COMMISSIONER HAMMOND: One more? I'm sorry.

4 THE WITNESS: One more typo. On the same  
5 interrogatory in Response 2(a) in the last sentence in  
6 parens it says "fax hard copy". There's a missing  
7 comma after hard copy. There should be a comma in  
8 between hard copy and disk.

9 COMMISSIONER HAMMOND: Okay. That is all  
10 the corrections then?

11 THE WITNESS: Correct.

12 COMMISSIONER HAMMOND: Okay.

13 (The document referred to was  
14 marked for identification as  
15 Exhibit No. USPS-RT-1 and was  
16 received in evidence.)

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BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON, DC 20268-0001

Complaint On Electronic Postmark

Docket No. C2004-2

DESIGNATION OF WRITTEN CROSS-EXAMINATION  
OF UNITED STATES POSTAL SERVICE  
WITNESS THOMAS J. FOTI  
(USPS-RT-1)

Party

Interrogatories

Office of the Consumer Advocate

DigiStamp/USPS-RT1-1-4  
OCA/USPS-RT1-1a-b, i-k, 2-11, 13-22, 23a, 24-28

Respectfully submitted,



Steven W. Williams  
Secretary

INTERROGATORY RESPONSES OF  
UNITED STATES POSTAL SERVICE  
WITNESS THOMAS J. FOTI (RT-1)  
DESIGNATED AS WRITTEN CROSS-EXAMINATION

<u>Interrogatory</u>	<u>Designating Parties</u>
DigiStamp/USPS-RT1-1	OCA
DigiStamp/USPS-RT1-2	OCA
DigiStamp/USPS-RT1-3	OCA
DigiStamp/USPS-RT1-4	OCA
OCA/USPS-RT1-1a	OCA
OCA/USPS-RT1-1b	OCA
OCA/USPS-RT1-1i	OCA
OCA/USPS-RT1-1j	OCA
OCA/USPS-RT1-1k	OCA
OCA/USPS-RT1-2	OCA
OCA/USPS-RT1-3	OCA
OCA/USPS-RT1-4	OCA
OCA/USPS-RT1-5	OCA
OCA/USPS-RT1-6	OCA
OCA/USPS-RT1-7	OCA
OCA/USPS-RT1-8	OCA
OCA/USPS-RT1-9	OCA
OCA/USPS-RT1-10	OCA
OCA/USPS-RT1-11	OCA
OCA/USPS-RT1-13	OCA
OCA/USPS-RT1-14	OCA
OCA/USPS-RT1-15	OCA
OCA/USPS-RT1-16	OCA
OCA/USPS-RT1-17	OCA
OCA/USPS-RT1-18	OCA
OCA/USPS-RT1-19	OCA
OCA/USPS-RT1-20	OCA
OCA/USPS-RT1-21	OCA
OCA/USPS-RT1-22	OCA
OCA/USPS-RT1-23a	OCA
OCA/USPS-RT1-24	OCA
OCA/USPS-RT1-25	OCA

Interrogatory

OCA/USPS-RT1-26

OCA/USPS-RT1-27

OCA/USPS-RT1-28

Designating Parties

OCA

OCA

OCA

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

**DS/USPS-RT1-1.** On page 3, line 19, through page 4, line 8, you state: "During 1995, Technology Applications commissioned focus group research on the project. . . . [T]he participants were receptive to the concept of applying a secure neutral-party time and date stamp to an electronic message, but only if the time and date stamping were conducted by an organization that had the trust and respect of individuals, as well as, [sic] business and government. When the focus group asked participants to name likely candidates to operate such a **service**, several well-known firms, such as IBM, AT&T and others, were mentioned. When the moderator then added several other potential providers, including the United States Postal Service, the participants' choices quickly narrowed to the Postal Service as one of the preferred choices."

1. Is it your testimony, then, that consumers in these focus groups **did not** spontaneously assume the USPS would be an appropriate provider, and that it was **only** when the moderator proposed USPS as a provider that USPS entered the discussion? If your answer is no, then please explain.

2. What do you mean when you say, "the participants' choices **quickly narrowed** to the Postal Service as **one of** the preferred providers?"

a. By the normal meaning of words, you are saying that the participants eliminated some of their original candidates. How did they do that, and why? Did the moderator offer suggestions as to why some should be eliminated?

b. I infer that **even after** the moderator's intervention, the consumers **did not** eliminate private businesses as potential providers? Is that correct? So is it your testimony that, until the moderator raised the possibility of the USPS, consumers did not think of the USPS as an appropriate provider, and even after the moderator's intervention, the consumers were unwilling to see private business as untrustworthy to provide this service? If your answer is no, then please explain.

3. When you asked the participants about "applying a secure neutral-party time and date stamp to an electronic message," did you mean "electronic **message**"? That is to say, were the participants given the impression that you were asking them about **messaging**—about sending a communication? Or did your moderator specify some esoteric meaning of the term "message" that does not involve sending a message?

4. Would it be fair and accurate to conclude from your testimony that your focus groups showed that the public does not, of **its own** origination, see the USPS as an appropriate source for date and time stamping, and that your moderator convinced them that because time stamps involve messaging, the USPS is a logical provider?

If your answer is no, then please explain. Would it be correct to infer from your testimony that it is only because the EPM certifies communications that consumers decided the USPS would be an appropriate provider? If your answer is no, then please explain. And would it, finally, be correct to conclude that even then, the public as represented in your own focus groups retained the idea that private business is perfectly capable of providing a trustworthy date and time stamp?

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

**RESPONSE:**

1. This research was done many years ago. I did not attend the focus groups. For the portion of my testimony you cite, I relied upon others who did observe the focus groups. Although I do not have the specific level of detail from the focus group sessions to determine the impact the moderator or the structure of the focus group sessions had in drawing the Postal Service into the discussion, it is my understanding that private firms were initially discussed as potential providers.

2.a. Again, I do not have this level of detail on the focus group sessions. See my answer above. My statement is that many focus groups participants readily embraced the view that the Postal Service seemed like a logical provider of this service, in addition to well-known private businesses with strong brands.

2.b. The focus group participants did not appear to eliminate large, well-established private businesses as potential providers. I do not have specific detail of the focus group sessions to determine what the participants thought of the appropriateness of the Postal Service as a provider before the moderator mentioned it.

3. At the time of the focus group sessions in 1995, we were in the concept stage of product development, and were trying to determine the value of the Postal

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

Service in a broad array of electronic services. It is my understanding, when this was discussed with focus group participants, the term "electronic message" was used in its normal sense at the time, without intending to convey anything "esoteric".

4. No. I believe the focus group research was done professionally, without prejudice or bias. When participants were asked for candidates to provide a secure third-party date and time stamp, the Postal Service, as well as some well-established private firms, were their preferred choice. The research highlighted that people generally respect the Postal Service because of its reputation as a trusted third party.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

**DS/USPS-RT1-2.** You state that "In fact, 97 percent of all Electronic Postmark users, since 2003, have been in conjunction with protecting content integrity of an electronic file—and not in the transmission of a message." (page 11, lines 12-14) DigiStamp previously introduced multiple exhibits that date back to the mid 1990's showing the USPS markets its EPM as a means for "secure communications."

1. Is it your testimony that, as a matter of fact, ninety-seven percent of your customers use the USPS EPM for purposes contrary to your own marketing? If your answer is no, then please explain. Is it your testimony that ninety-seven percent of your customers do not use it for communicating messages? If your answer is no, then please explain.

2. How could that possibly have happened? How, with near-unanimity, would your users have decided that the USPS EPM is not really for what your marketing says it's for, but for something else?

3. Consider this: cell phones are designed and marketed as high-quality communications devices, up-to and until the Telco appears before the FCC. The clock that is included in this device is used 10 times more often than the calling function. Therefore, by your logic, could the Telco claim that these devices are immune from regulation: they are not phones; they are clocks? If your answer is no, then please explain.

4. In connection with the testimony quoted above, please provide a breakdown of the percentages used by customers, as follows:

a. What percentage of USPS EPMs is used to verify faxes received? (your testimony, page 11, lines 16-22)

b. What percentage of USPS EPMs is used to verify Worker Compensation claims? (your testimony, page 12, lines 1-4)

c. What percentage of USPS EPMs is used to authenticate physicians' clinical notes? (your testimony, page 12, lines 6-11)

d. What percentage of USPS EPMs is used strictly in "documenting inventor's notes, research results, depictions, flow charts, schematics, descriptions, etc;" and "not submitting this material to anyone"? (your testimony, page 12, lines 15-18)

**RESPONSE:**

1. No, it is my testimony that, based on our understanding of how customers are using the USPS EPM, the EPM is essentially not being used in the transmission of a message.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

2. Customers do not normally rely on marketing materials from several years before to identify the current features of a product. In addition, in the 1990s, the Postal Service originally was proposing a suite of electronic services, under the title Electronic Commerce Service, of which the USPS EPM was only a part.

3. No, the facts of what I now understand to be posed by you as a hypothetical do not apply to the USPS EPM. Your hypothetical suggests phone service that can be and is used to carry phone messages between callers and the parties they call, without the utilization of any other service provider. USPS EPM, however, does not carry messages between two parties. The carriage of any message associated with USPS EPM requires the utilization of another service provider. Moreover, your hypothetical appears to suggest that any non-message use of the phone (i.e., as a clock) has never been featured in materials used to describe the product. USPS EPM is described as a service giving customers a way to time-stamp electronic files, providing evidence that a document or file existed at a specific time and date, and detecting changes made to the postmarked document. Your hypothetical describes a fundamentally different situation.

4. Based on my knowledge of the customer usage of the USPS EPM, below is a breakdown:

- a. 85%
- b. Less than 1%
- c. Less than 1%
- d. Less than 1%

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

**DS/USPS-RT1-3.** You state on page 11, lines 16-19: "The current largest customer of the USPS EPM is using it for content integrity in a compliance process, and not as part of an electronic communications process. This company has integrated the USPS Electronic Postmark into an existing business process that is used to verify electronic content of faxes received."

1. In what sense is a fax not an electronic communication process?
2. For this customer, is the application of the USPS EPM integrated into receiving the fax? That is, is the EPM applied automatically before the client is able to access the file in any way?
  - a. If so, how is that not part of an electronic communications process?
  - b. If not, how can it do what you claim—namely, verify the integrity of the content of the fax received?
    - i. If the client can access the fax in question without the EPM being applied, then obviously the client can apply, or not apply, the EPM only to such faxes as it deems it in its own interest to apply it to—hence defeating the very compliance process you've cited. But if the EPM is, by the nature of the business process, applied whenever a fax of the appropriate type is received, then obviously it is integrated into the electronic communications process.
    - ii. If the EPM is applied only after the client has accessed the file and submitted it to in-house processes, how does the EPM guarantee that file is the same one sent?
3. So which is it—does the USPS EPM not actually prove anything about what has been received, or it is really integral to the process of communication?

**RESPONSE:**

1. Although I could dispute whether or not a fax is considered an electronic media transmission (see HIPAA Security Rule, 68 Fed Register 8374, February 20, <sup>2003</sup>~~2004~~, which specifically excludes faxes from its definition of electronic messages), the point to be made is that the customer business process begins upon receipt of the fax – not during the fax transmission. The USPS EPM functionality of authenticating an electronic document when presented to the USPS EPM server is indifferent as to how that document got there or where it came from. Additionally, the USPS EPM plays no role in the communication protocol of the fax.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

2. Yes – The USPS EPM is a single component of a more robust customized application which was developed and integrated into the customer's business process of receiving a fax. It is similar to a protocol in which, after a hard copy communication has been received by an office, the very first thing that always happens is that the hard copy is time and date stamped by a secretary.
  - a. The functionality of the USPS EPM is limited to simply being presented an electronic file and authenticating that file. Where the electronic file originates (fax, hard copy, disk, email, etc.) is not relevant to the functionality of USPS EPM authenticating the file.
  - b. Not applicable
3. The core USPS EPM functionality enables the authenticating of electronic documents, regardless of how they are presented.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

**DS/USPS-RT1-4.** From page 4, line 10, to page seven, line 11, you give what you describe as a "history" of USPS development of its date and time stamp. You contend that the USPS "began work" in 1996 (page 4, line 12), after two years of speeches "announcing that the Postal Service would be building an electronic postmark for use by our customers." (page 4, lines 10-12) You later state, "When the Postal Service's contractor first developed our electronic postmark system, there were no industry standards on which to build." (page 8, lines 5-7.)

1. Prior to USPS' appropriation of the standards and protocols developed by private industry, is it not true that all of the USPS efforts failed? If your answer is no, then please explain.

2. You seem to claim that the USPS has helped develop industry standards (page 8, lines 4-10). Are you claiming that the participation of the USPS somehow benefited industry by precipitating and contributing to standards that otherwise were not under development? If so, how, when, by whom, and by what means? If not, why do you introduce the development of the IETF standards as if the USPS somehow played a central role?

3. Is it not true that the USPS EPM in its current form was only introduced in 2004, and in fact uses the standards developed by private industry, not the failed efforts of earlier USPS work? If your answer is no, then please explain.

**RESPONSE:**

1. No. We were an active organization participating in a market which was in its infancy. As with many emerging markets, products evolved to better meet customer needs.

2. It is my belief that the Postal Service's participation in the emerging industry provided some legitimacy to the market segment and encouraged other organizations to become engaged. We were active in discussions with many industry participants, which I believe either directly or indirectly had an impact on the development of standards by IETF. I have no information or belief about the extent of the Postal Service's direct involvement in IETF discussions because none of the postal employees who were likely to be involved are still employed by the Postal Service. However, the Postal Service was actively involved in Policy

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF DIGISTAMP**

Discussions inside and outside the government. For a discussion of the Postal Service's possible role as a trusted third party, see, for example, Michael S. Baum, *Federal Certification Authority, Liability, and Policy: Law and Policy of Certification-based Public Key and Digital Signatures* (1994). As another example, see *Digital Signature Guidelines*, Information Security Committee, Science and Technology Section, American Bar Association (1996), Section 1.35, (Trustworthy Systems), note 1.35.2 ("For more information, see, e.g., United States Postal Service, *Draft Security Policy: A Report by the Security Policy Team* (1994)").

3. No, the USPS EPM in its current technical form was introduced in 2002, although conceptually it is essentially the same as the USPS EPM introduced in the first part of the 1990s in terms of providing a time and date stamp to an electronic file and protecting the integrity of the content. The USPS EPM embraces a wide range of industry standards.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-1. At page 3 of your testimony, you make the statement that the Technology Applications group was tasked with developing technology-based applications products, or services-oriented capabilities that would enable the Postal Service to better serve its customers. The following questions are limited to domestic (non-international) activities of the Postal Service.

a. Please provide a detailed description of the Postal Service's "customers" as used at page 3, line 7. Address, in this description, whether the Postal Service views its customers as limited to those individuals and businesses that send or receive "personal, educational, literary, and business correspondence," as well as packages.

b. If the Postal Service customer base is limited to individuals and businesses that send or receive "personal, educational, literary, and business correspondence," and packages, then does the Postal Service view Electronic Postmark (EPM) customers as part of the set of individuals and businesses that send or receive "personal, educational, literary, and business correspondence" and packages. Explain in full.

c. If the Postal Service customer base includes other types of "customers," additional to individuals and businesses that send or receive "personal, educational, literary, and business correspondence," and packages, are there any limits on whom the Postal Service might view as a customer? If there are limits, what are they?

d. Are there any limits on the types of commercial or retail services that the Postal Service might decide to provide to its customers, e.g., selling doughnuts? Selling shoes? Selling homeowners insurance to non-employees? Providing a full array of banking services (for a fee) to non-employees? Explain fully. If there are limits, what are they?

e. Is it the policy of the Postal Service to limit the commercial or retail services it provides to mail-related services? If not, why not?

f. Is it the policy of the Postal Service to limit the commercial or retail services it provides to services that are close substitutes for mail, e.g. PostECS? If not, why not?

g. Does the Postal Service take the view that it may provide any type of commercial/retail product or service solely to earn additional revenues, without regard to the nature of the service and whether it has a close relationship to mail? Please explain fully.

h. Does the Postal Service take the view that there are any limitations on its ability to provide "nonpostal" services to its customers? Please explain fully.

i. Is EPM a postal service? Please explain

j. Or is EPM a "nonpostal" service? Please explain.

k. How does EPM relate to the Postal Service's core mission to provide *mail* services and services incidental to *mail* services?

i. Is EPM a mail service?

ii. Is EPM incidental to a mail service?

iii. Is it the Postal Service's position that EPM has nothing whatsoever to do with mail?

iv. Is EPM a service that comes within the Postal Service's fundamental mission because it is a substitute for/functions like a mail service?

v. Explain your answers to k.i. – iv. fully.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

**RESPONSE:**

a. I am unaware of any intent to use the term "customer" in any other than the generic sense of the term – "one that purchases a commodity or service" (Webster's Ninth New Collegiate Dictionary). Therefore, I have no reason to believe that the term as used incorporated any limitation of the type described in your question.

b. Not applicable.

c.-h. Objection filed.

i.-j. USPS EPM is a nonpostal service, as it is not a postal service. It is not a postal service because, although I am not a lawyer, it is my understanding that it does not fall within any operative definition of a postal service.

k. USPS EPM relates to the basic function of the Postal Service in that, while postal services bind the Nation together through personal, educational, literary, and business correspondence, USPS EPM has the potential to bind the Nation together through provision of a widely-available, standardized, and commonly-accepted means to establish the integrity of the contents of an electronic file at a particular time and date. In that sense, it is a similar type of service to a postal service.

i. No, it is not a mail service.

ii. No, it is not incidental to a mail service.

iii. Yes, it has nothing whatsoever to do with customary hard-copy mail.

iv. No, it does not substitute for/function like a mail service, although, as noted above, it is in some sense a similar type of service.

v. Those answers are self-explanatory.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-2. At page 3 of your testimony, you state that in a 1991 report commissioned by the Postal Service and prepared by a consulting firm, the consultant used the name "electronic postmark" and clearly described the function of the electronic postmark as "a secure time and date applied to electronic messages and documents." Further down the page, you describe a 1995 Technology Applications focus group that discussed "the notion of electronically time and date stamping electronic documents and messages." Are these descriptions still applicable to describe the functions of Electronic Postmark (EPM)? If not, explain fully and provide the current description. Provide all Postal Service documents that support any description different from that used in the 1991 consulting report or 1995 focus group.

**RESPONSE**

Below is the relevant description of the USPS EPM which can be found on the USPS internet site:

The USPS Electronic Postmark™ (EPM) protects the integrity of your electronic data through the use of auditable time stamps, digital signatures and hash codes. Through the USPS EPM web-based service, any third-party can verify the authenticity of electronic content. The EPM provides evidence to support non-repudiation of electronic transactions. The EPM is designed to deter and detect any fraudulent tampering or altering of electronic data.

Additionally, the Postal Service has provided USPS EPM description with previous filings to the Commission concerning Nonpostal Programs. On June 1, 2006, in response to Commission Order No. 1449 (Docket No. RM2004-1), and again on July 25, 2006 in response to OCA/USPS-58 (Docket No. R2006-1), the Postal Service provided the following description of the USPS EPM:

**"ELECTRONIC POSTMARK (EPM)**

The USPS Electronic Postmark (EPM) is currently an out-sourced all-electronic service giving customers a way to time-stamp electronic files. The EPM provides evidence that a document or file existed at a specific time and date and detects changes made to the postmarked document. Since January of 2003, the service has been performed as a strategic alliance with an outside vendor, Authentidate,

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

under postal direction, policies, and branding. The Postal Service shares a portion of the EPM fees collected. The service is sold over the internet via online sales, or via a hardcopy sales agreement.”

Finally a more detailed description of the USPS EPM can be found in the attached

**USPS EPM White Paper** which is available on our provider's internet site at

<http://www.authentidate.com/index.php/content/view/35/62/>

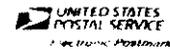


USPS<sup>®</sup> Electronic Postmark<sup>™</sup> (USPS<sup>®</sup> EPM<sup>™</sup>)  
White Paper

September, 2003

# Contents

<b>Contents</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>1</b>
Highlights of the USPS Electronic Postmark.....	1
Legal Strength of the USPS EPM.....	1
<b>Benefits of USPS EPM</b> .....	<b>2</b>
Start Using the USPS EPM Today.....	2
Developers.....	2
End Users.....	2
<b>Technology Overview</b> .....	<b>3</b>
Non-Repudiation – Proving WHO did WHAT and WHEN.....	3
Hash Codes prove WHAT.....	3
Digital Certificates Prove WHO.....	4
Digital Signatures Prove WHO did WHAT.....	4
Time Stamps Prove WHAT and WHEN.....	4
Trusted Third Party for Long Term Non-Repudiation.....	4
How does USPS EPM work with PKI?.....	4
<b>Putting it all together - The EPM Process</b> .....	<b>5</b>
USPS EPM Extension for Microsoft Office.....	5
ESIGN and Signing.....	5
<b>How EPM Works</b> .....	<b>6</b>
Overview.....	6
Authentication.....	6
Verification.....	6
<b>USPS EPM Specifications</b> .....	<b>7</b>
Features.....	8
Software Development Kits.....	9
USPS EPM Enabled Applications.....	9
Security Standards.....	10
<b>USPS EPM Related Services</b> .....	<b>11</b>
In-Person Proofing at Post Offices (IPP) Program.....	11



## Introduction

### ***Highlights of the USPS Electronic Postmark***

The advent of the Internet increased the need for efficient communication of electronic information with the same level of trust and value that the public has come to expect from the USPS® in the physical environment. The USPS® Electronic Postmark™ (USPS® EPM™) was created to facilitate secure electronic communication for government and commercial systems and has the potential to strengthen the security, privacy, and productivity of communication in the nation's electronic future.

The USPS EPM is a web-based security service. It includes trusted time stamps and content authentication technology, as well as aspects of non-repudiation. The trusted time stamps are derived from the National Institute of Standards and Technology (NIST), the official US source of time for commerce. These time stamps are auditable such that for each time stamp issued, the system is able to produce upon demand the bracketing time synchronization events starting from NIST and following a secure chain of custody through any intermediary clocks.

The USPS EPM service combines trusted time stamps with content authentication technology. This combination proves document authenticity when a resulting USPS EPM is associated with a document or transaction that can later be verified using the USPS EPM repository. Finally, the service enables digital signing applications by including support for digital certificates. The combination of these technologies maintained in the USPS EPM repository provides third party evidence to support non-repudiation of electronic transactions and is designed to detect the fraudulent tampering or inadvertent altering of electronic data.

Additionally, the USPS EPM supports applications so that they can comply with the E-SIGN legislation (Public Law 106-229 – enacted in June 2000) which made electronic signatures the legal equivalent of their paper counterparts in many situations. The E-SIGN law, which is technology neutral, provides general performance based guidelines eliminating legal barriers to using electronic technology to form and sign contracts, collect and store documents, and send and receive notices and disclosures. The USPS EPM is consistent with these guidelines, and enables corporations and individuals to take advantage of online contracts and commerce with a trusted USPS service.

The USPS has contracted with Authentidate to provide the sales, marketing, technology and services for customers to purchase and use the USPS EPM. Authentidate is currently the sole provider of the USPS EPM. By bringing the EPM to market with Authentidate, the USPS provides an important service to the public which combines the long standing integrity of the Postal Service with Authentidate's content authentication technology.

### ***Legal Strength of the USPS EPM***

Security experts agree that trusted time stamps and trusted third party archival of signatures and receipts are necessary to ensure long-term non-repudiation. A wide body of knowledge suggests that even today's best PKI technologies may be capable of being "broken" in the future, rendering signatures and receipts that are not archived by a trusted third party, untrustworthy (unless they are re-signed). Additionally, to ensure completeness and enable non-repudiation, e-commerce systems must have a third-party time-stamping system in place because it is simply too easy to alter dates on computer systems. Government and industry reporting requirements specifying that information must be submitted by a certain date and time can also be satisfied through the USPS EPM service.

In addition, a well-established body of federal law exists which support the USPS and its operations and services. The United States Postal Inspection Service protects the integrity of USPS operations and is authorized to investigate a variety of criminal activity. Any attempt to criminally interfere with the operation of the USPS EPM may be subject to investigation and prosecution under several federal statutes.



## Benefits of USPS EPM

The USPS offering of the EPM is significant for a variety of reasons. In light of recent economic conditions affecting the technology marketplace, the longevity of an organization and its ability to continue offering and supporting services into the future is of primary concern to customers. USPS policies for long term archival and retrieval of EPM receipts mean that these receipts will be available to satisfy legal retention requirements for years to come.

Equally important to the general marketplace is the fact that the USPS EPM offering provides a web-based service with an affordable, volume-based, transactional pricing model. This egalitarian approach provides a cost effective means by which companies large and small, as well as individuals, can utilize this non-repudiation service for trusted applications.

Additionally, where government agencies in particular are seeking ways to reduce the burden on citizens and businesses, the USPS EPM provides a service by which organizations can implement a receipting process to facilitate a basic system of records of all electronic transactions for a customer of that agency. A standard manifest will save countless hours of organizational and retrieval activities for organizations and individual customers alike.

As one of the most trusted government agencies in the United States today, the USPS offering of the EPM has the ability to stimulate electronic contracting and transactions by encouraging people who may be reluctant to use the Internet or technology to do business electronically. By stimulating widespread use of electronic systems, the USPS EPM has enormous potential to significantly increase government and commercial adoption of such systems. In turn, increased adoption of electronic systems facilitated by the USPS EPM will enhance national productivity by stimulating the technology industry and eliminating the costs associated with preparing, shipping, and storing paperwork.

### ***Start Using the USPS EPM Today***

#### ***Developers***

EPM Software Development Kits (SDKs) allow developers to easily build applications incorporating USPS EPM functionality. The SDK's are available for both the Microsoft Windows development environment (using the COM EPM SDK), as well as for a variety of other development platforms (using the Java EPM SDK).

#### ***End Users***

Because the USPS EPM is provided as a web service, end users will find that the USPS EPM easily fits their business needs. The USPS EPM service will soon be (planned fall 2003) integrated with Microsoft Office Professional Edition 2003 (part of the Microsoft Office System) and Microsoft Office XP as an Extension to Microsoft Office for Word. See more discussion about the details of the USPS EPM Extension for Microsoft® Office on page 7. For more information about these services, contact information is provided here.

United States Postal Service  
 USPS EPM Program Manager  
 475 L'Enfant Plaza, SW Suite 3300  
 Washington, DC 20260  
 202-268-7455  
[www.uspsepm.com](http://www.uspsepm.com)

Authenticate  
 Connell Corporate Center  
 300 Connell Drive 5<sup>th</sup> Floor  
 Berkeley Heights, NJ 07922  
 800-870-5348  
[www.authenticate.com](http://www.authenticate.com)



## Technology Overview

Electronic commerce enhances business efficiencies, enabling electronic data to be stored, accessed or transmitted with great ease. These efficiencies, however, and the dramatic growth of the Internet as a medium for communication, have raised new issues and concerns related to the security of electronic information. For example, when exchanging documents over the Internet, users (both corporate and individual) are concerned by such factors as eavesdropping (information remains intact, but privacy is compromised), tampering (information in transit is changed or replaced) and impersonation (information passes to a person who poses as the intended recipient).

### ***Non-Repudiation – Proving WHO did WHAT and WHEN***

The fact that electronic data can be easily altered necessitates a system by which parties can trust the information they share and use in everyday transactions. This requirement for trust is referred to in both the legal and crypto-technical worlds as non-repudiation. Non-repudiation is important in e-commerce to prevent parties to a transaction from disputing or denying the transaction after the fact. The primary goal of a non-repudiation system is to prove WHO did WHAT and WHEN, and maintain evidence of such information to resolve disputes, or for auditing and compliance.

Non-repudiation should be viewed from both a legal and a technical perspective. From a legal perspective, the American Bar Association PKI Assessment Guidelines define the term non-repudiation as "... sufficient evidence to persuade the ultimate authority (judge, jury or arbiter) as to such origin, submission, delivery, and integrity, despite an attempted denial by the purported sender." (p. 281)

In general terms, to repudiate something is to deny its existence, and therefore non-repudiation services use cryptographic methods which prevent an individual or entity from denying having performed a particular action related to data (such as mechanisms for non-rejection of authority, providing proof of origin, for proof of obligation, intent, or commitment; or for proof of ownership.) From a technical perspective, the term non-repudiation is used within authentication technology to describe a service which "... provides proof of the integrity and origin of data, both in an unforgeable [not able to be forged] relationship, which can be verified by any third party at any time; or, ... [provides a] high assurance ... [that data is] genuine, and that can not subsequently be refuted." (W. Caelli, D. Longley, and M. Shain, 1991. *Information Security Handbook*. London: Macmillan.)

Time stamping services are an aspect of non-repudiation services which provide "... a strong and verifiable cryptographic statement that a specific digital record existed at a specific moment in time. Time stamping a digital record provides the relevant parties with a verifiable statement of when the digital record was known to exist. Time stamping a digitally-signed record can further provide the relevant parties with a verifiable statement that the digital record was signed while the signing certificate was valid e.g., that the signature was formed before the expiration date of the signing certificate." ... [T]ime-stamping services thus provide the technical basis for general non-repudiation services, and for both Common Law – and Latin-derived notarial services." (p.182 ABA PKI Assessment Guidelines).

### ***Hash Codes prove WHAT***

To prove that the contents of a file have not been tampered with, USPS stores a *hash code* of the file, without actually seeing or storing the file. A hash code, also referred to as a "file signature" or "message digest", is a number that uniquely represents (is sufficient to identify) a particular file. Hash codes are unique in the sense that two different files will never have the same hash code, except in the unlikely event of a *hash collision*. The likelihood of a hash collision decreases exponentially as the bit length of the hash code increases. With the 160 bit SHA-1 hashing algorithm (the industry standard) used by the USPS EPM, the odds of a hash collision are exceedingly remote (1 in  $2^{80}$ ). And because the hashing function is 'one-way', no portion of the original data can be reconstructed from the file signature (in the same way an individual cannot be "reconstructed" from his signature or fingerprint). Hashing functions are superior to their technical counterpart the checksum, in that it is not possible (or at least extremely unlikely using today's technology) to find a second file with different contents that has the same hash code. Thus, if a user can present the EPM Service with a hash code, it can be assumed that the person who computed that hash code had in their possession a certain file.



### ***Digital Certificates Prove WHO***

PKI (Public Key Infrastructure) uses the concept of public and private keys to prove identity at a distance in the electronic world, where "face to face" authentication is impractical. A digital certificate is comprised of two "keys", one public and one private key. The public key is freely distributed, and serves to verify a signature as being created by its matching private key. The private key is held secret by the owner, and is used to sign digital transactions. Certificate Authorities (CAs) control the issuance of digital certificates, and are responsible for properly identifying the owner (also known as *vetting*).

### ***Digital Signatures Prove WHO did WHAT***

A digital signature is created by signing a hash code of a file with the user's private key. Since the public key is distributed as part of the digital signature anyone viewing the signature can now verify that it was signed by the corresponding private key. In this way, both senders and receivers can associate the sender's identity with a specific file. The E-SIGN act, signed into law in 2000, gives electronic signatures the same legal strength as paper signatures for most documents.

### ***Time Stamps Prove WHAT and WHEN***

Time-Stamping is a process whereby a trusted third party signs a hash code with the current time. There is a protocol for time stamping – the Internet Engineering Task Force (IETF) 3161, that defines how hash codes are signed with a time stamp. This protocol is an *anonymous* protocol, meaning the identity of the submitter of the hash code is not associated with the file. The private key used for signing is that of the Time Stamping Authority (TSA). The TSA certifies (in the case of the USPS EPM, the TSA is the United States Postal Service) that the time stamp issued is accurate. This avoids the problem of relying on an individual computer clock for time stamping, since the time and date functions in a computer are relatively easy to manipulate. The USPS EPM derives trusted time stamps from the National Institute of Standards and Technology (NIST), the official US source of time for commerce.

### ***Trusted Third Party for Long Term Non-Repudiation***

All the techniques described above are today's industry standard techniques for proving identity, signing, and time stamping. According to RFC 3126, Electronic Signature Formats for Long Term Electronic Signatures, one of the best ways to ensure successful long term non-repudiation is to store signatures and time stamps in a trusted third party repository, which can vouch for their integrity. The USPS EPM service stores a signed hash of the file or transaction and an associated time stamp signed by the USPS. Should there ever be a need to utilize newer, stronger algorithms, a trusted third party could *re-sign* the signatures and time stamps, thus preserving a *chain of trust* from the original as far into the future as required.

### ***How does USPS EPM work with PKI?***

The core strength of PKI is strong user-level authentication and digital signing (proving WHO did WHAT). The USPS EPM actually extends the trust of PKI by adding trusted time stamps, checking that the signing certificate is not expired, and archiving the transaction for long term non-repudiation. Therefore, the USPS EPM service is *complementary* to PKI, but the EPM user does not need to use PKI in order to use the EPM. USPS also uses PKI to establish a secure, tamper-proof connection between the customer's network and the USPS EPM repository. The USPS EPM repository is issued server-level PKI digital certificates so that users can trust the service maintaining their file/document digital signatures.



## Putting it all together - The EPM Process

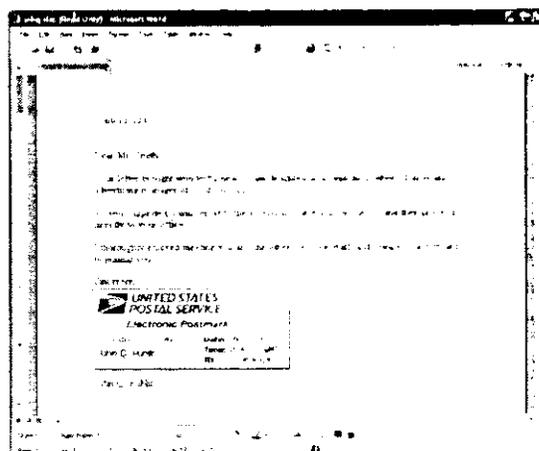
Where digital signature technology proves WHO did WHAT, and time stamping technology proves WHAT and WHEN, these technologies are all combined in the USPS EPM service to provide the necessary evidence to enable non-repudiation of electronic data. Now let's take a look at just one example of how the EPM works.

### ***USPS EPM Extension for Microsoft Office***

The USPS EPM, which enables users to verify authenticity, provide tamper detection, and date and time stamp their electronic documents and files, will be integrated with Microsoft Office Professional Edition 2003 (part of the Microsoft Office System) and Microsoft Office XP as an Extension to Microsoft Office for Word. The USPS EPM Extension for Microsoft Office software, co-developed by Authentidate and Microsoft Corp., will be available for download from <http://office.microsoft.com> in Fall 2003, where users will receive instructions on how to establish a USPS EPM account.

The USPS EPM Extension for Microsoft Office, an extra feature added to the standard Microsoft Word application, consists of an integrated set of capabilities, including: 1) digital signing of a Word document using digital certificates, 2) electronic content sealing and time/date stamping with the USPS EPM, and 3) the ability to subsequently verify the Word document's validity, authenticity and integrity.

**Figure 1.0 Sample Postmarked Word Document**

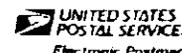


### ***ESIGN and Signing***

The USPS EPM service supports applications so that they can comply with the E-SIGN legislation (June 2000) which made electronic signatures a legally viable option for conducting business. The USPS EPM Extension for Microsoft Office is an application that makes it possible.

The E-SIGN law, which is technology neutral, provides general performance based guidelines eliminating legal barriers to using electronic technology to form and sign contracts, collect and store documents, and send and receive notices and disclosures. E-SIGN also requires that electronically signed records are retained in a manner that: 1) accurately reflects the information set forth in the contract or other record; and 2) remains accessible to all persons who are legally entitled to access in a form that is capable of being accurately reproduced for later reference, whether by transmission, printing or otherwise.

The USPS EPM Extension for Microsoft Office allows users of the USPS EPM service to digitally sign, electronically postmark and verify Word documents so that documents stay protected, auditable and secure – allowing detection of alterations. The USPS EPM service is consistent with the E-SIGN guidelines, allows content to be verified by users over the web, and maintains evidence of document authenticity for later reference for seven years.



## How EPM Works

### **Overview**

As a web-based service, the USPS EPM enables companies large and small as well as individuals to take advantage of the efficiency of the Internet for everything from correspondence to contracting with the ability to verify the authenticity of data.

The USPS EPM employs a secure time stamping clock, synchronized to the National Institute of Standards Technology (NIST), the official US source of time. A trusted time stamp is obtained from the time stamping clock and signed by the USPS to the unique hash code (associated with each customer's original file) to produce a combined USPS EPM receipt.

The USPS EPM cannot be changed by end users — or even by the USPS or Authentidate. In fact, attempting to tamper with an EPM in the USPS EPM repository could be prosecuted as a violation of federal law.

### **Authentication**

The USPS EPM protects the integrity of your electronic data by providing third-party verification (via the USPS) of electronic content against the secure USPS EPM Data Center to establish that content has not been altered or changed since the time of electronic postmarking. This service provides the foundation for non-repudiation services by enabling non-repudiation of electronic content. The USPS EPM also allows for digital signing, whereby users can apply their identity to electronic content through access to digital certificates for signing as well as including declarations of intent when signing.

### **Verification**

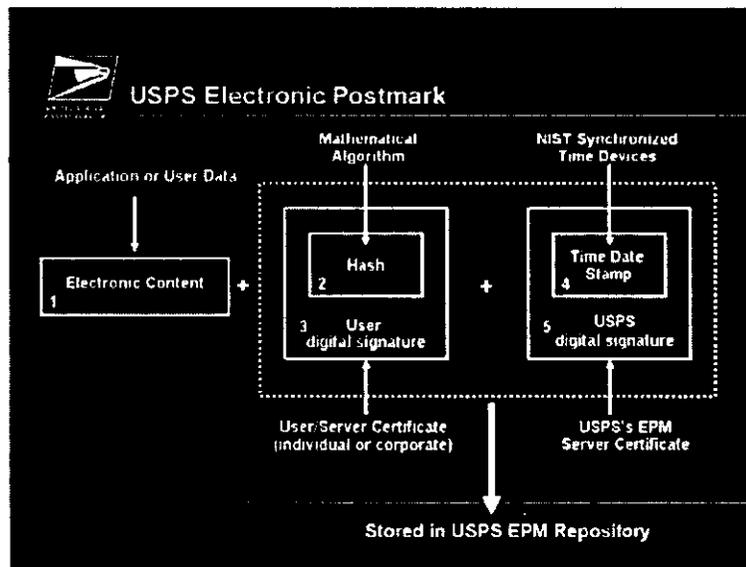
All documents, web forms, email, etc. that have been electronically postmarked by the USPS include the USPS EPM digital signature and a signed date/time stamp. The attributes of the digital signature and date/time stamp are made available for users to view as evidence of authenticity. The attributes of the USPS EPM include information illustrating that:

1. The contents of the document have not been modified in any way since the EPM was applied.
2. The EPM signature has not been modified or tampered with since it was signed.
3. The certificate used to sign the EPM was not expired at the time the EPM date/time stamp was issued.
4. The EPM date/time stamp denotes the exact time and date at which the EPM was issued by the USPS EPM Service.
5. The EPM date/time stamp has not been modified or tampered with.



The following diagram illustrates how the USPS EPM process works:

Figure 2.0 USPS EPM Process



1. Electronic content is created from any application.
2. The electronic content is submitted for an EPM through the USPS EPM SDK. The USPS EPM SDK then creates a hash code of the electronic content (a unique fingerprint of the file, but does not include the file itself (proves WHAT)).
3. The hash code is signed by the user/server digital certificate.
4. The signed hash code is sent by the USPS EPM SDK to the USPS EPM Data Center for time stamping. Once the Data Center receives the signed hash, the user/server's digital certificate is checked for validity against a Certificate Revocation List (CRL). Next, a trusted time stamp is obtained from the EPM Time Stamp Server (which is synchronized to the National Institute for Standards and Technology). The time synchronization events are logged by the time stamping hardware and can be used to prove that the time stamp issued for each EPM is accurate.
5. The resulting time stamp is then signed by the USPS digital certificate to produce an EPM, which is stored in the USPS EPM repository along with the user's signature of the file's hash to provide verifiable evidence of content for seven years. (WHO, WHAT and WHEN). The actual content of a file is never stored by the USPS EPM repository.

This electronic proof, signed by the Postal Service, provides evidence to support non-repudiation of electronic transactions. The EPM is designed to detect the tampering or altering of electronic data.

## USPS EPM Specifications

The USPS EPM is a web-based service that is available in the form of a software development kit (SDK) for developers to use to build applications incorporating USPS EPM functionality. The SDK's are available for both the Microsoft Windows developing environment (COM SDK), as well as for a variety of other development platforms (Java SDK). The USPS EPM service is also available in an application, as an extension to Microsoft Office XP for Word documents.



## Features

Features	
USPS EPM Service	<ul style="list-style-type: none"> <li>❑ Web-based service allows third-parties to verify authenticity of electronic content (documents, web forms, email, etc.) from USPS EPM repository</li> <li>❑ Detects whether data has been modified or altered from time of USPS EPM applied to data</li> <li>❑ Enables applications to include digital signing functionality, with a signing ceremony</li> <li>❑ Technology consistent with the American Bar Association PKI Assessment Guidelines 2001* (See more information below)</li> <li>❑ Consistent with Electronic Signatures in Global and National Commerce Act (ESIGN) performance-based requirements for electronic signing</li> <li>❑ Compatible with all X.509 digital certificates</li> <li>❑ Requires no modification or transmission of content (only a hash code of the file is logged as evidence of authenticity)</li> <li>❑ Stores hash of data for 7 years</li> </ul>

\* According to the American Bar Association PKI Assessment Guidelines (June 2001), "A time-stamping service generally provides a strong and verifiable cryptographic statement that a specific digital record existed at a specific moment in time. Time stamping a digital record provides the relevant parties with a verifiable statement of when the digital record was known to exist. Time stamping a digital record can further provide the relevant parties with a verifiable statement that the digital record was signed while the signing certificate was valid, e.g., that the signature was formed before the expiration date of the signing certificate. Time-stamping certificate revocation lists and other revocation data corresponding to a signing certificate provides the relevant parties with additional assurances that the signing certificate was not revoked at the time of signing. Time-stamping services thus provide the technical basis for general non-repudiation services, and for both Common Law and Latin-derived notarial services." (PAG p.182)



## Software Development Kits

Software Development Kits	
SDKs	<ul style="list-style-type: none"> <li><input type="checkbox"/> Obtain USPS EPMs</li> <li><input type="checkbox"/> Verify USPS EPMs against USPS EPM repository</li> <li><input type="checkbox"/> Verify USPS EPMs locally</li> <li><input type="checkbox"/> Obtain verification receipts</li> <li><input checked="" type="checkbox"/> Sample applications provided for easy integration and configuration into existing applications</li> <li><input type="checkbox"/> User guides provided (Use of objects in EPM service and code samples)</li> <li><input type="checkbox"/> All transaction secured by SSL communication with USPS EPM server</li> </ul>
	<p><b>COM SDK</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enables Windows applications to use USPS EPM service</li> <li><input type="checkbox"/> Organized as a set of COM objects that can be used from any language or development tool that supports COM (Microsoft C++, Visual Basic, ASP, C#, etc.)</li> <li><input type="checkbox"/> Shipped with extensive code samples in a variety of programs (C++, Visual Basic, ASP, C#, MFC, .NET, etc.), both GUI and command-line</li> </ul>
	<p><b>Java SDK</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Java SDK is platform independent</li> <li><input type="checkbox"/> Enables developers to integrate USPS EPM service into any platform</li> <li><input type="checkbox"/> Java SDK can be used from any stand-alone Java and J2EE applications</li> <li><input type="checkbox"/> Java SDK is packaged as a jar file for easy integration and configuration</li> </ul>

## USPS EPM Enabled Applications

Applications	
USPS EPM Extension For Microsoft Office	<ul style="list-style-type: none"> <li><input type="checkbox"/> Application for applying USPS EPMs to Word documents</li> <li><input type="checkbox"/> Enables use of digital certificates for identity and signing</li> <li><input type="checkbox"/> Compatible with all X.509 digital certificates</li> <li><input type="checkbox"/> Web based verification of EPM's against USPS EPM repository</li> <li><input type="checkbox"/> Option to verify USPS EPMs locally</li> <li><input type="checkbox"/> Ability to include multiple USPS EPMs within a single document</li> <li><input type="checkbox"/> Obtain verification receipts</li> </ul>



## Security Standards

The USPS EPM embraces a wide range of industry security standards, as well as technical and legal performance-based guidelines that are available today with respect to electronic data. The list below includes various standards and guidelines with which the USPS EPM is technically compliant. At present, these standards and guidelines include:

- ❑ **Fault Tolerant.** The EPM Data Center, including firewalls, routers, switches, servers, and storage, is designed to be 100% fault tolerant to any single component or connection failure. Disk mirroring is used in all servers. Multiple ISP connections are designed to assure continuous availability of the service.
- ❑ **Federal Information Processing Standards Publications (FIPS).** Time stamp server and time stamp private signing key are protected to FIPS PUB 140-2 Level 3.
- ❑ **Firewall.** Service is able to tunnel through all standard firewalls as HTTP-S traffic through port 443. The EPM service is also able to pass through both non-authenticated and password-authenticated proxy servers without modification or reconfiguration of the firewall or proxy servers.
- ❑ **Hashing.** System uses the SHA-1 hashing algorithm for each file processed.
- ❑ **Non-Repudiation.** All USPS EPMs issued are stored in a central USPS EPM repository for seven years to provide non-repudiation.
- ❑ **Operating Systems.** EPM SDK software runs on the following operating systems: Windows®, Solaris, Linux.
- ❑ **Public-Key Cryptography Standards (PKCS).** System supports the PKCS#7 Cryptographic Message Syntax Standard.
- ❑ **Secure Data Center.** The USPS EPM Data Center is housed in AT&T's secure hosting facility, including physically secured cages for servers and strict access control.
- ❑ **Secure Socket Layers (SSL).** EPM uses SSL for secure communications between the customer and the Central Server. Server-level digital certificates are used to authenticate the SSL connection.
- ❑ **Simple Object Access Protocol (SOAP)/Extensible Markup Language (XML).** EPM uses an XML-based SOAP protocol to communicate between the client-side SDK and the EPM Data Center.
- ❑ **Software Development Kits (SDKs).** Software Developer Kits are available and support the following languages: C++, COM, Java (JVM).
- ❑ **Time Stamping.** EPM time stamp servers are compliant with RFC 3161 Internet X.509 Public Key Infrastructure Time Stamp Protocol.
- ❑ **Trusted Time™ Auditable Timing Source.** The source of time is the National Institute of Standards and Technology (NIST), the official US source of time for commerce. These time stamps are auditable – that is, for each time stamp issued, the system is able to produce upon demand the bracketing time synchronization events starting from NIST and following a secure chain of custody through any intermediary clocks. (Trusted Time™ is a trademark of Symmetricom).
- ❑ **Web Services Development Language (WSDL)/Universal Description, Discovery and Integration (UDDI).** EPM is a Web Service, using the latest standard protocols. The Web services Description Language provides a way of describing the specific interfaces of Web services and APIs, and is used by UDDI. UDDI is a repository that stores the descriptions of Web services.
- ❑ **X.509 Digital Certificates.** USPS EPM uses X.509 digital certificates for strong authentication and identity purposes. At the end user level, an individual's private key may be used to sign the hash of a file or document. At the server level, the EPM time stamp server's private key (signed by the USPS) is used to re-sign the combined digital certificate containing the hash of the file or document and the secure time stamp.

Other product or service names mentioned herein are the trademarks of their respective owners.



## USPS EPM Related Services

### ***In-Person Proofing at Post Offices (IPP) Program***

Similar to the goals of the USPS EPM service in facilitating secure electronic communication for government and commercial systems by providing verifiable evidence of electronic content, the USPS announced In-Person Proofing at Post Offices (IPP) Program, which is a related trusted service supporting the activities of U.S. Certificate Authorities and government organizations. (*Federal Register / Vol. 68, No. 116 / Tuesday, June 17, 2003*) [FR Doc. 03-153470]

The IPP Program is an operation by which the USPS conducts In-Person-Proofing of customers nationwide for physically authenticating an individual's identification at a post office before that individual is issued a digital certificate.

IPP supports efficient, affordable, trusted communications through the use of identification verification at Post Offices, incorporation of process enhancements required by the Postal Service, active management of the IPP program by the USPS, and use of First Class U.S. Mail to verify physical addresses of applicants.

The IPP program begins when an organization establishes a relationship with a qualified U.S. Certificate Authority to integrate digital signing with improved identity verification into an online application. Then, any individual wanting to use digital certificates that include USPS IPP completes an application online. The online system will then verify the individual's identity via commercial database checking. Next, the system produces a standard Postal Service form that can be printed out by the individual. That individual then presents the form, and accompanying identification such as a driver's license and home utility bill, to a participating post office where the "In-Person Proofing" process is conducted. After successful completion of the IPP event, the CA will notify the applicant to download their digital certificate.

IPP creates a new broad-based capability for the Nation that promotes improved public trust and greater efficiency in the electronic delivery of a wide range of services. Similar to the USPS EPM, the IPP efforts support the goals of the Government Paperwork Elimination Act of 1998, Electronic Signature in Global and National Commerce Act of 2000, Health Insurance Portability and Accountability Act of 1996, Sarbanes Oxley Act of 2002, Gramm-Leach-Bliley Act of 1999 as well as other Presidential directives on e-government.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-3. Please provide the Statement of Work for the 1991 report commissioned by the Postal Service (USPS-T-1 at 3, l. 4 -11). Also, provide the resulting report and any memoranda produced by the consultant or Postal Service in connection with this report.

**RESPONSE**

There were a number of activities mentioned in the History section of my rebuttal testimony to clearly establish that the Postal Service was active in developing electronic services (including the USPS Electronic Postmark) for over ten years. The main purpose of providing this background was to highlight Witness Borgers' inaccurate claim that the Postal Service entered the market in 2004, and to show that the Postal Service had already established itself in this emerging industry prior to 1998 when the concept occurred to Witness Borger. I have tried to provide the information requested in this and similar interrogatories. Because many of the activities mentioned took place many years ago, however, some of the information or documents being requested are no longer available. What is being provided, though, will clearly support my testimony that the Postal Service has been at this for a long time.

We were unable to locate the Statement of Work for the 1991 report commissioned, or to find the final report by the consultant.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-4. Please provide the internal documentation that led to the creation of the Technology Applications group (USPS-T-1 at 3, l. 13 – 17). Also provide any documentation describing the functions, goals, and mission of the Technology Applications group.

**RESPONSE**

Attached is an excerpt from the Fiscal Year 1994 Comprehensive Statement of Postal Operations discussing the creation and activities of this group.

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-4



Comprehensive Statement  
on Postal Operations

FY 1994

HE6315 .A29 1994

United States. Postal  
Service.

Comprehensive statement  
on postal operations.

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-4

**2. Retail Operations**

**a. Postal Lobby Improvements.** The Postal Service continued to add computer-based Integrated Retail Terminals (IRTs) to retail operations.

In addition, Postage Validation Imprinters (PVIs) have been added to IRT systems at retail windows. PVIs have replaced postage meters and produce postage labels that validate the collection of postage and include the barcoded destination address of the mailpiece.

National standards for furniture, display fixtures, graphics, and signage that will be used in all future lobby upgrades are being developed. The first pilot sites completed in fiscal year 1994 included five sites in Van Nuys, California; three sites in Washington, DC; two sites in Northern Virginia; and five sites in Kansas City, Missouri. The test will be completed with 48 additional pilot sites throughout the country in fiscal year 1995.

**b. Debit/Credit Card Acceptance.** During 1993-94, market testing of USPS acceptance of credit and debit (bank/ATM) cards continued successfully in five districts (Ft. Worth, Dallas, Orlando, Capital, and Northern Virginia). The decision analysis report (DAR) for a national rollout of the program was approved in October 1994 by the Board of Governors. National implementation is scheduled to begin in April 1995 and continue during 1995-96.

**c. Self-Service Equipment.** Deployment of the first new Booklet Stamp machines began in fiscal year 1994. More than 1,000 will be deployed in postal lobbies during the first phase in the overhaul of the self-service program. The new machines sell basic postage stamps in booklet form or separately from coils, and customers can use debit cards as well as cash when purchasing stamps.

A contract was awarded for the production of a new single-stamp and small-booklet vending machine. One thousand machines will be purchased initially to replace old equipment. Each will return complete change, to include pennies, instead of stamps.

The number of Postage and Mailing Centers (PMCs) will be expanded to 40, while field testing continues. The PMC offers customers convenience and fast service for obtaining mailing information and costs. The PMC prints and dispenses stamps of the exact postage required at the time of purchase. Customers desiring change-of-address service will be able to enter their COA information on the PMC's keyboard. The information is then mailed to the customer at his old address for verification and, if correct, is forwarded to address management for incorporation into the system.

**d. Philatelic Programs.** Net philatelic revenue was approximately \$285 million in fiscal year 1994 — a 15 percent increase over the previous year. In conjunction with the issuance of stamps featuring popular singers and jazz and blues greats, the Postal Service conducted the first American Music Stamp Festival during the month of September and followed up with National Stamp Collecting Month's promotion centering around the Wonders of the Seas stamps. A nationwide stamp design contest co-sponsored by McDonald's generated 150,000 submissions by children. The four winning designs will be issued as stamps in 1995.

Consumer response to self-adhesive stamps has been overwhelmingly positive. The Postal Service introduced seven new "no lick" stamp designs in 1994, including two ATM stamps available through bank automated teller machines.

**3. Information and Research Programs****I. Technology and the Future**

As the Postal Service continues to be the leader in the delivery of hard copy communications, it is also seeking opportunities to leverage its technological base to create new products and services that will deliver value to customers. The Technology Applications department has been chartered to identify enabling technologies that will serve the needs of customers, help perform the Postal Service's core business activities more efficiently and reliably, and offer it the opportunity to become an innovative leader in the future electronic-services marketplace.

Technology Applications is meeting this challenge by focusing on three critical strategies: improving the existing mail flow by creating new hybrid mail services (electronic to paper and paper

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-4

to electronic); identifying and implementing new services in the emerging electronic commerce arena; and positioning the Postal Service in those new media markets. Taken together, these strategies will help carry the Postal Service into the next century and provide the next generation of communications products customers will need.

The following initiatives are examples of the Postal Service's commitment to provide technology-based services that are responsive to changing customer needs and expectations:

**a. Reply Card Scanning.** Reply Card Scanning is a hybrid service that captures scanned video images of customer information on business reply cards at the originating post office. The data is then electronically delivered to the recipient in a matter of hours, rather than the normal two- to four-day period, thereby reducing overall customer costs while improving postal operating efficiencies and speed of service.

**b. Electronic Commerce.** Working with other federal agencies, the Postal Service is evaluating the provision of electronic commerce services such as certification, authentication, encryption, electronic messaging, and value-added services based on its established role as a trusted third party to maintain security and protect individual privacy.

**c. Kiosks.** The National Performance Review team has asked the Postal Service to lead an interagency effort to electronically provide government information and services to the public. Working with federal, state, and local entities, Technology Applications is developing an interactive information kiosk to provide a single point of contact for government services, as well as ensuring fast, easy, and universal access to all citizens.

**d. Address Recognition.** A continuing area of contract research activity by the State University of New York (SUNY) is the recognition of handwritten addresses. During fiscal year 1994, earlier investigations were integrated into a prototype system that could completely process script addresses to the delivery point level. This requires that the system recognize delivery-line information in addition to the handwritten ZIP Code. Tests conducted in the laboratory of actual mail piece images indicated that more than 20 percent of the handwritten letters could be finalized. During the next year, computer processes developed by SUNY will be integrated with the remote computer reader (RCR) to further increase the performance of the entire remote bar coding system.

There have also been research efforts to increase the performance of the MLOCRs. These efforts have concentrated on designing improved address matching techniques. Using an addressing matching directory developed under earlier research programs, an MLOCR was converted to one that had two directory matching systems with software to arbitrate the results. Testing of this system saw increased delivery point coding results and a reduction in errors. Five additional systems are in the process of being field tested to confirm that the results can be replicated across the nation with the addressing peculiarities that exist in various locales.

Success with the co-directory also revealed that significant performance improvements should be possible by adding parallel recognition processing to the MLOCRs. A co-processing recognition system has been built and integrated with an MLOCR in the laboratory. Testing of live mail has begun and initial results of an arbitrated output look very promising.

Looking further into the future, a development is underway on a low-cost optical character reader. A full system — including a gray-scale camera, processing electronics, and address directory — is being developed for installation on small bar code sorters installed in delivery units. This effort is being undertaken by the University of Arkansas — the original developers of the wide area bar code reader — and will allow local OCR processing of letter mail that has originated at that delivery office.

## 2. Information Systems

**a. Field Distributed Computing Infrastructure.** As the Postal Service implements distributed computing on the workroom floor, at the retail window, on the loading dock, and in vehicles, it is moving to a standard information technology (IT) infrastructure. The dominant computing model is the small powerful computer — distributed throughout the organization and linked to an enterprise network. This business model emphasizes satisfaction of customer needs, decentralization

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-5. Please provide the Statement of Work for the 1995 focus group research (USPS-T-1 at 3, L. 19 – p. 4, l. 8). Provide the results of the focus group, including any reports that describe the results of the research.

**RESPONSE**

We are unable to locate the Statement of Work. Objection filed on providing report.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-6. Please provide copies of the 1994 and 1995 speeches of postal officials cited at USPS-T-1 at 4, l. 10 – 12.

**RESPONSE**

We no longer have copies of every speech from this period, but attached is a August 3, 1994 speech by Richard Rothwell, Senior Director of Technology Integration, on this subject, which I am informed is typical of the speeches at that time.

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

Address to Information Security Committee, ED/IT Division  
American Bar Association Section of Science and Technology  
Quebec City, Canada, August 3, 1994

**Good afternoon.**

**My name is Richard Rothwell. I am senior director of technology integration for the United States Postal Service.**

**I doubt there are many groups more aware of the sweeping changes taking place in communications than this one, or how those changes affect the way that all of us will do business in the future. Today I want to share with you my thoughts on the role of the postal service in this new age, and particularly, the role that we are being asked to assume in helping to facilitate the emerging world of electronic commerce.**

**The postal service was established, at the birth of the United States, with the mission of binding together a diverse and far-flung nation through the correspondence of the people. It was, and is, a broad-based mission. Over a century ago, then acting Attorney General William Howard Taft wrote that "the makers of the constitution ... had in mind the comprehensive view which regarded post offices ... as instruments for the transmission of intelligence," a mission they expressed "in very comprehensive terms..." Today we are being asked by our customers to consider new ways of carrying out this mission. Today we live in a complex, cost conscious, interdependent society which is developing new electronic communication systems and re-inventing commercial practices. For many applications, the new efficiencies of electronic data communication, the benefits that it has provided to its early adopters, and the competitive pressures that this evolution has created are driving corporations, governments, and individuals to explore new ways of conducting business, and serving their customers and constituents.**

**Yet, as many experts have noted, including many of you in this room, digital files as a rule are neither as secure nor as reliable as their paper counterparts. Digital files are designed to be easily manipulated by users on different computers. This is, of course, an essential element of the efficiency that electronic commerce conveys. But without some method of sealing a digital file to establish its contents, author, and time of**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**transmittal, the benefits of electronic commerce will inevitably be limited to highly structured transactions between parties that know and trust on another. Such limits will severely constrain or wipe out the benefits of electronic data interchange. A recent article in Government Computer News noted that the use of trading partner agreements to structure EDI agreements could require the services of hundreds of lawyers to negotiate, write, and argue about the agreements just for government procurement. This is evidence of the great degree of transactional friction that must inevitably accompany such an approach.**

**If electronic commerce is not going to be limited to highly structured transactions between well known and trusted parties, other solutions must be developed to create an effective legal framework and electronic infrastructure. Electronic communication media cannot become a reliable basis for widespread business use without a trusted method of sealing digital contents, verifying the parties involved, and establishing an official date and time for the transaction.**

**Government has similar needs. Trust and security are essential to the success of the national information infrastructure, the reform of government performance, and a number of other critical functions, such as the implementation of health care reform. Personal, educational, literary, and business correspondence traveling on the information superhighway must be electronically guarded so that all citizens are reasonably assured of the integrity of their records. The timely delivery of important electronic information, and the identity and authority of the people with whom they communicate are equally important. Without trust and security, all of the supercomputers and all of the high-speed networks in the world cannot make the NII succeed on the broad functional basis for which it was conceived.**

**As one of the nation's largest organizations, the United States postal service shares many of the concerns of both business and government. The Postal Service must manage transactions with thousands of organizations on a daily basis in the process of annually doing \$49 billion of business moving 171 billion pieces of mail. But our concerns are no different from those of any large enterprise in the world today trying to make its operations more efficient.**

**There are not likely to be many in this room who do not believe in the need for a mechanism for establishing the reliability of an electronic transmission, and binding an individual to it. I**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**therefore do not believe that it will be necessary to conduct a detailed exploration of the advantages of building a public key infrastructure as a solution to the technical problems of providing security for electronic documents. What I will talk to you about is the role the postal service can play in providing these technical solutions where they are needed.**

**There are several reasons why the postal service is developing platforms for providing solutions to these problems. First, our general duty to "bind the nation together through the personal, educational, literary, and business correspondence of the people" has taken on new meaning now that a hybrid information highway, part paper and part electronic, has become a reality and will continue to be for at least the next decade. Second, not surprisingly, our customers are asking us to play an expanded role in facilitating paper and electronic commerce because we have unique legal and institutional resources to accomplish the task. And third, we have to develop electronic services to meet our customers' needs for faster, more efficient handling of their products.**

**A core function of the Postal Service will remain the transmission of hard copy messages to and from residences and businesses in America. As I've noted, that function flows out of our core mission to bind the nation together. The Postal Service has other missions as well. We are tasked to provide service on a universal basis to patrons in all areas and to all communities. We are required to use every effort to provide efficient and expeditious delivery of correspondence. We are charged with protecting the privacy of postal customers and may not make available to the public by any means or for any purpose any mailing or other list of names or addresses, past or present, of postal patrons or other persons. And we are charged with maintaining the security and integrity of the mails, and investigating postal offenses and civil matters relating to the Postal Service.**

**As a consequence of these missions, the Postal Service has at least three assets which make us a likely candidate to play a role in this emerging field. First, the Postal Service already has much of the legal and institutional infrastructure necessary to assist in the development of widespread electronic commerce. Second, our size and widely distributed resources give us the practical tools to provide a much-needed service on a universal basis. Third, we are uniquely situated to protect core values**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**such as security and individual privacy as well as universal access to the tools of electronic commerce.**

**Let me discuss these one at a time.**

**First, the Postal Service has the legal structure to perform the duties of managing a certificate authority. The Post Office was originally established by the Continental Congress as the United State's first information highway. For over two hundred years, a sophisticated regime of statutes, regulations, and policies has developed to provide the infrastructure which enables secure, efficient, and inexpensive transmission of paper communications. For 200 years, the United States Postal Service has certified mail, sealed it with the power and authority of law, provided responsible and timely mail delivery, and insured patrons against loss or theft. A reliable and trusted mail system remarkably free of corruption or abuse has accompanied the development of a system of commerce in the United States which is second to none in the world.**

**For hardcopy communications, the legal framework is already in place to handle issues such as liability, indemnity, confidentiality, fraudulent use, theft, definite dating, etc. A similar framework will be required to support electronic commerce. Customers have suggested that the Postal Service may be in a unique position to provide part of that structure. For example, some customers have suggested that they are concerned with their own capacity to handle liability issues, and that the postal service provides a ready-made solution to this problem. Others have expressed concern about the confidentiality problems inherent in dealing with other companies, while still others have asked for a regime for controlling fraud which is as strong and convenient as that in place for mail fraud. Thus, the strong legal framework established for handling paper communications can provide similar benefits for electronic commerce.**

**Second, our customers are asking for our assistance in this area because we have unique practical assets, including:**

- \* The 40,000 retail facilities distributed nationwide.**
- \* Universal presence and the capacity to achieve significant scale.**
- \* The resources of an existing national information infrastructure.**
- \* A very strong verification process currently used for passports, that involves proof of id and other**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**information to a federal employee.**

**\* The experience, policies, and ability to archive records without risk that they would be used for collateral commercial purposes.**

**The Postal Service is also a remarkably long-lived organization, and those of you who have struggled with archiving policies will recognize that to be an important advantage. As Bob Jueneman has said on the Internet, "Certificates 'R Us" may be gone tomorrow. If you have to prove that a certificate was registered on a certain date, and you are seeking an appropriate archiving facility, you can have confidence the postal service will still be around to support your request.**

**A third strength the Postal Service brings to enabling electronic commerce, and another reason that our customers have asked for help, is our capacity to create certificate management systems that can reach virtually every community in America, because we already have a substantial presence in those communities. We can therefore provide a solution to the question of how to put the tools of electronic commerce, such as certificates, into the hands of everyone. There are many obstacles to prevent citizens from taking advantage of the benefits of electronic commerce. Currently there are technological, geographic, economic, and knowledge barriers which prevent people from participating in the benefits of electronic commerce. To provide universal service to electronic commerce we must provide access which is universally usable and ubiquitous and scalable. By providing a solution to some of these access problems, the Postal Service may have an important role to play in ensuring that future communications in america provide a continuing framework for sustaining a democratic, participatory society.**

**Thus, many of the institutional features needed by an entity wishing to take part in certificate issuance and management already exist in the United States Postal Service. The Postal Service was established to provide very similar services for the support of correspondence when the physical frontier was chaotic and hard to reach. It is ready to provide similar services on the electronic frontier.**

**As the Postmaster General has informed Congress, we are actively supporting the development of the NII to facilitate the development of our own business and to help us carry out our mission. On March 24, the Postmaster General testified before the Senate affairs committee that "working with other federal**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

agencies, we may be able to develop an electronic commerce system." He also noted that, through the development of a kiosk program that might carry out postal transactions and perhaps also disseminate information from other agencies, our postal lobbies could become "on-ramps" to the electronic super highway. The Postmaster General highlighted two important areas in which the Postal Service may be helpful: serving the requirements of other government agencies, and providing universal service to those citizens who are in danger of being left out of the information revolution. To these he might have added a third, equally important area: protecting the privacy of American citizens. This concern is deeply embedded in postal tradition and statute. When we speak of the security of electronic commerce we should not miss the way in which commercial security and individual privacy are interconnected concepts.

While it is too early to know what precisely lies ahead, let me share with you a general description of the systems we are developing, both for our own use and for that of our customers.

The postal service is using public key encryption technology, and related technologies, to develop a public key certification authority and a set of associated trusted third party services which we call Postal Electronic Commerce Services (Postal ECS). When initially deployed, Postal ECS will provide a basis for electronic assurances within and among government agencies, and between government agencies and their constituents. In particular, the postal service has developed the ability to:

- \* Issue public key certificates and store them in a public directory;
- \* Provide for the "sealing" of selected documents or other electronic objects and associating them with a digital signature and a trusted time and date stamp;
- \* Provide services for public key certificate publication and revocation; and,
- \* Provide the ability to encrypt confidential information moving between the user environment and the Postal ECS management system.
- \* Finally, provide near real-time access to certificates and their status.

The certification authority will issue and manage X.509 public key certificates containing a person's X.500 distinguished name, public key, and other identifying information. Users can then retrieve a certificate from the postal service, and use its

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**public key to authenticate a digital signature generated by the complementary private key.**

**The correspondence service provided by the system is the postal ecs seal which provides users with a validation of the originator based on his or her digital signature. We also provide a postal service digital signature on the digest of an electronic object that assures that it cannot be changed without detection. We also provide the postal service digital signature on a date and time stamp that we supply to enable proof of existence at a point in time and we provide archiving for those date and time stamps. Finally, we provide near real-time access to certificates and their status. This allows a user to get up-to-date information on the validity of certificates, and removes the need for users to maintain their own certificate revocation lists.**

**The postal service has implemented the certificate authority services, the correspondence services and the supporting directory on a host computer system in one of our major production data centers. We have also developed three postal service-licensed user agents as reference models to be installed on end user workstations that will provide access to postal ecs services. They run on Microsoft Windows-based PC's and access Postal ECS services via e-mail (either internet or X.400). We are also working on an interactive dial-up communication alternative and expect this to be available shortly.**

**These user agents contain standard programming interfaces that link user applications, cryptographic routines, and ecs services together. Our initial implementation is based on the Digital Signature Standard (DSS) algorithm set; but our plan is to support other cryptographic options such as RSA in the near future.**

**We are now moving from developmental work to actual proof of concept pilot testing of these services both internally in the usps and with our government agency partners. Our plans will evolve as we gain experience from these initial pilot tests and continue to talk with customers, and experts in encryption, software development, and computer science. We have shared our plans with congress, the administration, and the media. And we have asked ourselves three key questions:**

- \* Is this initiative critical to our mission and our responsibility to the public?**
- \* Do our customers have a need for our participation?**

**And,**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

**\* Would the costs of providing these services be balanced by potential revenues?**

**Certainly the responses that we have received to date more than justifies our view that this is an area in which we should continue to be an active participant.**

**Before concluding, let me directly address a controversial philosophical discussion about certificate management so you can understand what we see as the future world of electronic commerce. There has been a great deal of debate about the relative advantages of hierarchial versus peer-to-peer or one-level models for management of digital signature. To some extent, I believe this debate misses the point. The system for managing X.500 certificates that will eventually be adopted will be adopted only because it meets the business needs of the users. Because the complex communication needs of the future will require flexibility to meet individual desires, some mix of hierarchial and peer-to-peer or flat management schemes will be adopted.**

**What the recipient of an electronic document signed with a digital signature needs to know is how much weight to give that signature -- or, in other words, what actions to take based on an evaluation of the sender. This is exactly the same thing that is decided every day by people -- should we sell securities to a voice over the phone? Should we place an order with a new salesman? Given the infinite variety of possible transactions and encounters, there is no point in trying to impose on electronic transactions a single paradigm for authentication. Different levels of assurance, and different architectures, will be necessary for different uses. What is important is that the parties to the transaction are aware of the level of assurance provided.**

**The Postal Service can be of assistance in filling some specific needs in the certificate arena, but it has no intention of controlling or dominating that arena. For the near future the universe of electronic commerce will continue to have many different galaxies. Many varying concepts and services will be able to make valuable contributions. Many other entities will provide services in this area: as Vice President Gore has noted in numerous speeches, there is a role for both private and public entities. We plan to provide services based upon identified needs, which customers will decide whether or not they will use.**

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-6

In keeping with the philosophy I have articulated, let me say that the Postal Service, in any development of these products, intends to support multiple cryptographic products in the market place. In addition, we will not compete with network service providers, nor will we become a network or carrier.

**In developing these services, we are keenly interested in the work of this group. While the technology and scale issues seem to us to be manageable, we recognize that there are still many legal questions concerning the way in which the design of a public key infrastructure management service might best work. The liability issues are not yet completely clear, and the duties of each entity in such an infrastructure need to be articulated. As customers seek our services, we will have to face questions of scalability, investment, and the regulatory issues associated with the introduction of a new service. Can the service be managed? What investment will be required? How will regulators have us present the service to the public and at what price?**

**We greatly appreciate the exchange of views that this forum makes possible. We all have much to learn in this area, and I believe we should welcome the fact that we live in such interesting times.**

[end]

----- End Included Message -----

- **Next message:** [hallam@dxal18.cern.ch](mailto:hallam@dxal18.cern.ch): "[Re: OBCSCR](#)"
- **Previous message:** [Nick Szabo: "The ultimate in trust"](#)

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-7. Please provide the Statement of Work for the CygnaCom Solutions contract cited at USPS-T-1 at 4, l. 13 – p. 5, l. 5.

**RESPONSE**

The original Statement of Work for the Cygnacom Solutions, Inc., contract is no longer available, although the Postal Service does have the Statement of Work for 1997 for a later phase of the contract. It is attached. The only copy located contains text that was previously highlighted by unknown persons for unknown reasons, but the resulting shading on the attached copy is not to my knowledge intended to be a redaction. To provide a more legible copy, the page with the highlighting (page 1) has been retyped, and the retyped page is inserted behind the original page 1, in case the original is not sufficiently clear.

ATTACHMENT TO RESPONSE, OCA/USPS-RT-7  
**Amendment to the  
 Statement of Work  
 Order No. 102590-96-F-1247**

**Statement of Work for Phase V. Software Changes**

**OVERVIEW**

The United States Postal Service (USPS) has been planning an infrastructure designed to provide Electronic Commerce Services to users of electronic networks. These services include an electronic postmark, an electronic return receipt, an electronic postmark, and other services required for the authentication and verification of electronic mail. Initially, a partnership was formed between the USPS and a commercial firm to provide electronic postmarking and archival services. The commercial firm is located in Palo Alto, California. As the project progressed, it became more difficult and expensive for the commercial partner to provide operation support services. The USPS has decided that it would be more advantageous to develop, modify and operate an electronic postmarking service in the Washington, DC metropolitan area. The system must be constructed quickly, must provide reliable services, and be sufficiently flexible to offer and implement new services to meet customer demands.

The new electronic postmarking services allow the USPS to experiment with more innovative concepts in electronic commerce. For example, the postmark processor pilot will allow the introduction of return receipts for USPS electronic mail. The USPS is also exploring the capability for the USPS to form new partnerships that are not limited to a single vendor.

**PURPOSE**

The purpose of this document is to identify the technical tasks and roles necessary to release a pilot electronic postmarking system.

**EXISTING ELECTRONIC POSTMARKING SYSTEM**

The existing electronic postmarking system is in operation at AgieStar's facility in San Jose, California. It consists of a Sun Sparc 20 serving as a USPS Postmarking Processor, and client software for the verification of USPS postmarks. In the current implementation, postmarks are generated using a software library that contains a private key. Verification is performed on the client side using a dynamic link library (DLL) with the public key hard coded into the DLL. There is no support for standard X.509 certificates and no mechanism for key exchange.

**PILOT ELECTRONIC POSTMARKING SYSTEM**

In the Pilot implementation, the existing system will be replaced by the initial system. The existing system provides postmarking services currently offered by AgieStar, with the addition of return receipts and archival services. As new opportunities for partnerships between the USPS and commercial billing and archival services become available, modifications to the system may be made to accommodate these services.

Subsequent versions of the postmarker may include access to non-SMTP mail services (MCI, AT&T, etc.). As part of this effort, client software will be provided to perform verification of the electronic postmark at

ATTACHMENT TO RESPONSE, OCA/USPS-RT-7

*Not original, transcription  
for readability of the attachment*

**Amendment to the  
Statement of Work  
Order No. 102590-96-F-1247**

**Statement of Work for Phase V. Software Changes**

**OVERVIEW**

The United States Postal Service (USPS) has begun piloting an Infrastructure designed to provide Electronic Commerce Services to users of electronic networks. These services include an electronic postmark (similar attributes to the paper postmark), and other services required for the authentication and privacy of electronic documents. Initially, a partnership was formed between the USPS and a commercial firm to provide electronic postmarking and archival services. The commercial firm is located in Palo Alto, California. As the project progressed, it became more difficult and expensive for the commercial partner to provide operation support services. The USPS has decided that it would be more advantageous to develop, modify and operate an electronic postmarking service in the Washington, DC metropolitan area. The system must be constructed quickly, must provide reliable services, and be sufficiently flexible to offer and implement new services to meet customer demands.

The new electronic postmarking services allow the USPS to experiment with more innovative concepts in electronic commerce. For example, the postmark processor pilot will allow the introduction of return receipts for USPS electronic mail, it also offers the capability for the USPS to form new partnerships that do not rely on proprietary software from a single vendor.

**PURPOSE**

The purpose of this document is to identify the technical tasks and roles necessary to release a pilot electronic postmarking system

**EXISTING ELECTRONIC POSTMARKING SYSTEM**

The electronic postmarking system is currently in operation at AegisStar's facility in San Jose, California. It consists of a Sun Sparc 20 serving as a USPS Postmarking processor, and client software for the verification of USPS postmarks. In the current implementation, postmarks are generated using a software cryptographic engine and a hard coded private key. Verification is performed on the client side using a dynamic link library (DLL) with the public key hard coded into the DLL. There is no support for standard X509 certificates and no mechanism for key exchange.

**PILOT ELECTRONIC POSTMARKING SYSTEM**

In the Pilot implementation, the USPS Postmark Processor will provide mail services. The initial system will duplicate the electronic mail and postmarking services currently offered by AegisStar, with the exception of file archiving and billing. As new opportunities for partnerships between the USPS and commercial billing and archival services become available, modifications to the system may be made to accommodate these services.

Subsequent versions of the postmarker may include access to non-SMTP mail services (MCI, AT&T, etc). As part of this effort, client software will be provided to perform verification of the electronic postmark at

#### **ATTACHMENT TO RESPONSE, OCA/USPS-RT-7**

the client's personal computer. The software will be compatible with the postmarks generated by the pilot system. This software will be easily modified to meet customer demands and expectations.

On an as-needed basis and at the request of the USPS, the contractor will provide support to USPS customers who have special requirements or wish to integrate postmarking services into their existing structures.

The Pilot also increases security of the system. A hardware-signing device will replace the software cryptographic engine. The private key will be restricted to this hardware device. Access to the device will eventually be limited to USPS-authorized personnel.

#### **Mail Reader**

A mail "reader" will be constructed that is compatible with the current postmark implementation. The reader shall be user friendly, providing an easy to use graphical user interface (GUI). The reader will be suitable for distribution via floppy disk or the Internet. It shall provide the ability to verify an electronic postmark, decode and detach mail attachments. It is intended for use with the customer's existing mail package. The mail reader will process postmarks generated by either the current AegisStar system or the Pilot system.

#### **Pilot Electronic Postmarker**

A postmark processor will be constructed that provides SMTP-based mail and postmarking services. To provide the most compatible and reliable SMTP mail services, SendMail Version 8.5 will be employed to send mail to recipients. (One drawback of the current implementation is that a proprietary mailer was modified for this purpose, yielding incompatibilities with some Internet mail packages.) This system is intended to provide reliable services with minimal support.

The postmark processor shall use an Atalla Websafe for signature generation, and an Odetics GPS as a stable timebase. Initially, BASE64, UUENCODE, and text encoding will be supported for all messages. Other modules may be added as the need arises. Unlike the current AegisStar implementation, the pilot postmark processor will allow users to specify recipients using the tag USPOST or any reasonable derivation (e.g., U.S.POST, USpost, U S post, etc.). Like the current implementation, the pilot postmarker will support the following formatting tags: /text, /ccMail, /UUENCODE, /SUN, /Eudora, etc. Other switches will be supported, as new features become available.

The postmark processor may include an interface to MCI electronic Mail Service. This will consist of a server that transfers mail destined to/from the postmark server to MCI, providing native MCI users with USPS Electronic Postmarking services. Alternatives to this implementation will be evaluated prior the commencement of this effort.

#### **Pilot Return Receipt**

The postmark processor will include a return receipt function. The postmark processor will hold postmark messages in local storage and forward a message to the recipient indicating that the USPS has an electronic message for the recipient. The recipient will retrieve the message, causing a return receipt to be forwarded to the message originator.

#### **Pilot Integrated Mail Sender**

An integrated mail sender will be constructed that integrates the pilot mail reader and a SMTP mail sender capability. The mail sender will be designed for the Windows 3.1/95 environment. Mail will be sent using the SMTP protocol to send mail and POP3 to receive mail. Multiple attachments to email will be

**ATTACHMENT TO RESPONSE, OCA/USPS-RT-7**

supported. The mail sender will enable calculation of charges based upon the prices for postmarking and other services as required. The mail sender will display the value of these charges to the user prior to message submission. The mail sender may be required to provide encryption and digital signatures. A window will be displayed requesting that the user select the security services desired, including document archive, priority mail, express mail, and electronic postmark. Once any option is selected and a price is calculated, the USPOST (or other) tag will then be generated for the original address and all other addresses. The user will not be required to use the USPOST tag to generate electronic postmarks. The mail sender will perform this service transparently to the user.

**Pilot Additional Modifications**

Additional modifications to the postmark processor may be requested to support the USPS effort to establish electronic commerce. These may include providing software for commercial electronic mail vendors, integrating the postmark process in commercial electronic mail packages and systems, the development of an API for integration into commercial products, the development of a distributed architecture, and integration with other USPS projects, as required.

**Pilot "Brainstorming Sessions"**

The contractor will participate with USPS Marketing planners in a series of brainstorming sessions to define the Postmark process, sender and reader. The sessions will include freeform discussions, analysis, and alternatives to proposed solutions. The contractor will be responsible for documenting or assembling documentation on the session discussion and results.

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-7

Deliverables

## 1. Software deliverables

- Pilot Mail Reader\*
- Pilot Mail Sender\*
- Pilot Return Receipt
- Pilot Electronic Postmarker
- Pilot Additional Modifications (as required)

## 2. Other deliverables

- Pilot "Brainstorming Sessions"

In addition, the following will also apply:

- All client software used in development of the Postal Application must, to the greatest extent possible, be of commercial usage and must, to the greatest extent possible, comply with Postal standards.
- All rights to this software will revert to the United States Postal Service'
- All deliverables for technical documentation shall include source and object code, as well as printer/hardcopy deliverables.

\*Note: the Pilot Mail Reader and Pilot Mail Sender may be combined into one user interface

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-8. Please provide any slides or handouts that were presented at the May 1996 meeting at Aegis Star (USPS-T-1 at 5, l. 7 -9)

**RESPONSE**

I am unaware of whether any slides or handouts were used in this meeting.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-9. Please provide any slides or handouts that were presented at the June 1996 demonstration at Foote, Cohn, Belding (USPS-T-1 at 5, l. 9 - 10). What was the purpose of the demonstration at Foote, Cohn, Belding?

**RESPONSE**

My understanding is the purpose of the meeting was to demonstrate a prototype EPM application. I am unaware of whether any slides or handouts were used in this meeting.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPSRT1-10. Please provide the Statement of Work for the Cylink project (USPS-T-1 at 5, I. 12 – 21).

**RESPONSE**

The *original* Statement of Work for this project is no longer available. A Statement of Work in connection with an extension of the contract for 2000 is attached.

IDIQ Contract No. 102590-00-B-1651

## Statement of Work for Multi Algorithm PPKI Development and Support

Contractor: Cylink Corporation

### 1) Background

The U.S. Postal Service development of electronic commerce continues to be in an environment where requirements and technology are changing quickly. Several vendors are currently in beta test offering services requiring encryption software or public key software. The USPS is providing the Public Key Infrastructure and Certificate Authority (PKI/CA) services required by these vendors. These services include:

- electronic time and date postmarking and delivery confirmation
- certification of sender identity; and
- assurance that received document has not been altered en route
- identity validation for system/application access

This PKI/CA service provides digital certificates that qualify a device or user digital identity and establishes the premise that "I am who I say I am" when that device or user conducts an electronic transaction on the Internet. USPS PKI is currently being used for applications including the Information Based Indicia Program (IBIP) postal secure device (PSD), by issuing certificates for vendors deploying PSDs. The current number of IBIP certificates issued is approximately 400,000.

Other applications depending on this program to provide digital certificates include: Mailing Online requires digital certificates to identify non-profit mailers when submitting electronic documents for non-profit mailing; Post<sub>e</sub>CS™ (an international postal electronic document and file delivery service) requires digital certificates for both electronic signatures and encryption for both non-repudiation and privacy. This program is currently in pilot. Digital certificates will provide protection of Postal customer's financial transactions, personal correspondence, and non-repudiation of legal and other messages sent over the Internet.

Cylink Corporation is the developer of the Postal Public Key Infrastructure and Certificate Authority (PPKI/CA) software used to support IBIP and other Internet Business initiatives. This system provides digital certificates and an authentication architecture to enable these new businesses. There are two systems for which Cylink is responsible on site at Cylink:

- A development system used by Cylink to develop new functionality and
- a PPKI testbed system used by the USPS to pilot new enhancements

Cylink Corporation Proprietary Information

Revised 04/19/00

Statement of Work for Multi Algorithm PPKI Development and Support  
 ATTACHMENT TO RESPONSE, OCA/USPS-RT-10

before they are transitioned to the production system.

The USPS has finalized a Certification & Accreditation on the Cylink production system which is located at the USPS San Mateo COSC. There has also been a complete security review and audit of the software prior to the move.

## 2) Objectives

- Operation of a PPKI Testbed  
 Infrastructure support of development by USPS and its vendors by the operation of a test/pilot PPKI system on Cylink's premises.
- Architecture Consulting and Development
- Support for Pilot phase  
 during the testing and deployment of PPKI software
- Support of Production Phase Installation
- Disaster Recovery system support
- Program Management and Coordination

## 3) Scope of Work

Cylink's specific obligations shall be as detailed below:

### a) Operation of PPKI Testbed

Operation of a test/pilot Postal Public Key Infrastructure/Certificate Authority (PPKI) server on Cylink premises. This system shall support development and pilot activities. The system shall be available nominally from 7:00 a.m. until 7:00 p.m. PST, Monday to Friday, except Government holidays.

### b) Architecture Consulting and Development:

All development activities shall be undertaken according to a mutually-agreed technical specification and initiated by task orders that may be issued from time to time by the USPS.

Cylink shall perform testing and validate the operation of new releases of PPKI server software prior to installation in the USPS San Mateo facility. Testing and software validation shall be conducted against the requirements specified and agreed between Cylink and USPS prior to starting development. Cylink shall provide on-site support of the CAT at the San Mateo COSC facility.

Cylink shall continue the development of enhancements to the IBIP system as required by the IBIP program manager such as:

- Allow authenticated users to perform a "real time" message authentication.

**Cylink Corporation Proprietary Information**

Revised 04/19/00

Statement of Work for Multi Algorithm PPKI Development and Support  
 ATTACHMENT TO RESPONSE, OCA/USPS-RT-10

- Produce a downloadable file (updated at some specific interval) that lists all IBIP PSD certificates issued to allow USPS to perform a comparison against MATS and have a full loop audit on PSDs.
- Provide for a batch download of PSD certificates to allow for signature verification "off line".

Cylink shall provide support for PKI-enabled applications developed by the USPS or its vendors. Cylink shall provide system design consultation by the Cylink PPKI/CA System Engineer, software development, testing, end-user documentation and programming documentation. These PKI-enabled applications may include:

- eProof -- a business-to-government secure authenticated electronic document interchange service. Delivery of the documents is proven via an electronic return receipt containing the USPS electronic postmark.
- NetPost -- a multi-channel (hard copy and electronic) document delivery service messaging suite. This mailing online service requires USPS digital certificates for authentication of non-profit mailers prior to national launch, encryption for customer privacy, and controlling access to sensitive databases
- Shipping Online -- an Internet package delivery service that will require digital certificates for controlled data base access as well as user authentication.
- Electronic Mail Box - digital certificates will be needed for both authentication and encryption to ensure the users privacy and protect access to the mailbox.
- Internet Bill Delivery and Presentment - a secure financial transaction application requiring certificates for authentication and for digitally signing documents. Electronic Postmark to apply a time/date stamp and check for any evidence of tampering. Encryption certificates for privacy may also be considered for this application.
- An archiving service which provides ability to store and transfer as a just-in-time function. Such a service might be a component which enhances secure email and postmarked applications.

c) *Support for Pilot Phase at COSC*

Cylink shall provide continuing support for San Mateo operations personnel as needed during pilot projects. Operational support shall be for USPS business days only, beginning at 7:00 a.m. through 7:00 pm Pacific time, and would require a telephone response from Cylink within 4 hours. Note that unless problems can be solved by walking COSC support personnel through problems via phone, Cylink will either have to come on site at San Mateo or access through a secure system (not in place at this point in time.) If future expansion to hours or days is

**Cylink Corporation Proprietary Information**

Revised 04/19/00

3

Statement of Work for Multi Algorithm PPKI Development and Support  
**ATTACHMENT TO RESPONSE, OCA/USPS-RT-10**

necessary, additional funding will have to be negotiated. Support outside of the 7:00 a.m. to 7:00 p.m. window can be provided with 48 hours notice, for a limited period of time.

Cylink shall provide training as requested to USPS personnel.

*d) Support for Production Phase Installation*

Cylink shall support the production phase installation of PPKI according to its "Standard Sale" service level agreement, in the document entitled *Cylink's Worldwide Support and Maintenance Agreement* attached hereto.

Cylink shall deliver its standard commercial product training course to USPS personnel as requested.

*e) Disaster Recovery Site Operation*

The pilot/test PPKI system that is maintained by Cylink in support of pilot applications and testing by USPS and USPS vendors shall be maintained in a state of readiness such that it could be brought online to support the continuing operation of the certificate issuing, revocation, and directory publishing of the operational PPKI at COSC.

The service level agreement describing Cylink's obligations for providing disaster recovery backup site are to be determined.

*f) Program Management and Coordination*

Cylink shall attend meetings with the USPS Program Managers and other contractors involved in the development effort for the purpose of updating all team members and to track the delivery of interdependent components of the system. Provide management reports to the Program Manager with detail program status (including procurement purchases to date and/or needs, and problem analysis/suggested solutions report):

**4) Deliverables**

The specific project deliverables relate to the requirements of the individual programs. The delivery dates will be determined after agreement on the technical requirements. Specific deliverables will include:

- Technical Manuals – User's Guide and Installation Guide, distributed in .pdf format with software distribution media.
- Software Deliverables - Based on the agreed requirements.

**5) Schedule of Deliverables**

Technical Manuals – User's Guide and Installation Guide

**Cylink Corporation Proprietary Information**

Revised 04/19/00

Statement of Work for Multi Algorithm PPKI Development and Support  
ATTACHMENT TO RESPONSE, OCA/USPS-RT-10

Draft	Provided at each Customer Acceptance Test (CAT)
Final Version	Provided with final version of each delivery of Cylink's commercial PKI product
Software Deliverables	To be mutually agreed for each task order

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-11. Please provide all public announcements, speeches, and press releases concerning Electronic Postmark (EPM) (USPS-T-1 at 6, l. 1 – 4).

**RESPONSE**

Attached is the August 14, 1996, Federal Register Notice. I have been unable to locate any other public material from the Postal Service in this time frame.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-13. Please provide any slides, handouts or other materials distributed in connection with the briefings for members of Congress, The Electronic Frontier Foundation, and any other groups (USPS-T-1 at 6, l. 5 -6).

**RESPONSE**

Attached is a presentation of the USPS Electronic Commerce Services to the San Jose Postal Customer Council. I have been unable to locate any other material during this timeframe.



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# UNITED STATES POSTAL SERVICE ELECTRONIC COMMERCE SERVICES

Customer Benefits of the Electronic Postmark

**Presentation to:  
San Jose - PCC**

**June 19, 1997**

**Leo Campbell  
Manager, ECS**

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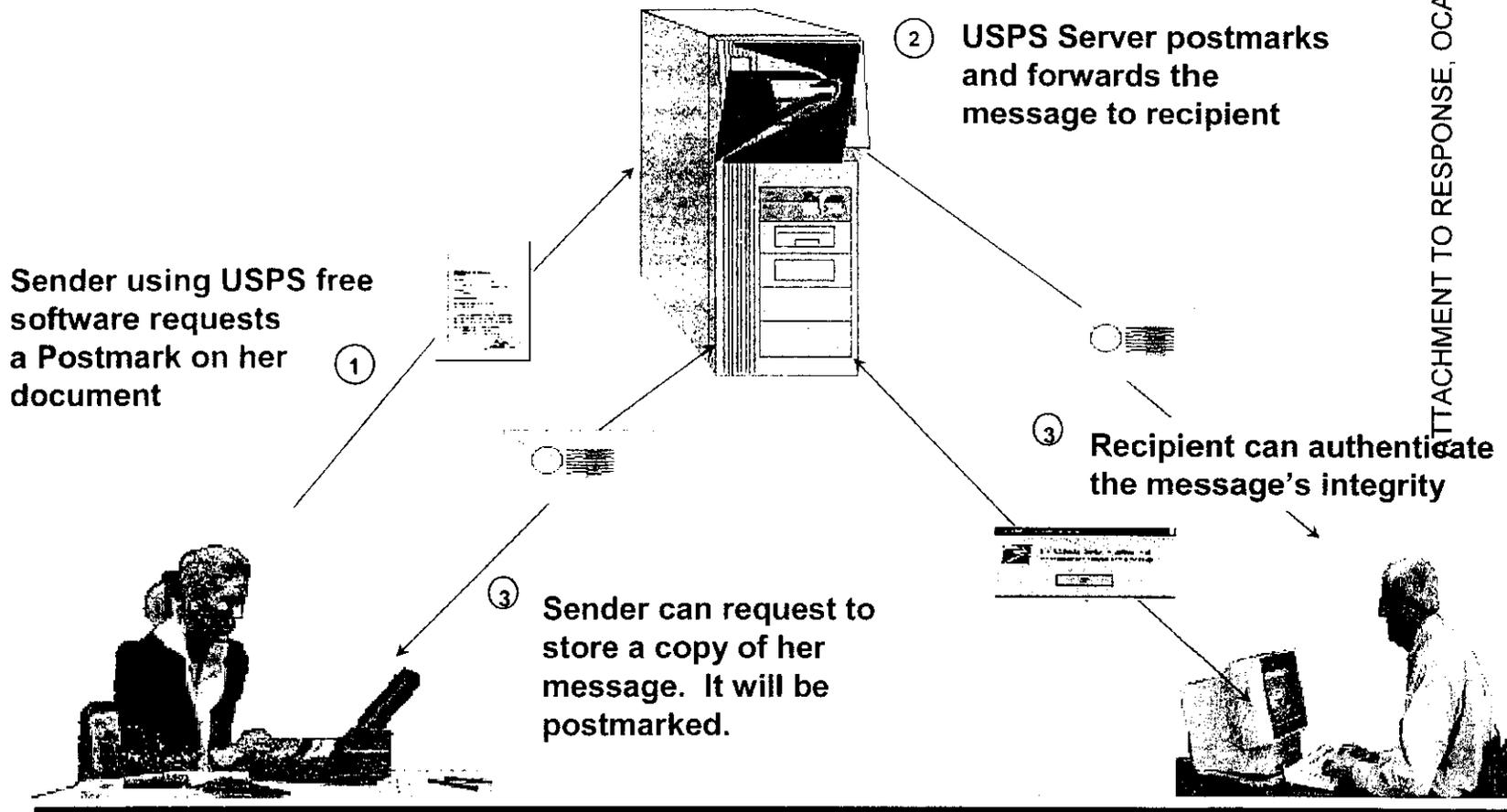
## **What is a postmark?**

---

- **A time and date stamp .....**  
**But also -----**
  - **Proof of existence**
  - **Third Party temporary possession**
  - **Chain of possession**
  - **Disinterested party handling**
  - **Generally Accepted practices and procedures**
-



# How The USPS Postmarking Service Works





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## **What You Get When You Postmark:**

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**Attribute:** Your document existed at a certain point in time

**Benefit:** Neither sender, receiver, nor third party can deny the document's existence

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## **What You Get When You Postmark:**

---

**Attribute:** Your document was no longer in the originator's control nor yet under receiver's possession

**Benefit:** Coupled with the first attribute, a verifiable chain of possession can be established

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## **What You Get When You Postmark:**

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**Attribute: Universally accepted date and time stamp assures all parties 'When' the document existed**

**Benefit: Coupled with both earlier attributes, all interested parties can now link chain of possession with time and dates of possession**

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## **What You Get When You Postmark:**

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**Attribute:** Digitally applied USPS signature validates contents have not been altered

**Benefit:** The USPS signature assures the recipient that the received message is what was sent

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## **What You Get When You Postmark:**

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**Attribute:** Postal Service authentication continues a long uninterrupted history of legal standing and authority to authenticate

**Benefit:** Universal recognition by all parties (including courts) of the validity and authority associated with Postal involvement

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## **What You Get When You Postmark:**

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**Attribute:** All USPS records of transactions undergo frequent and periodic internal and external audit

**Benefit:** These audits provide adequate proof to all interested parties that USPS procedures and practices adhere to stringent regulations that have consistently been upheld in many legal and audit venues

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## **What You Get When You Postmark:**

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**Attribute:** For those documents you voluntarily choose to archive, postmarks are applied on all transactions which store and retrieve your document

**Benefit:** This additional postmarking adds a more thorough temporal chain of possession and evidence about your document's existence

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## CONCLUSIONS

**Email and web-based electronic transactions often require a proof of existence in time. While most systems can provide, literally, a time and date stamp, the USPS Electronic Postmark brings with it legal standing, enforcement, and security.**

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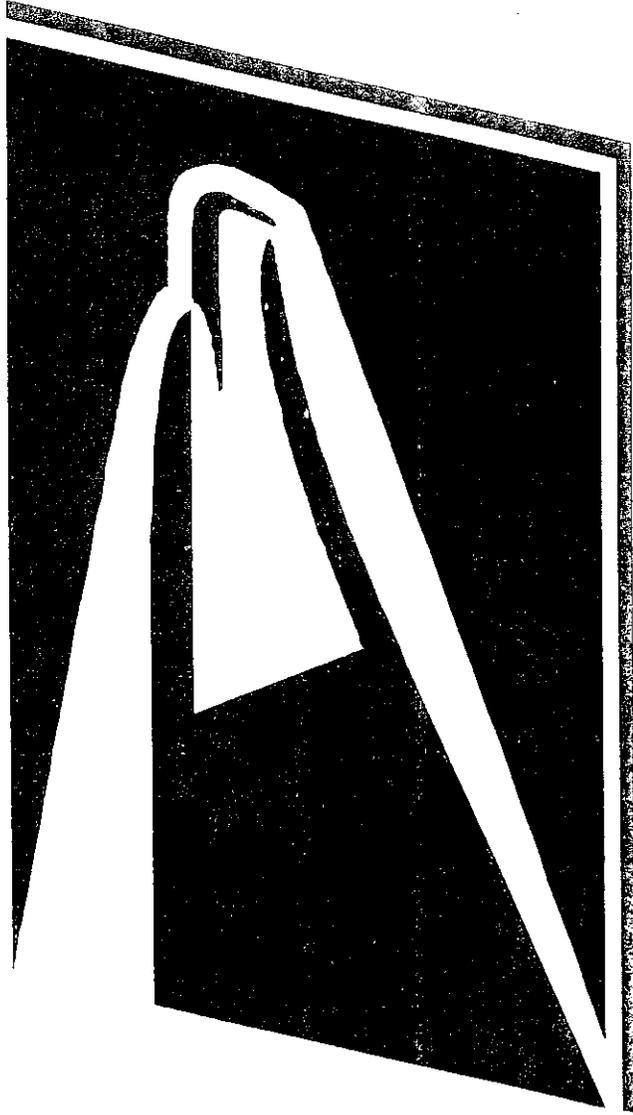
**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-14. Please provide copies of all materials used to demonstrate Electronic Postmark (EPM) at the San Jose, Chicago, and Boston trade shows, as well as multiple Postal Forum trade shows (USPS-T-1 at 6, l. 11-15).

**RESPONSE**

To my knowledge, the only material that may exist is the attached presentation believed to have been used at the Boston trade show.

ATTACHMENT TO RESPONSE, OCA/USPS-RT-14



UNITED STATES  
 POSTAL SERVICE

*Boston, Dec 1 Trade Show  
 1998*



# LONGEVITY



225 Years

1993

1991

1984



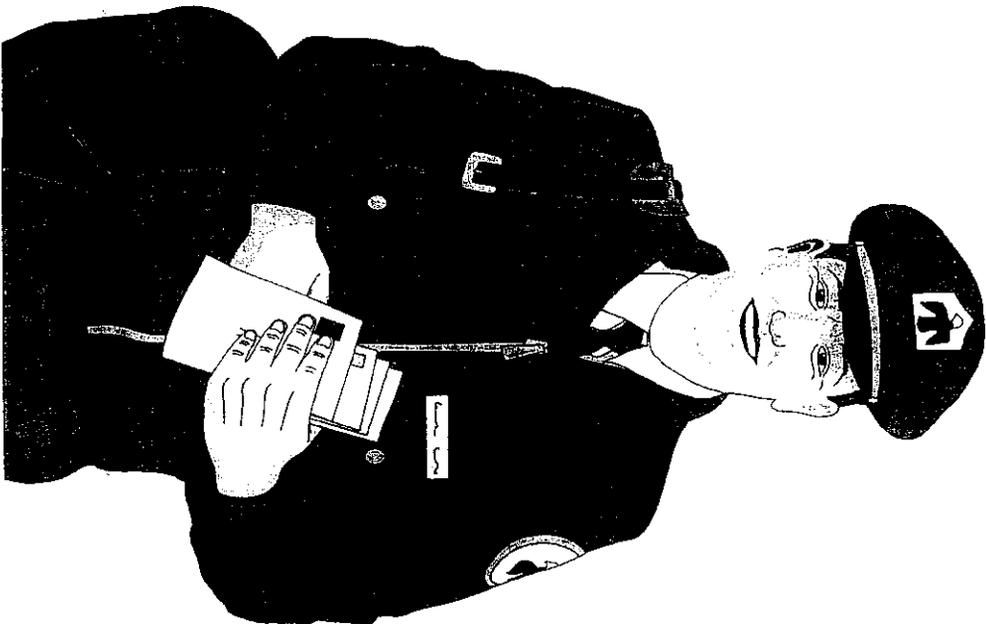
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# LONGEVITY

**225 Years**

**800,000**

**Employees**





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**“To bind the nation together through the personal, educational, literary, and business correspondence of the people.”**

ATTACHMENT TO RESPONSE, OCA/USPS-RT-14

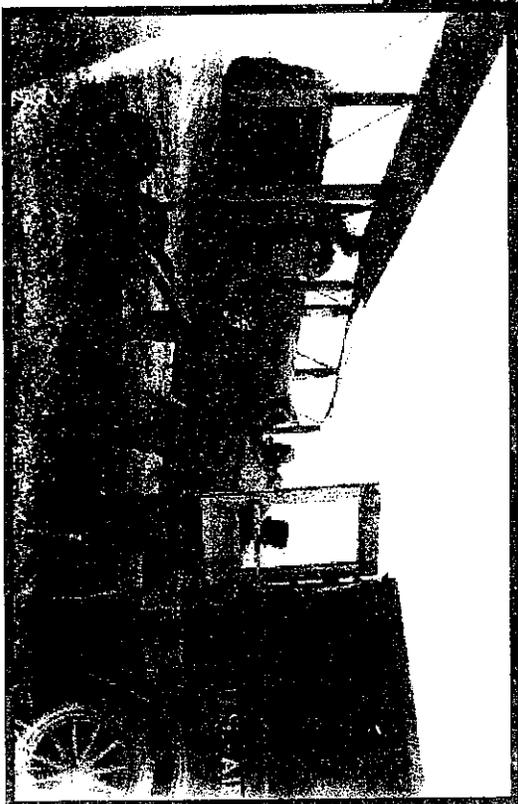
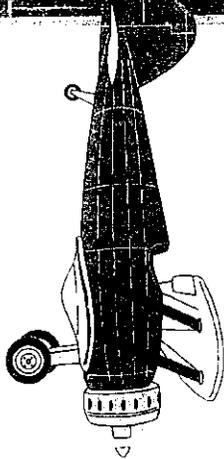


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# TRUST



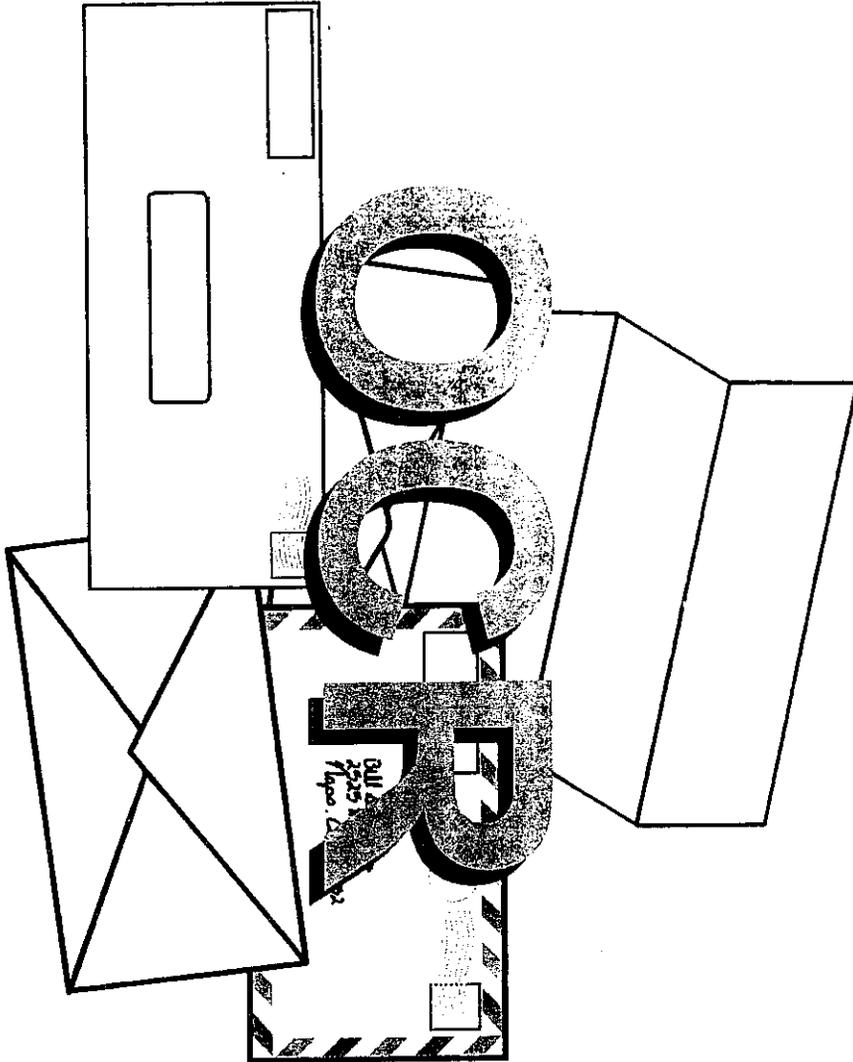
# TECHNOLOGY



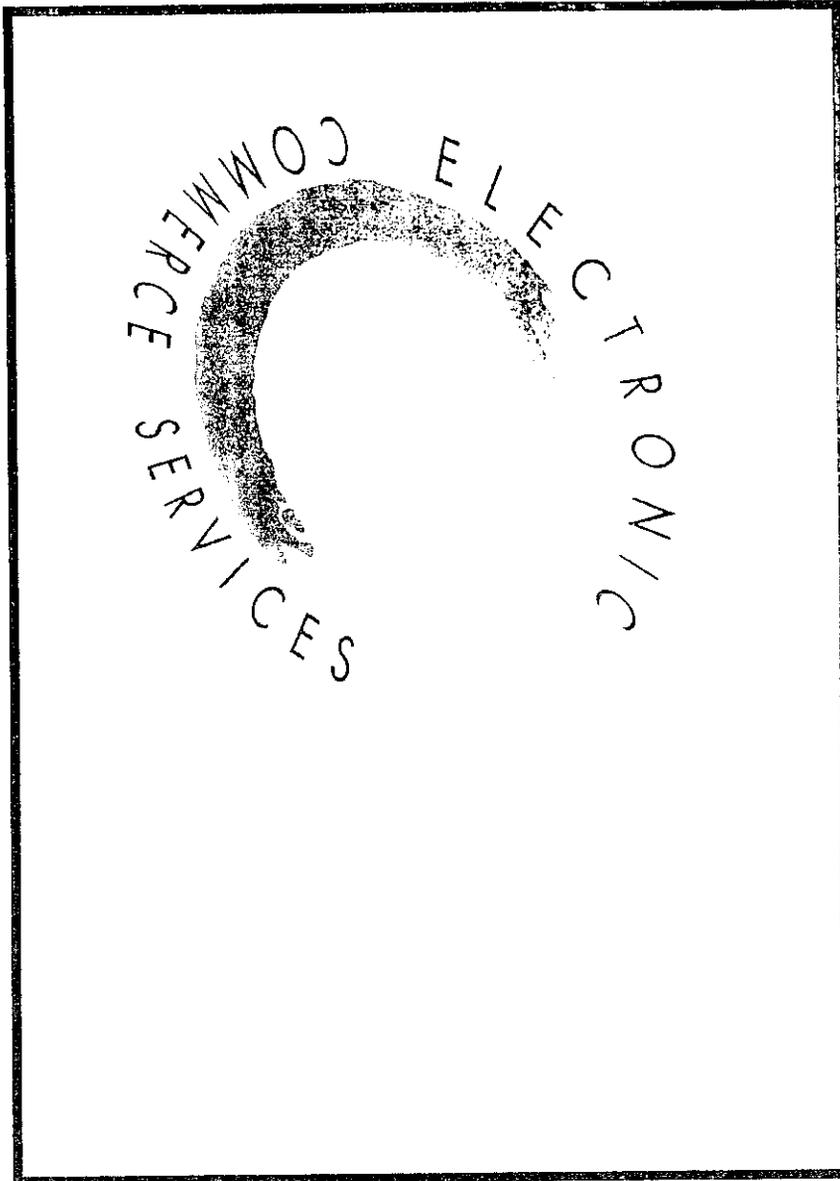
-  **Telegraph**
-  **Railroads**
-  **Aviation**



# TECHNOLOGY



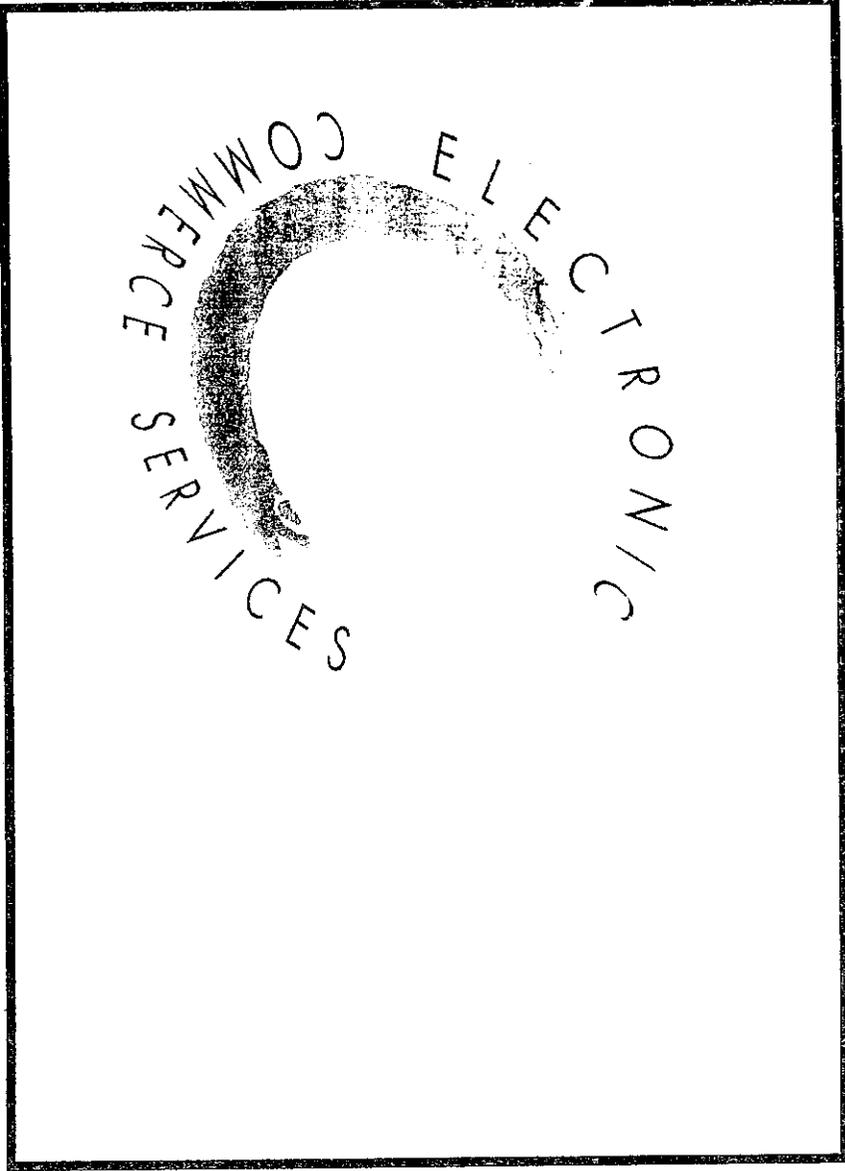
ATTACHMENT TO RESPONSE, OCA/USPS-RT-14



ATTACHMENT TO RESPONSE, OCA/USPS-RT-14



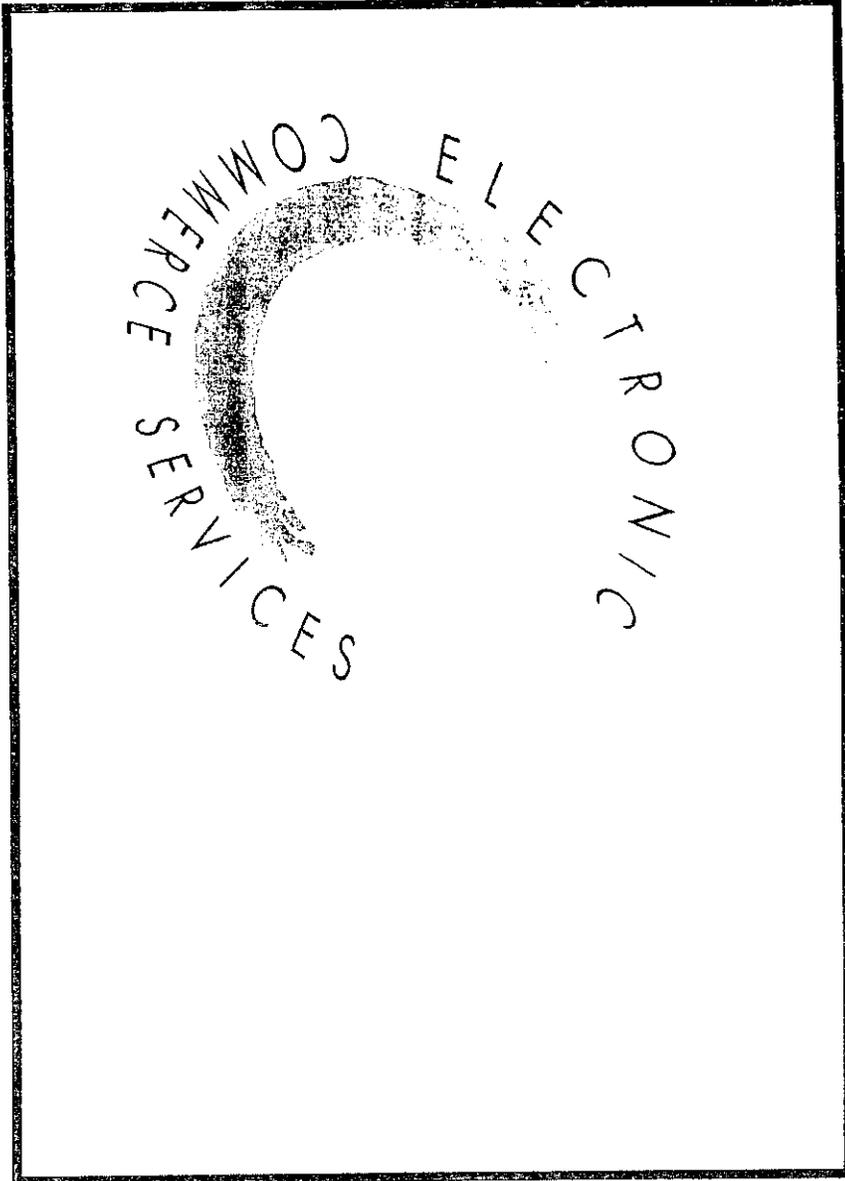
# Time & Date Stamp





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# Easy To Use





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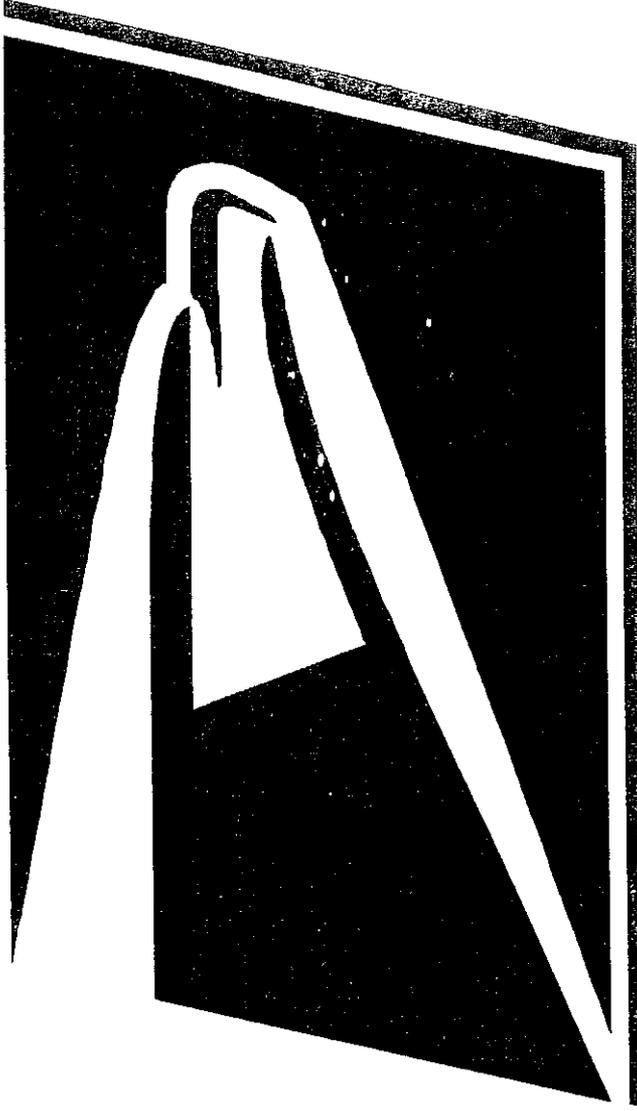
# Applications

 **Contracts**

 **Notarized Documents**

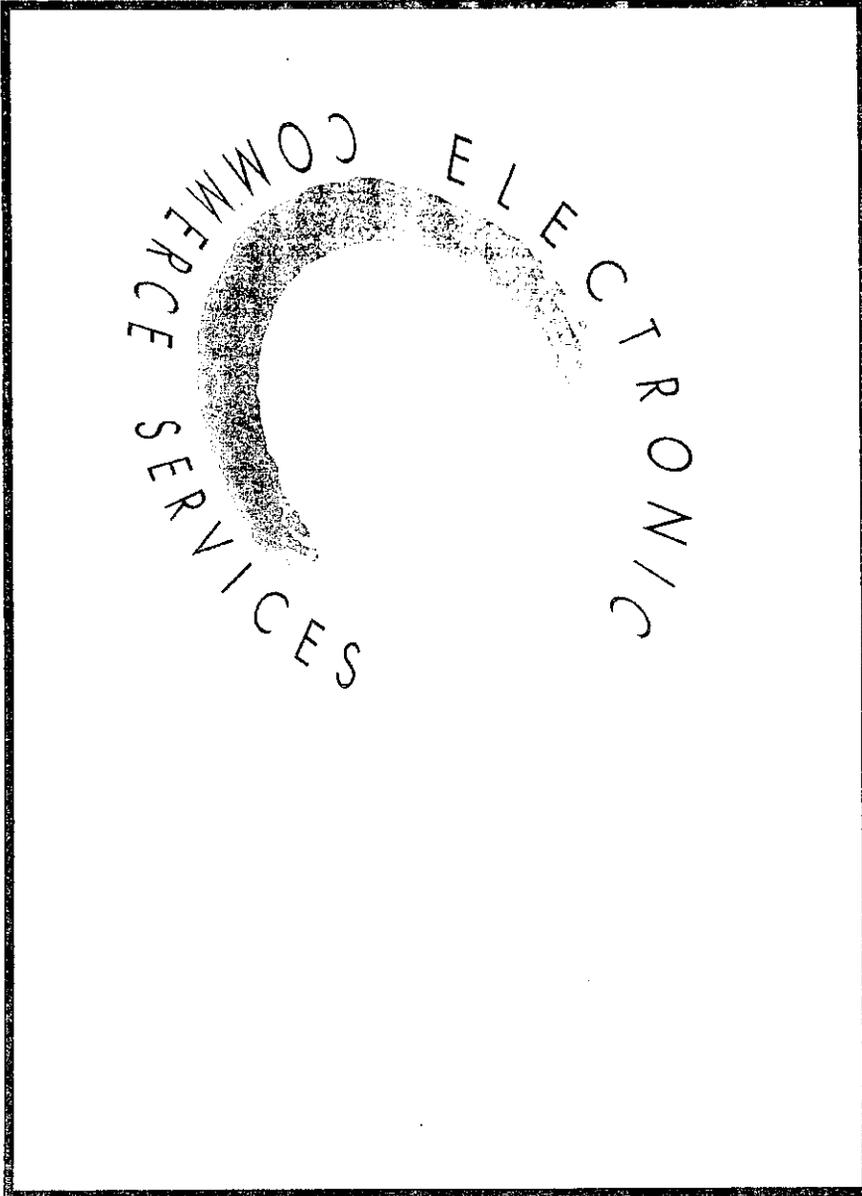
 **Purchase Orders**

 **Medical Records**  
**Billing Information**



UNITED STATES  
POSTAL SERVICE

ATTACHMENT TO RESPONSE, OCA/USPS-RT-14





Works with  
 any E-Mail  
 and Date  
 Stamp

**NO POSTAGE  
 NECESSARY  
 IF MAILED  
 IN THE  
 UNITED STATES**

**POSTAGE WILL BE PAID BY ADDRESSEE**

**NO POSTAGE  
 NECESSARY  
 IF MAILED  
 IN THE  
 UNITED STATES**

**POSTAGE WILL BE PAID BY ADDRESSEE**



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# SECURITY

## Postal Inspectors

## FBI

ATTACHMENT TO RESPONSE, OCA/USPS-RT-14



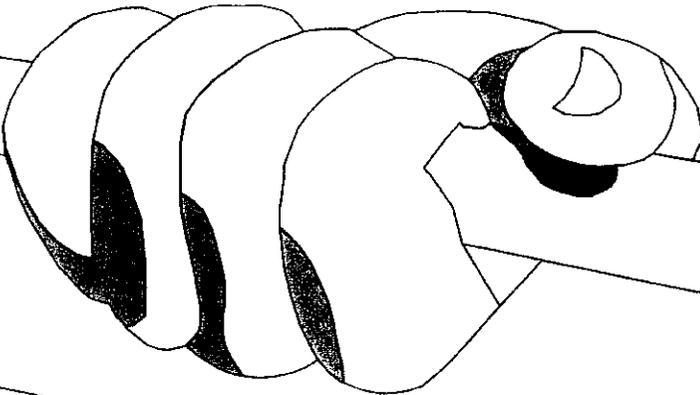
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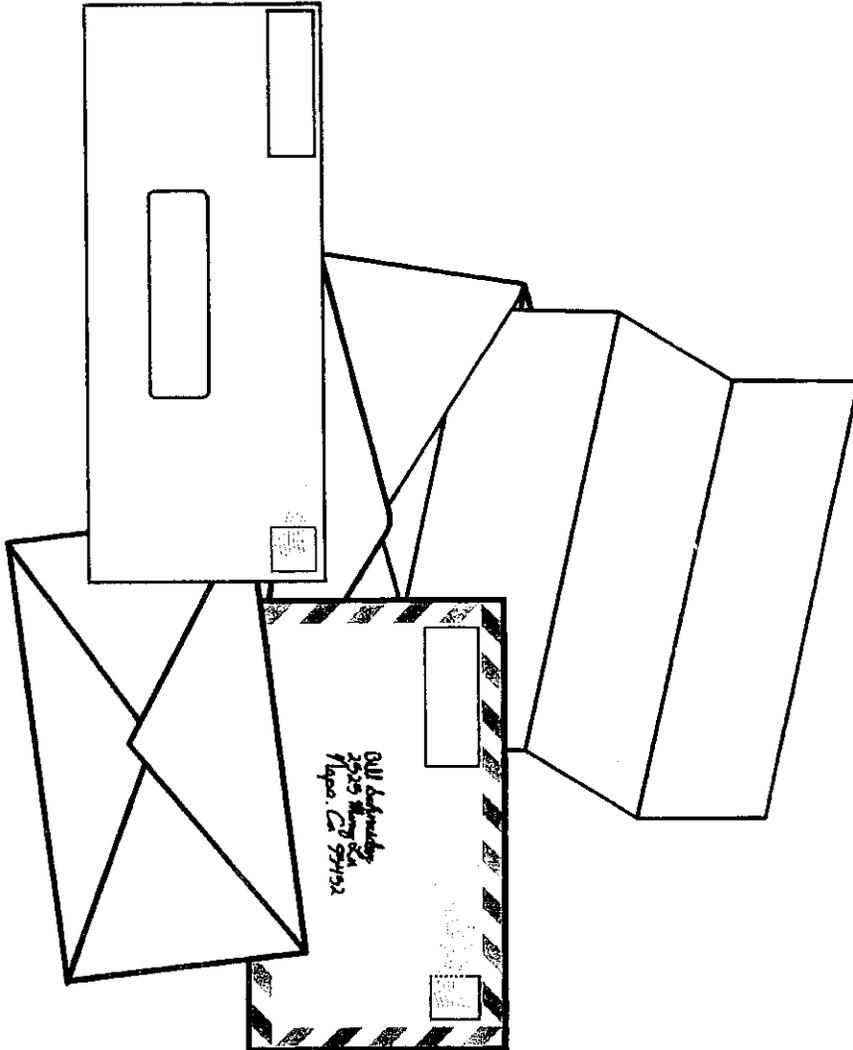
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# TECHNOLOGY



**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-15. Please provide copies of materials and exhibits used at all "eCommerce" trade shows" (USPS-T-1-6, l. 15 – 17).

**RESPONSE**

To my knowledge, this material no longer exists.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-16. Please provide all communications from the Postal Service to hundreds of companies and organizations describing Electronic Postmark (EPM)'s functions and how EPM might be applied to their specific needs (USPS-T-1 at 7, I. 1 – 3). (Identifying information may be redacted. However, please indicate the type of work the company or organization performs).

**RESPONSE**

To my knowledge, most of the communication was done through informal channels, such as through conversations and business card exchanges at trade shows. From available materials, I can tell the following.

At the 1996 Boston Trade show, contacts were made with approximately 500 people. In many instances, it is not possible to tell directly from the company or organization name (which is all we have) what type of work the company or organization performs. Based on what can be discerned from the more recognizable names, however, the types of outfits represented include computer companies, consulting companies, financial sector companies, telecommunications companies, public utilities, federal agencies, state and local governments, higher educational institutions, nonprofit organizations, manufacturing companies, technology companies, and members of the media.

At the 1996 Chicago Trade Show, contacts were made with approximately 720 people. In addition to the types represented at the Boston Trade Show, other types included insurance companies, health care companies, and publishing companies.

At the 1996 EMA Conference, contacts were made with approximately 60 people. In addition to the above types, petroleum companies were also represented.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

At the 1997 San Jose conference, contacts were made with approximately 540 people.

In addition to the above types, aviation companies were also represented.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-17. Please provide all communications from the Postal Service to “dozens . . . of IT developers” describing Electronic Postmark (EPM)’s functions and how EPM might be utilized by their customers (USPS-T-1 at 7, l. 4 – 6). (Identifying information may be redacted. However, please indicate the type of work the company or organization performs).

**RESPONSE**

Attached is a request for information for IT services. To my knowledge, the majority of this communication was done through phone conversations. It is believed that many of these people or companies potentially could be those whose contacts at trade shows are referenced in response to your question 16.



## ATTACHMENT TO RESPONSE, OCA/USPS-RT-17

[Commerce Business Daily: Posted April 25, 1997]  
 [Printed Issue Date: April 29, 1997]  
 from the Commerce Business Daily Online via GPO Access  
 [[cbdnet.access.gpo.gov](http://cbdnet.access.gpo.gov)]

PART: U.S. GOVERNMENT PROCUREMENTS

SUBPART: SERVICES

CLASSCOD: D--Information Technology Services, including Telecommunication  
 Services--Potential Sources Sought

OFFADD: U.S. Postal Service, Headquarters Purchasing, Room 4541,  
 475 L'Enfant Plaza, SW., Washington, DC 20260-6230

SUBJECT: D--ELECTRONIC POSTMARK SERVICES

SOL N/A

DUE 051297

POC Booker Weaver (202) 268-5669

DESC: As a part of a strategy to expand the range of systems that could incorporate the USPS' postmarking code (enabling privacy, tamper detection/prevention, and digital time/date stamp), the United States Postal Service (USPS) is seeking qualified firms that currently offer either an Internet based email service, a Web-based **electronic** document transmission service, and/or an archival service (which may be web or email-based). The USPS is seeking responses from only those firms that are currently operating such a service, so that we might explore with them the feasibility of adapting these systems to accommodate the USPS' software code to **postmark** email messages, **electronic** document transmissions, attachments, and files/documents messages in and out of, an **electronic** archive. We encourage responses from vendors who have the ability to pass messages as generic ASCII text and/or Web based HTML, RTF, PDF, or other industry standard messaging formats. We are not seeking responses from software and/or hardware firms, unless these firms are currently offering a service such as described above. If you are unsure as to whether your current service can integrate with our software, please submit your credentials. All submittals should include the following: a description of the services you are currently offering, with flow diagrams (or other graphics aids) showing how the system routes mail/messages; a short history of how long the system has been operating, and how many iterations it has gone through; whether customers are currently using it, how many, etc.; a brief description of your current pricing/rate schedules; a description of the physical processing facilities you currently are using; and a description of your system features; and corporate qualifications. In the corporate qualifications section please identify and provide the following: 1) A statement of the years of experience the company, as currently organized has had in delivering the required products or services, including a list of current contract with estimated completion dates, dollar values, purchasers, and telephone numbers of purchasers' representatives. 2) Whether you are privately funded; including references with length of service, average savings and checking balances; outstanding loans, type and limit of credit and the bank's rating of your company as a customer. 3) A description of the company's organization and capabilities, including brief biographies of key personnel, expertise in marketing and business development within your respective industry, staff available for the specific project or projects, project control systems, manpower and equipment resources, and current physical locations and places of business. If your company is interested in being considered for participation, should a solicitation be

**ATTACHMENT TO RESPONSE, OCA/USPS-RT-17**

issued, you should submit the requested written information NOT LATER THAN MAY 12, 1997. In addition to the requested information, your cover letter must include company name, address, telephone number, federal tax ID number, name(s) of the contact person(s), signature by an officer of the company, and sufficient information to enable the U. S. Postal Service determine if your company is qualified to perform. You should also identify whether your company is large, small, women or minority owned. Responses should be sent to Booker Weaver, Room 4541, 475 L'Enfant Plaza, SW., Washington, DC 20260-6238. There will be no other announcement for this requirement. THIS IS NOT A SOLICITATION. U.S. POSTAL SERVICE, 475 L'ENFANT PLAZA, SW, ROOM 4541, WASHINGTON, DC (202) 268-5669.

CITE: (W-115 SN066361)

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-18. Please provide all communications from the Postal Service to Microsoft, IBM, Lotus, Digital, Hewlett-Packard, Verisign, eTRade, and Entrust describing EPM's functions and how Electronic Postmark (EPM) might be applied to their specific needs or the needs of their customers (USPS-T-1 at 7, l. 1 – 3).

**RESPONSE**

To my knowledge, this material no longer exists.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-19. Please provide all communications from the Postal Service to "a dozen top law firms" describing Electronic Postmark (EPM)'s functions and how EPM might be utilized by their customers (USPS-T-1 at 7, l. 9). (Identifying information may be redacted. However, please indicate the type of work the company or organization performs).

**RESPONSE**

To my knowledge, these communications no longer exist. The firms were engaged in the general practice of law.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-20. Please provide all communications from the Postal Service to “the EDI community” describing Electronic Postmark (EPM)’s functions and how EPM might be utilized by their customers (USPS-T-1 at 7, l. 9). (Identifying information may be redacted. However, please indicate the type of work the company or organization performs).

**RESPONSE**

To my knowledge, these communications no longer exists.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-21. Please provide all communications from the Postal Service to each of the "host of government agencies" describing Electronic Postmark (EPM)'s functions and how each agency might utilize EPM (USPS-T-1 at 7, I. 9).

**RESPONSE**

To my knowledge, this communications no longer exists.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-22. Please list the "two dozen active participants in this sector" (USPS-T-1 at 7, l. 20- 21).

**RESPONSE**

An internet search would indicate many companies in this sector. The Postal Service's internal list may be viewed as subjective.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-23. Please provide a copy of the October 2001 Request for Information (RFI) published in the Commerce Business Daily concerning Electronic Postmark (EPM) (USPS-T-1 at 10, I. 10 -12).

- a. How many companies responded?
- b. Which companies responded?
- c. Why did the Postal Service choose Authentidate?
- d. What were the reasons for not choosing the other applicants?

**RESPONSE**

Attached is the October 2001 RFI.

a. Four

b-d. Objection filed.

## ATTACHMENT TO RESPONSE, OCA/USPS-RT-23

[Commerce Business Daily: Posted in CBDNet on October 17, 2001]

[Printed Issue Date: October 19, 2001]

From the Commerce Business Daily Online via GPO Access

{cbnet.access.gpo.gov}

PART: U.S. GOVERNMENT PROCUREMENTS

SUBPART: SERVICES

CLASSCOD: D--Information Technology Services, including Telecommunication Services--Potential Sources Sought

OFFADD: United States Postal Service, Supplies and Services Purchasing, Alliance and Innovations Group, Room 4541, 475 L'Enfant Plaza SW, Washington, DC, 20260-6230

SUBJECT: D--USPS ELECTRONIC POST MARK ALLIANCE OPPORTUNITY ANNOUNCEMENT

SII: 104901-01

RT-23

Mark Guilfoil, Manager, Alliance & Innovations, Headquarters  
Washington, Phone 202-268-3951, Fax 202-268-3677, Email mguilfoil@email.usps.gov

The United States Postal Service T&DS / EPM Alliance Opportunity Announcement. This notice serves as public announcement that the United States Postal Service (USPS) is commencing a business alliance process focused in the product area of Time and Date Stamp Mark Technology. The USPS is seeking firms with existing Time and Date Stamp Technology solutions to extend the functionality or offer an alternative to our current USPS **Electronic Postmark** (EPM) service. Interested parties may obtain detailed information concerning our current USPS EPM at [www.usps.com](http://www.usps.com) and searching for EPM. A firm's developed solution might include additional Time and Date Stamp components of **electronic mail (email)** software for **electronic content delivery**, Internet service for business **electronic documents**, or other developed Internet services or products. USPS customers confidently count on the delivery of their mail correspondence through our traditional paper mail systems. Today the USPS is expanding this same trust and security to the **electronic** world. Our USPS EPM has been targeted to address Internet security and privacy concerns while supporting the USPS in our trusted third-party status and brand name. The specific USPS business purpose of the initiative announced herein is to mutually expand both a USPS product and the supplier's ability to provide robust, competent authentication, privacy, and authentication of **electronic content delivery**. Suppliers should note that this announcement and its next steps will not result in a request for proposal (RFP), but rather initiation of alliance activities which may result in the identification and implementation of a contractual relationship with an alliance partner. The USPS alliance process is not equivalent to a procurement process, and will not be conducted under the USPS Purchasing Manual. If you have questions about the T&DS / EPM alliance process, please contact Mr. Mark Guilfoil, Headquarters Purchasing, Alliance and Innovations Group, 475 L'Enfant Plaza, Washington, DC, 20260-6230, Tel: 202-268-3951. The USPS alliance process is a two-phased process by review process consisting of proposal review, and if successful, pilot implementation with a selected alliance partner. In an internal pilot phase, we will demonstrate commercial viability and a clear potential for mutual financial benefit. The USPS would expect to proceed with alliance discussions with the identified supplier. Any resulting alliance instrument would provide for a non-exclusive business relationship which would require mutual risk and rewards, including revenue sharing of the jointly developed product. If your firm is interested

**ATTACHMENT TO RESPONSE, OCA/USPS-RT-23**

in participating in this T&DS alliance selection process with the USPS, please provide information concerning your product, service, and business. Respondents should state how their product(s) or service(s) would enhance the USPS EPM. Additionally, the following list of criteria should be addressed for purposes of USPS review of organizational compatibility and strength. These criteria will form the basis for further discussions and issuance of a Request for Information (RFI) to identified participants. Criterion 1; Demonstration of an existing product solution, current usage, and market potential. 2; Information concerning corporate history, current customer base, and product deployment. 3; Brief introductory discussion of the applicable technology platform, and how it meets emerging Internet Engineering Task Force (IETF) Standards for Date/Time Stamps. 4; Provide product history, number of customers, average number of transactions per day, and plans for future enhancements and releases. 5; Discuss number of dedicated staff for your product. 6; Describe the competitive advantages your company and current product(s) can provide to the USPS vis-a-vis other competitors. This should include a discussion on speed to market and short/long term solutions. 7; Discuss security standards in use and any assessment concerning penetration testing. Submissions should be limited to 30 pages and provided to Ms. Priscilla A. Hicks, EPM Program Manager, e-Business Technology Solutions, Room 2140, L'Enfant Plaza S.W., Washington, D.C. 20260-1530 no later than 2:30 p.m. on November 7, 2001. One original and two copies of all materials submitted are requested.

LINKED: <http://www.eps.gov/spg/USPS/SSP-AIR?106590-001/listing.html>

LINKED: Visit this URL for the latest information about this

listing.

REF: A-1 - 0811876:

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-24. Please provide the Strategic Alliance Agreement between the Postal Service and Authentidate (USPS-T-1 at 10, I. 15 -18).

**RESPONSE**

A copy of the Strategic Alliance Agreement, partly redacted for confidential commercial information, is available on the Securities and Exchange Commission EDGAR web site under ADAT documents (ADAT is the securities symbol for Authentidate).

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-25. Please provide the number of transactions that underlie the 97 percent figure set forth at USPS-T-1 at 11, l. 12 – 14. Break down the number given into the 10 most numerous types of usage, and rank these uses by amount of volume for the usage type.

**RESPONSE**

To provide this level of detail, an updated customer usage analysis was performed. The results of this analysis is based on the time period of mid-2002 through mid-2006. The total volume of USPS EPM used was over 3.1 million. Based on our understanding of how customers are using the USPS EPM, the results of this analysis show non-message application exceeding 99 percent. Below is break-out the most common applications of the USPS EPM:

	<u>% of EPMs Used</u>
Non-Messaging_Applications	
Authenticating doctors' orders	85%
Auditing archived records	10%
Signing medical necessity forms	2%
Certifying drivers records	2%
Other	<1%
Potential Message Applications	<1%

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-26. Please refer to your testimony at 11, l. 16 -22. You mention the use of a fax at line 19.

- a. Does the "largest customer" ("A") send the referenced fax to itself?
- b. Or to another entity ("B")?
- c. What is the nature of A's business?
- d. If the fax is sent to a different entity, what is the nature of the recipient's business ("B")?
- e. What kind of information is contained in the fax?
- f. Before the availability of Electronic Postmark (EPM) and like services, how did A transmit the information contained in the fax to B?
  - i. Was mail a suitable means of transmitting the contents of the fax from A to B? If not, please explain.
  - ii. Are you aware of businesses such as A today sending information such as that contained in the fax to recipients such as B? If not, please explain.
  - iii. Are you aware of businesses such as A sending information such as that contained in the fax to recipients such as B prior to the availability of EPM and like services? If not, please explain.
- g. If A preferred to use hardcopy mail, could it print the fax (or the information contained in the fax), put it in an envelope, and mail it to B? If not, why not?

**RESPONSE**

a.-g. This customer referenced (and referred to as "A") in this set of questions does not send a fax. This customer receives a doctor's order (or prescription) via fax. Upon receipt of the electronic document, the file is presented to the USPS EPM Server for authentication through a customized application which was developed and integrated into the customer's business process. After authentication of the document, the customer's fulfillment process, including billing, can be initiated. Prior to integrating the customized application with USPS EPM functionality, I believe the customer's business process was that it received the fax and directly processed the order without authentication. Due to the urgency to get the product to the patient, using mail for this purpose generally is not considered suitable.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-27. An example of a "second customer's" use of Electronic Postmark (EPM) is given at page 12 of your testimony at lines 1 – 4.

- a. What is the nature of the customer's business?
- b. Will the Worker Compensation claim forms be sent to another entity or entities? If so, what is the nature of the other entities?
- c. Before the availability of EPM, did businesses like this (i.e., the "second customer's" business) often use mail to achieve what is now done through EPM? If not, why not?
- d. Would hardcopy mail be a good substitute for the second customer's use of EPM? If not, why not? How could the second customer use mail to achieve comparable results?
- e. For the doctor example set forth at page 12, l. 6 – 11, you emphasize that the doctors "keep this record" and "don't forward it to anyone." However, you do not make the same claim for the second customer. Is that because the second customer does forward the Worker Compensation forms to another entity? If not, then please explain.

**RESPONSE**

- a. The customer's business is a Managed Care Utilization Review Office
- b. Yes - A third-party administrator
- c. I'm not clear on what is meant by saying "done through EPM," but I do not know how businesses like these previously authenticated electronic files.
- d. No. The EPM provides third-party authentication of electronic files.
- e. Yes.

**RESPONSE OF POSTAL SERVICE WITNESS FOTI  
TO INTERROGATORIES OF THE OCA**

OCA/USPS-RT1-28. Please refer to the 3 examples set forth on page 12 of your testimony. Isn't it correct that businesses that want to prove they have not altered a document could print the document, seal it in an envelope, address to themselves, have it postmarked by mailing it, and keep the unopened envelope as proof that the document contained in the envelope had not been modified since the time of mailing?

a. If not, why not?

b. Are you aware of current examples of such mail use? If so, please describe your understanding of this practice.

c. Are you aware of past examples of such mail use? If so, please describe your understanding of this practice.

**RESPONSE**

a -c I am familiar with anecdotes suggesting the process you describe as a means by which aspiring writers, inventors, and the like could prove the existence of their written work product at a given date. I am personally unaware of any previous or current attempts to use this procedure, or, if there were any, whether this process was viewed as satisfactory proof of anything. While this procedure conceivably could work for an individual with the need to "postmark" a relatively few pieces of work, it would seem totally unacceptable for any business with a significant volume of transactions to document. Not only would there be the problem of storing and retrieving multiple copies, but the process may be viewed as susceptible to manipulation, and once the envelope is unsealed, the postmark can never again be used to prove anything.

1                   COMMISSIONER HAMMOND: Is there any  
2 additional written cross-examination for Witness Foti?

3                   (No response.)

4                   COMMISSIONER HAMMOND: Okay. So this will  
5 now bring us to oral cross-examination.

6                   Two parties have requested oral examination.  
7 They are DigiStamp and the Office of Consumer  
8 Advocate.

9                   Is there any other party that wants to  
10 cross-examine Witness Foti?

11                   (No response.)

12                   COMMISSIONER HAMMOND: We will begin the  
13 cross-examination by DigiStamp.

14                   CROSS-EXAMINATION

15                   BY MR. BORGERS:

16                   Q     Good morning. We're here this morning to  
17 work on the issues of material fact described in  
18 Commission Order 1455. Order 1455 was the notice of  
19 proceeding for the DigiStamp complaint on the U.S.  
20 Postal Service electronic postmark.

21                   One of the important issues described in  
22 Order 1455 is does the electronic postmark provide a  
23 document delivery service. To this issue, Mr. Foti,  
24 in your testimony on page 11 you make this statement,  
25 and I'll read this. I quote: "In fact, 97 percent of

1 all electronic postmark users since 2003 have been in  
2 conjunction with protecting content integrity of  
3 electronic files and not in the transmission of a  
4 message."

5 This quote in particular was the subject of  
6 DigiStamp's Interrogatory No. 2 where in part of your  
7 response you add to the same subject, "USPS EPM,  
8 however, does not carry messages between two parties.  
9 The carriage of any message associated with the USPS  
10 EPM requires the utilization of another service."

11 This testimony, that is "does not carry  
12 messages between two parties," is at the heart of this  
13 issue. That's the issue I would like to clarify by  
14 asking questions.

15 Specifically, those questions are by giving  
16 a demonstration of the USPS electronic postmark  
17 service, and in that demonstration I'd like to focus  
18 on the question specifically related to the issue,  
19 does the electronic postmark provide the service of  
20 transferring information from sender to receiver.

21 A Yes.

22 (The document referred to was  
23 marked for identification as  
24 Exhibit No. XE-Foti-1.)

25 MR. BORGERS: The exhibit that's going to be

1 handed out now, interestingly enough, is a Microsoft  
2 Word document, and what we have in that document is  
3 pictures of the software.

4 These pictures capture, if you will, the  
5 experience that a user of the electronic postmark  
6 service would experience on their computer when using  
7 this electronic postmark service.

8 MR. KOETTING: Commissioner Hammond, if we  
9 could have less testimony from Mr. Borgers and more  
10 questions to the witness perhaps we might proceed a  
11 little more directly to the purpose of today's  
12 hearing, which is to hear from the witness rather from  
13 counsel table.

14 COMMISSIONER HAMMOND: Yes. If you would  
15 try to confine to questions in this proceeding please,  
16 Mr. Borgers?

17 BY MR. BORGERS:

18 Q The first page of the exhibit, this would be  
19 capturing, if you will, the image from the website,  
20 uspsepm.com. Does it in fact show that home page of  
21 the website, uspsepm.com?

22 A The portion in the background is the home  
23 page. That pop-up is not part of the home page.

24 Q Okay. So that pop-up would be achieved by  
25 pressing the button in the lower left that reads

1 Certified Electronic Communication Has Arrived. That  
2 would result in that pop-up being displayed. Would  
3 that pop-up be displayed if I pressed that button?

4 A That is correct.

5 Q Okay. In the middle of the page it says Try  
6 It Today. If I were to press that button, would in  
7 fact the second screen print be displayed?

8 A You're referring to page 2?

9 Q Yes, I jumped to page 2. If I press the  
10 button Try It Today would the first image on the top  
11 of page 2 be displayed?

12 A Yes, I believe so.

13 Q Now, on that page it says Download the MS  
14 Office Extensions. If I downloaded and installed the  
15 software that I got from the USPS EPM website and then  
16 after the installation I checked who is the publisher  
17 of that software that I just downloaded from this  
18 site, would it display much like it does in the bottom  
19 of this image where it shows the publisher of that  
20 software is the USPS?

21 A Where are you referring to? I'm sorry.

22 Q I'm on page 2 at the bottom, and I'm showing  
23 the Microsoft view of all programs installed on the  
24 computer.

25 The question is during the installation

1 process would I be installing software that's  
2 published by the Postal Service?

3 MR. KOETTING: Mr. Borgers, do you have a  
4 definition of the term published as you're using it in  
5 that context?

6 MR. BORGERS: Published in the sense that  
7 all software that shows up on your Microsoft  
8 environment you have the chance to, if you will, sign  
9 that software and say verily this software was  
10 published by -- provided by -- a particular  
11 organization.

12 THE WITNESS: That's what it states here.

13 BY MR. BORGERS:

14 Q Okay. During the installation process of  
15 this software, would I be asked to agree to a license  
16 statement? That license agreement is between myself,  
17 the user, and the United States Postal Service.

18 A You would be asked for a license for the  
19 EPM.

20 Q And that would be an agreement between  
21 myself, the user, and the Postal Service?

22 A That is correct.

23 Q Very good. Now, on page 3 of the exhibit  
24 what we have here is a Microsoft Word document. This  
25 is a document that I'm creating, but we get to see, if

1 you will, the effects of having installed the software  
2 from the USPS EPM website.

3 After installing this software from the U.S.  
4 Postal Service, is it true that my Microsoft  
5 environment has now been updated to add a couple of  
6 buttons on the right-hand side? Is that true that's  
7 the effect of installing the software on the visual  
8 display within Microsoft Word?

9 A That is correct. The two icons in the upper  
10 right corner.

11 Q Okay. If I click on one of those buttons,  
12 does it then add this postmark emblem inside of my  
13 Microsoft word document?

14 A If your cursor is in that location it adds.

15 Q Thanks. Now, the Microsoft Word document  
16 that I create, are there any limitations on the  
17 purpose of the content? For example, what you see  
18 here is DigiStamp's cover letter, and it says Contract  
19 Terms. I'm sending a contract to my business partner.

20 Is it in fact true here though that the user  
21 of this service within Microsoft Word can type in  
22 anything they want? It can be a doctor's order. It  
23 can be a communication to a family member. It can be  
24 contract terms, just as I demonstrated here. Is that  
25 true?

1           A     That is true.  The USPS never takes control  
2 of the document.

3           Q     So the content can be anything?

4           A     The USPS never takes control of the  
5 document.

6           Q     Very good.  Now, if I double click on this  
7 icon that was inserted by the U.S. Postal Service  
8 software am I presented with this screen shown on the  
9 bottom, Postmark the Document?

10          A     Yes, I believe that's true.

11          Q     Okay.  And on that screen, as shown here, it  
12 identifies myself, Rick Borgers.  Is that  
13 identification used to charge me as a user for the  
14 service of creating the postmark?

15          A     I believe you are charged previously for the  
16 EPM.

17          Q     Okay.  So I have an account established with  
18 the EPM by using my credit card that has a credit  
19 balance, and my credit balance will be reduced because  
20 you can associate me as the user with this particular  
21 transaction, correct?

22          A     I believe that's true.

23          Q     This screen that we're showing right here  
24 postmarks the document.  That's being presented by the  
25 software that I previously installed, the software

1 that came from the USPS EPM website. Is that true?

2 A I believe that's true.

3 Q There is an optional question that's asked  
4 at the bottom of that screen. "Do you want this  
5 document electronically delivered with a return  
6 receipt?"

7 If in fact I check that and press the Sign  
8 button is the next screen that I will be presented by  
9 this software this screen on the next page shown in  
10 green? The top of it says Request Return Receipt.  
11 Will this dialogue then be presented?

12 A That is correct.

13 Q On this screen, is this the function where I  
14 get to, as it says, "You will receive an email  
15 notification when your document has been sent and  
16 another notification when the recipient acknowledges  
17 receipt of the document. The notices will include the  
18 times and dates of this event."

19 Is this the point where I get to enter my  
20 email address so that I will be notified when this  
21 document is sent?

22 A This is the point you enter your email  
23 address. That is correct.

24 Q And can I enter email addresses of other  
25 people that I want my original Microsoft Word document

1 to be sent to?

2 A In the recipient information. That is where  
3 you add it.

4 Q So if I type in email addresses in the  
5 section described as Recipient Email Addresses then  
6 that person will be sent a copy of my Microsoft Word  
7 document?

8 A If you press the Add button after you enter  
9 that information.

10 Q Very good. Very good. How many people's  
11 names can I put here for recipients of this Microsoft  
12 Word document?

13 A I do not know the exact number.

14 Q Okay. Very good. At least in this demo  
15 we've shown two?

16 A That is correct.

17 Q Now, after typing in the email addresses I  
18 press the word Okay in the bottom section of that  
19 dialogue.

20 Is it true then that the electronic postmark  
21 software will then go about displaying these series of  
22 dialogues: Creating Receipt, Getting Document,  
23 Obtaining USPS EPM, Creating Return Receipt, Creating  
24 Document Path, Relaying Document?

25 Is that the experience that a user would

1 perceive after pressing the Okay button on Recipient  
2 Information?

3 A I cannot verify that all these boxes show.  
4 I do know that a number of boxes appear.

5 Q Very good.

6 A I cannot verify all of these in this order.

7 Q Very good. Very good. Let me jump then to  
8 the next exhibit. That would be on page 6.

9 After a period of time, as being the author  
10 of this Microsoft Word document and having used the  
11 software as shown in this paper demo, would I in fact  
12 receive an email in my In box, my email address having  
13 been previously described to the software on that  
14 recipient address page?

15 Would I in fact receive an email from the  
16 United States Postal Service?

17 A Yes, that's true.

18 Q Would that email look much like what we see  
19 on Exhibit 1, page 6?

20 A I'm not sure if it would look exactly like  
21 this. This message is from over a year ago. There  
22 may have been some changes made since that time, but  
23 there's something to the effect of this.

24 Q Would this email have been sent by -- let's  
25 look at the From address. From:

Heritage Reporting Corporation  
(202) 628-4888

1 unitedstatespostalservice@uspsep.m.com.

2 A Yes.

3 Q And at a minimum would it include a note  
4 much like the second sentence? "You requested a  
5 return receipt notice from the United States Postal  
6 Service when your document was electronically mailed."

7 A Yes.

8 Q Now, in the middle of the page it says Date  
9 and Time of Electronic Mailing and in parentheses  
10 (Received by the U.S. Postal Service Data Center.)

11 Does that mean in previous processing that  
12 in fact my Microsoft Word document was transferred  
13 from my computer and received by the U.S. Postal  
14 Service Data Center?

15 A It means it was received by the USPS Data  
16 Center.

17 Q So my document was copied from my  
18 environment to the U.S. Postal Service Data Center?

19 A Not your document. A hash or a fingerprint  
20 of your document.

21 Q But not the document itself?

22 A That is correct.

23 Q Okay. Let's jump to page 7. This is the In  
24 box of one of the people whose email address I had  
25 entered previously. I had entered two email

1 addresses, one of those being  
2 chriscasady@digistamp.com.

3 In her In box she in fact received an email  
4 from the United States Postal Service with the subject  
5 essentially Postmarked Document From the United States  
6 Postal Service. Is that a proper characterization of  
7 what she would see in her In box?

8 A I believe that's true.

9 Q So I didn't send the email to Chris Casady.  
10 In fact, the Postal Service sent the email to Chris  
11 Casady.

12 A The Postal Service never receives the  
13 document which you sent.

14 Q Okay. Let's look at this. We're going to  
15 double click on that In box and actually take a look  
16 at this email.

17 Let's look at the From address. The From  
18 address is unitedstatespostalservice@uspsep.com, so  
19 this is an email, and it would be what you would  
20 expect, an email sent to chriscasady@digistamp.com  
21 from the United States Postal Service. That's what  
22 you would expect the processing of this postmark  
23 service to provide?

24 A I believe that's correct.

25 Q Can you tell me the name of the attachment,

1 njjohnson.pod.doc? That's my Microsoft Word document.  
2 How is it the Postal Service was able to send my  
3 document to Chris Casady if they never in fact had my  
4 document?

5 A What is referenced here is the Postal  
6 Service's ability to authenticate the document which  
7 was sent. The Postal Service never received your  
8 document, so therefore could not send it to Mr. Casady  
9 or Ms. Casady.

10 Q Let's read this email. It says, "To save  
11 this document right click on the attachment and select  
12 Save As."

13 Now, if the person follows these  
14 instructions will in fact that document be saved to  
15 their computer?

16 A Yes, I believe so.

17 Q Where did that document originate from? Is  
18 it not an attachment on this email?

19 A It originated from you.

20 Q At this point in time on Chris Casady's  
21 computer, who's in a different state, if she follows  
22 the instructions -- right click on the attachment and  
23 Save As -- will that document now be on her computer?

24 A Yes, I believe that's true.

25 Q How did that document get onto her computer?

1 Is it not an attachment on this email?

2 A Correct. It's an attachment on this email  
3 which you sent to her.

4 Q Okay. So this email, who is this email  
5 from?

6 A The origination of the email is from you.

7 Q I don't see my email address on here. I do  
8 see the address From:

9 unitedstatespostalservice@uspsepm.com.

10 A Again, that is there to recognize that the  
11 USPS authenticated that document.

12 Q Okay. The document, the Microsoft Word  
13 document, was on my computer. I used USPS EPM  
14 software.

15 Was that document transferred to the Data  
16 Center at the U.S. Postal Service whereby it was  
17 attached to this email and then forwarded on my behalf  
18 to Chris Casady?

19 A Could you repeat the question?

20 Q We started this demonstration with a  
21 Microsoft Word document. I used EPM software to  
22 designate who I wanted that document to be delivered  
23 to.

24 Is it correct in fact that that Microsoft  
25 Word document was transferred from my computer to the

1 U.S. Postal Service Data Center at which point it was  
2 attached to an email from the U.S. Postal Service and  
3 sent to chriscasady@digistamp.com?

4 A That document is never received by the USPS  
5 server.

6 Q In this demo we saw that I sent no emails.  
7 I did not send that document, but somehow this  
8 document is now on an attachment from the Postal  
9 Service being saved on Chris Casady's computer. Can  
10 you explain the gap?

11 A When you hit the Okay button on the Request  
12 Return Receipt you initiate the sending of that  
13 document.

14 Q And on the acknowledgement that I receive  
15 from the Postal Service it says that that document was  
16 received at the USPS Data Center.

17 A Where are you referring to?

18 Q It's Page 6, Date and Time of Electronic  
19 Mailing (Received by the U.S. Postal Service Data  
20 Center). Data and Time of Electronic Mailing.

21 A It says nothing about the document there.

22 Q Okay. So it's your contention then that  
23 this document got to Chris Casady's computer not on  
24 the attachment that came from the Postal Service, but  
25 through some other means? Is that correct?

1           A     The Postal Service never received that  
2 document.

3           Q     Okay. Let's look again on page 8 at the  
4 very bottom of the page. It says, "For security  
5 reasons, if you open this document and do not have the  
6 USPS EPM software for Microsoft documents the document  
7 will appear blank."

8                     Is that true? If Chris Casady does not have  
9 the Postal Service software installed on her computer,  
10 can she in fact see the content of that document?

11          A     I believe that's true. She cannot see the  
12 document if she doesn't have the software.

13          Q     Why would that be true? What has happened  
14 to this document that keeps her from actually seeing  
15 the content without having the Postal Service's  
16 software installed on her computer?

17          A     I believe there's a security reason for  
18 that.

19          Q     Is it true in fact that this document has  
20 been encrypted?

21          A     That is correct.

22          Q     Where did the encryption occur?

23          A     The encryption occurred as part of this  
24 application.

25          Q     Did the encryption occur on my computer

1 before it was sent or on the electronic Postal Service  
2 computer at the Data Center?

3 A I believe it occurred on your computer.

4 Q Do you have a way to check those facts at  
5 this time?

6 A No, I don't.

7 MS. DREIFUSS: Commissioner Hammond?

8 COMMISSIONER HAMMOND: Yes?

9 MS. DREIFUSS: I'm sorry to interrupt. I'm  
10 just going to assist Mr. Borgers with your permission,  
11 since he's not familiar with our proceedings.

12 COMMISSIONER HAMMOND: Go right ahead.

13 MS. DREIFUSS: It may be that Mr. Borgers  
14 would like the Postal Service to provide an answer  
15 possibly this morning.

16 Would it be all right, Mr. Borgers, if I  
17 asked Mr. Foti one or two questions to see whether and  
18 when one might be able to get an answer to that  
19 question?

20 MR. BORGERS: Certainly.

21 MS. DREIFUSS: Mr. Foti, would you be able  
22 to get an answer to that question if you checked  
23 during a short break that we may be having later this  
24 morning?

25 THE WITNESS: Yes, I probably could.

1 MS. DREIFUSS: Commissioner Hammond, would  
2 it be all right then if we do ask Mr. Borgers'  
3 question as presented in that way and Mr. Foti gets  
4 back to him with an answer after a short break a  
5 little later on?

6 COMMISSIONER HAMMOND: Yes. If he has a  
7 problem he can explain it, but yes.

8 MS. DREIFUSS: Thank you.

9 BY MR. BORGERS:

10 Q And can we add to that question was the  
11 document, the Microsoft Word document, transferred  
12 straight from myself, the sender's computer, to Chris  
13 Casady's computer, or did it in fact go through the  
14 Postal Service's Data Center?

15 A I believe I answered that to the best of my  
16 knowledge.

17 MS. DREIFUSS: I'm sorry again to interrupt,  
18 Commissioner Hammond.

19 Mr. Foti said he answered to the best of his  
20 knowledge. It may still be a benefit to the record if  
21 you did check on that fact.

22 I know he answered to the best of his  
23 ability and the best of his knowledge. It may be that  
24 he was mistaken, so I think Mr. Borgers' question is  
25 legitimate. Maybe you can just verify that that is

1 correct.

2 COMMISSIONER HAMMOND: If he can that would  
3 be helpful, but he can only provide information that  
4 he does know about.

5 MR. BORGERS: Very good.

6 BY MR. BORGERS:

7 Q At this point in the demonstration we have  
8 an attachment of a Microsoft Word document on an email  
9 that was sent by the Postal Service. Is that correct?

10 A I'm sorry. Could you repeat the question?

11 Q At this point in the demonstration we are  
12 looking at an email that was sent by the Postal  
13 Service that has an attachment which is a Microsoft  
14 Word document. Is that correct?

15 A Again, the email was sent by you.

16 Q This Microsoft Word attachment cannot be  
17 looked at until the user has installed software from  
18 the electronic postmark?

19 A Yes, that's true.

20 Q So in this process of putting this Microsoft  
21 Word document on Chris Casady's computer, the last  
22 step that has to be accomplished is sending this  
23 attachment through some software that's provided by  
24 the Postal Service?

25 A Yes, that's true.

1 Q And before she uses that Postal Service  
2 software, this Microsoft Word document is essentially  
3 not delivered, not viewable, cannot be read? Is that  
4 true?

5 A It cannot be read.

6 Q It's not viewable?

7 A It's not viewable.

8 Q At the end of this process is it true once  
9 installing the Postal Service software and saving this  
10 Microsoft Word document now this Microsoft Word  
11 document that was once on my computer is now on Chris  
12 Casady's computer? Is that true?

13 A Yes, I believe that's true.

14 Q Is that an exact copy of the document that  
15 was on my computer and is now on Chris Casady's  
16 computer?

17 A I assume so in this example.

18 Q Now we're at page 9 of this demonstration.  
19 I, the sender, receive an email shown on page 9 from  
20 the U.S. Postal Service. The From address? Would I  
21 be assuming that this email came from the United  
22 States Postal Service, given the From address? Is  
23 that true?

24 A That is correct.

25 Q This was the normal process, and the user of

1 this service would receive a note that said  
2 essentially what is said here, "Your request for a  
3 return receipt notice from the United States Postal  
4 Service when your document was electronically  
5 delivered."

6 Is that what this email is about, to inform  
7 me that my document was electronically delivered? Is  
8 that correct?

9 A That's what it states.

10 Q Is that the intention of the electronic  
11 postmark service to inform the sender of the document  
12 when that document was in fact delivered to the  
13 recipient?

14 A In this Microsoft application when you use  
15 the return receipt function that is the purpose. That  
16 is not the purpose of the electronic postmark.

17 In this application when you use the  
18 electronic postmark with a return receipt that is true  
19 what you said just in this application.

20 Q In this application, this is software that  
21 in total I retrieved from the website described as  
22 uspsepm.com.

23 A This is the Microsoft Word extension  
24 application retrieved from the USPS website.

25 Q Very good. For a customer to use this

1 service and this software that were retrieved from the  
2 uspssep.com website, does the customer need anything  
3 beyond these things?

4 That is, I need to have the EPM service. I  
5 need to have an internet connection. I need to have  
6 an email address, and I need to pay the United States  
7 Postal Service for use of the service. What else does  
8 your average customer need beyond those things to use  
9 this service?

10 A My guess is that they need a lot of things,  
11 but one of the things in addition to that, like you  
12 said, they do need an internet service that is being  
13 provided by a service provider. They're paying that  
14 service provider for the service. Without that  
15 service, the USPS EPM could not be sent.

16 Q Do you have any special requirements for  
17 that internet connection? I'm here in a hotel, and  
18 they give me a wireless connection. Phone companies  
19 provide connections. Cable companies provide  
20 connections.

21 Is it just a generic internet connection, or  
22 is there something special about this particular  
23 internet connection?

24 A You need an internet service provider.

25 Q No other special qualifications on the

1 description of internet service provider?

2 A That is correct.

3 Q Was this service designed to be retrieved  
4 from your website so that just your average customer  
5 could use this document delivery service?

6 A This service was designed for a cross  
7 segment of customers, that being one of them.

8 Q And do you feel like your average customer  
9 with just your average amount of computer knowledge  
10 and an internet connection could in fact install and  
11 use this service?

12 A Yes.

13 Q Very good. We need to go back to your  
14 testimony where you describe that the U.S. Postal  
15 Service EPM product provides no delivery of a message.

16 Given this demo where I've just shown a  
17 computer file moved from the sender's computer to the  
18 receiver's computer, would you like to qualify that  
19 testimony at this point?

20 Again, the testimony was, "However, USPS EPM  
21 does not carry messages between two parties." This  
22 would be Rebuttal Testimony No. 2. This is where  
23 DigiStamp has asked a question, and in part of your  
24 response -- let me get the exact page for you.

25 This would be the response of yourself to

1 interrogatories of DigiStamp, Question No. 2. It's  
2 labeled RT-1-2. Even without referring to that  
3 testimony I can phrase the question.

4 Does the U.S. Postal Service EPM service,  
5 given the demo just shown, carry a message between two  
6 parties?

7 A No.

8 Q The Microsoft Word document was on one  
9 computer, and at the end of the process it was on  
10 another person's computer.

11 A A functionality of the USPS EPM is a  
12 time/date functionality. The Microsoft Word extension  
13 is an application which uses the USPS EPM as a  
14 component.

15 Q So the Microsoft Word plug-in, does it  
16 accomplish carrying messages between two parties?

17 A Provided you have an internet service  
18 provider, yes.

19 Q So when you answered the question, "The  
20 carriage of any message associated with USPS EPM  
21 requires the utilization of another service provider,"  
22 was it your intention in your testimony there to say  
23 that the other service provider needed was in fact an  
24 internet connection?

25 A I'm sorry. Could you rephrase the question?

1           Q     So if a person has an account at the USPS  
2     EPM and they get the Microsoft Word plug-in from the  
3     USPS EPM website can they effectively use the function  
4     of delivering messages from sender to receiver?

5           A     Again, the Microsoft Word plug-in enables  
6     that message transfer along with the internet service  
7     provider. The USPS EPM does not transfer the message.

8           Q     Instead it's the internet that transfers the  
9     message? Is that your testimony?

10          A     It's the internet service provider.

11          Q     And there's no special requirements for that  
12     internet service provider? Any internet service  
13     provider will work?

14          A     I believe I answered that question already.

15          Q     I sent a letter to a business colleague in  
16     Australia. I went to the Postal Service, and I asked  
17     how can I send this? One of the options was airmail.

18                     Was it a logical assumption for me to assume  
19     when they say airmail that an airplane was going to be  
20     used to get my letter to Australia?

21          A     I assume so.

22          Q     When I tell you that I'm going to send you  
23     an email, is it a logical assumption that I'm going to  
24     use the internet to send you that email?

25          A     Yes, I believe that's true.

1 Q Is it to the point where we consider  
2 electricity, the thing that's required to support  
3 running your computer? Is it safe to say that the  
4 internet is part of the infrastructure required to  
5 send emails?

6 MR. KOETTING: Could you rephrase that  
7 question? You lost me on that one.

8 BY MR. BORGERS:

9 Q There are basic infrastructure concepts.  
10 The internet seems to be something that's required in  
11 order to send an email.

12 Are there parallels in other infrastructure  
13 concepts? For example, electricity is required to run  
14 a computer. Is it safe to assume that to send emails  
15 you must use the internet?

16 A I believe I just answered that.

17 Q Very good. We have reviewed this Microsoft  
18 Word plug-in that we got from the USPS EPM website,  
19 and I'd like to know if this function could be used to  
20 deliver documents in a sense replacing registered or  
21 certified mail.

22 To that question, are you familiar with page  
23 10 of the exhibit, which is again taken from the USPS  
24 EPM website?

25 A Yes, I have seen this.

1           Q     Given that this particular state has chosen  
2     that electronic document delivery services that use  
3     the USPS EPM are a substitute for registered or  
4     certified mail, then is it logical to say, given the  
5     demo I just showed of the Microsoft Word plug-in,  
6     using services like the Microsoft Word plug-in from  
7     the U.S. Postal Service EPM could be used to replace  
8     certified or registered mail?

9           A     According to this press release, it states  
10    that South Carolina, the State of South Carolina, has  
11    accepted the use of the USPS EPM that perhaps could be  
12    used as an alternate for certified or registered mail.

13          Q     Very good.  When South Carolina was working  
14    hard to decide whether to pass this law, did the  
15    Postal Service participate in any conversations in  
16    South Carolina?

17                For example, did you go there on site to  
18    speak with the legislators?  Not you yourself, but any  
19    representatives from the Postal Service.  Did you  
20    supply them with marketing or explanatory materials or  
21    participate in any conference calls to help South  
22    Carolina understand that in fact the EPM service could  
23    be used to replace certified/registered mail?

24          A     No, not to my knowledge.

25          Q     No one from the Postal Service attended or

1 sent documents to help this happen?

2 A No, not to my knowledge.

3 Q Very good. On page 11, the last page of  
4 this exhibit, this is a presentation made by a Postal  
5 Service employee. This actual page came from your  
6 responses of your testimony to the OCA. This is just  
7 one particular page.

8 Do you think this diagram describes  
9 accurately how the USPS postmarking service works?

10 A This diagram is from a presentation which  
11 was made over 10 or nearly 10 years ago. I believe  
12 the date there says June 1997.

13 This presentation was in the context of a  
14 broader electronic commerce service, which at the time  
15 the Postal Service was examining.

16 Q Okay. So this is not a proper  
17 characterization of the current system you have in  
18 place?

19 A No.

20 Q Item No. 2, "The U.S. Postal Service service  
21 postmarks and forwards the message to the recipient."  
22 That does not occur in today's world?

23 A Again, this was a presentation made in 1997  
24 which describes a broader electronic commerce service  
25 product offering.

1           Q     Very good.  Okay.  So back to South Carolina  
2           again.  To your knowledge, has any other state passed  
3           legislation that supports using things like this  
4           Microsoft Word plug-in and the EPM service as part of  
5           the EPM service to replace certified or registered  
6           mail?

7                     Do you know of any other states that are  
8           either contemplating or have passed legislation of  
9           that type?

10          A     I'm aware of some other states.

11          Q     Can you list those?

12          A     I believe Maryland is one.  I don't know the  
13          specifics of any others.

14          Q     Do you know of any of these states that are  
15          considering this type of legislation where a Postal  
16          Service employee has been part of making the  
17          presentation to the legislators?

18          A     No.

19          Q     So there haven't been any travel  
20          arrangements for that purpose of Postal Service  
21          employees to go attend these presentations?

22          A     Not to my knowledge, no.

23          Q     Very good.  I need to go over some other  
24          quotes from the Postal Service in this complaint and  
25          ask you whether these statements are true.

1           In the response to the complaint, the Postal  
2 Service says, "The Postal Service contends that since  
3 nothing moves between sender and recipient it is  
4 impossible to construe any carriage of mail sine qua  
5 non of a postal service."

6           Do you see how a person giving this demo  
7 that we just had of software from the EPM service,  
8 that they might be construed to think that there was a  
9 form of carriage of mail occurring with the software  
10 provided by the EPM service?

11          A     The key phrase there is with the software,  
12 which you stated. Within the Microsoft Word extension  
13 is an application which uses as a component the USPS  
14 EPM.

15          Q     This Microsoft plug-in, who publishes that  
16 software? Where do I retrieve that software and who  
17 publishes it?

18          A     At the USPS website.

19          Q     Very good. "The Postal Service contends  
20 that electronic postmark service is not a postal  
21 service because it does not deliver anything between  
22 senders and recipients." Do you agree with that  
23 statement?

24          A     Again, that is a Microsoft application.

25          Q     Is that Microsoft application part of the

1 EPM service?

2 A That is a Microsoft extension that is  
3 applicable with an EPM.

4 Q Very good. All right. I'm changing  
5 subjects to a different response. It's to another  
6 important issue of material fact in Order 1455, and  
7 that is does the USPS EPM provide a service that is  
8 ancillary to the process of electronic communication?

9 In Order 1455 on page 6 the Postal Service  
10 states, "The USPS EPM service does not by itself  
11 provide evidence of the time and date of a document  
12 transition, although a third party application may use  
13 it that way." I say that just as content.

14 A Excuse me. Can you tell me? What are you  
15 reading from?

16 Q Okay. This is in Order 1455 on page 6.

17 A Page 6 of my rebuttal testimony?

18 Q No. This is page 6 of Order 1455, so this  
19 is where the Commission is quoting the Postal Service  
20 in their response to the complaint.

21 A Okay. I do not have that or have not seen  
22 it.

23 Q Well, let's just refer directly to your  
24 testimony. In your testimony and I believe this is a  
25 quote. This is a quote on Rebuttal Testimony No. 3:

1                   "The current largest customer of the USPS  
2 EPM is using it for content integrity in a compliance  
3 process and noc as part of an electronic  
4 communications process. This company has integrated  
5 the USPS electronic postmark into an existing business  
6 process that is used to verify electronic content of  
7 faxes received." That's page 11.

8           A     Okay. So this is in my direct testimony?

9           Q     Yes, it is.

10          A     Or my rebuttal testimony? All right.

11          Q     This is in your direct rebuttal testimony,  
12 page 11, starting at line 16.

13          A     Okay. I'm sorry. Can you repeat the  
14 question?

15          Q     Does this customer account for approximately  
16 85 percent of the USPS EPM transactions?

17          A     That is correct.

18          Q     What is the general nature of this company?  
19 Is it in fact an insurance company?

20          A     No.

21          Q     What is the general nature of business of  
22 this company?

23          A     They are a durable medical equipment  
24 provider.

25          Q     The content of the faxes that are received

1 as you described, what is the general nature of the  
2 content of these faxes? For example, are they  
3 doctor's orders?

4 A I believe I responded to this in one of the  
5 interrogatories. Yes, they are doctor's orders or  
6 prescriptions.

7 Q Very good. So when DigiStamp asked the  
8 question in what sense is a fax not an electronic  
9 communication, would you like to read from your  
10 testimony or would you like to elaborate on your  
11 testimony to that question? In what sense is a fax  
12 not an electronic communication?

13 MR. KOETTING: Which question was that,  
14 please?

15 MR. BORGERS: That was No. 3. This is a  
16 response to the interrogatories of DigiStamp.

17 THE WITNESS: I can certainly read my  
18 response.

19 BY MR. BORGERS:

20 Q You do in fact dispute whether a fax is an  
21 electronic communication?

22 A I say I could dispute.

23 Q Okay. In the case of this specific customer  
24 receiving doctor's orders just in the context of this  
25 customer, are the faxes that this customer receives,

1 these doctor's orders, are they communications?

2 A Could you repeat the question?

3 Q We're talking about whether we're going to  
4 dispute whether a fax is an electronic communication,  
5 and I'm saying let's avoid the dispute. Instead,  
6 let's focus in on this specific customer who uses 85  
7 percent of the USPS EPM transactions.

8 For this specific customer, when they  
9 receive faxes that contain doctor's orders is that an  
10 example of a communication being sent to the company?

11 A Yes, I believe that's true.

12 Q So although we might dispute in some cases  
13 whether a fax being sent is an electronic  
14 communication, for this customer this is in fact an  
15 example of a process which is an electronic  
16 communication?

17 MR. KOETTING: I think you just put words in  
18 the witness' mouth.

19 MR. BORGERS: I'm sorry.

20 MR. KOETTING: He said it was a  
21 communication. He didn't say it was an electronic  
22 communication.

23 MR. BORGERS: Okay. Thanks.

24 BY MR. BORGERS:

25 Q Do you think that these doctor's orders

1 being communicated to the medical equipment supplier  
2 being sent via fax, do you think that is an example of  
3 an electronic communication?

4 A As I stated in my response, I could dispute  
5 whether or not a fax is considered an electronic media  
6 transmission. There are certain rules as part of the  
7 HIPAA security rule which excludes faxes from the  
8 definition of electronic messages.

9 Q In this specific case though -- not general  
10 rules, but in this specific case -- where doctor's  
11 orders are faxed to a company who is a medical device  
12 supplier, in this specific case in your opinion is  
13 that an example of an electronic communication?

14 A Again, this is a durable medical equipment  
15 provider, and they would fall under these rules so  
16 that could be disputed.

17 Q Do you dispute it?

18 A I could dispute it.

19 Q Because of the HIPAA rules? Is that the  
20 reason you feel like you could dispute this?

21 A Yes.

22 Q Let's go over the HIPAA rules. Exhibit 2.

23 MR. BORGERS: Shelley, I need a copy. I  
24 handed you all of this.

25 //

1 BY MR. BORGERS:

2 Q This is a printout of what I believe to be  
3 the HIPAA rule that you refer to. Have I actually  
4 gotten the correct HIPAA rule?

5 A Yes, I believe so.

6 MR. KOETTING: Just to point out, this is  
7 not the entire rule. This is an excerpt from it.

8 MR. BORGERS: Very much so. What I did is I  
9 went through the rule, and I just did a search for the  
10 word fax so that we would have this in front of us.

11 BY MR. BORGERS:

12 Q I suppose the real question comes down to  
13 related to disputing whether a fax is an electronic  
14 communication. You referred to the HIPAA rules.

15 Have I captured here on this printout where  
16 in the HIPAA rules you believe that they dispute  
17 whether a fax is an electronic communication?

18 A No.

19 Q Can you tell me where in the HIPAA rules  
20 they use the word fax and in fact they say a fax is  
21 not an electronic communication?

22 A In Section 160.130 under Definitions.

23 Q Can you read that definition?

24 A It's quite lengthy. I'll read it.

25 "Electronic media means: 1) Electronic storage media,

1 including memory devices in computers (hard drives)  
2 and removable transportable digital memory media such  
3 as magnetic tape or disk, optical disk or digital  
4 memory card; or

5 "2) Transmission media used to exchange  
6 information already in electronic storage media.  
7 Transmission media includes, for example, the  
8 internet, extranet (using internet technology to link  
9 businesses with information accessible only to  
10 collaborating parties), lease lines, dial-up lines,  
11 private networks and physical movement of removable/  
12 transportable electronic storage and media.

13 "Certain transmissions, including of paper  
14 via facsimile and of voice via telephone, are not  
15 considered to be transmissions via electronic media  
16 because the information being exchanged did not exist  
17 in electronic form before the transmission."

18 Q So let's understand this one specific  
19 customer, and let's try to apply this HIPAA rule. In  
20 the case of this customer, a doctor's order, if I  
21 understand correctly, is a piece of paper. Is that  
22 correct?

23 A That is correct.

24 Q That piece of paper is faxed to this medical  
25 device company?

1           A     That is correct.

2           Q     The medical device company receives that  
3 fax, and they store it in a computer file. Is that  
4 correct?

5           A     That is correct.

6           Q     Okay. Now, did the HIPAA rules not  
7 specifically exclude that type of fax communication?

8           A     Not to my knowledge.

9           Q     Okay. Let's read further into these. We're  
10 in Section 164.302 where they actually speak about  
11 this notion of excluding faxes.

12                     It just seems like a lot to read. Let me  
13 see if I can just do this as a question. They did say  
14 that in fact faxes that were used, if you will, like a  
15 photocopier where it starts out paper and it ends up  
16 paper on the other end, those kinds of faxes do not  
17 fall under their security guidelines, but does it not  
18 then later say though that faxes that are paper and  
19 then stored in an electronic medium, that electronic  
20 medium does become subject to their security  
21 guidelines?

22           A     No, I don't believe so. I mean, what you  
23 provided here is essentially text from the Comments  
24 section of the *Federal Register*. I believe this is  
25 just a dialogue going back and forth which mentions

1 some of the comments going back.

2 What I read was the definition which was  
3 used in the final rule. I believe this is dialogue as  
4 a result of forming the final rule.

5 Q Okay. So it is your understanding then that  
6 all faxes were eliminated from the set of HIPAA rules?

7 A That was my understanding, yes.

8 Q Okay. They did not make any kind of a  
9 caveat that says if the fax was then captured in its  
10 electronic medium that that fax is subject to their  
11 rules? To your knowledge, that's not true?

12 A In reading this, I did not get that.

13 Q Okay. Very good. I need to restate a  
14 question. The doctor's orders that are sent to this  
15 medical device provider, they're sent to them via fax.  
16 Is this an example of an electronic communication?

17 A Again, you've asked me that, and I told you  
18 I could dispute that. I think I have.

19 Q I didn't ask whether you could dispute it.  
20 I asked you in the specific example of this situation  
21 where doctor's orders are faxed to this medical  
22 supplier is this an example of an electronic  
23 communication?

24 A Based on HIPAA rules, I'm going to say no.

25 Q When this fax is received by this medical

1 supplier company is the fax held in an electronic  
2 form, i.e., a computer file?

3 A Yes.

4 Q Okay. Can that computer file then be  
5 viewed, the contents of that computer file be viewed  
6 by many people or one person on a computer screen?

7 A Yes, I believe so.

8 Q Would it be fair to characterize this system  
9 as a convenience that lets people on one end continue  
10 to use the old-fashioned fax machine, but at the  
11 medical provider that receives many faxes it's a  
12 convenience that they can handle these faxes as  
13 electronic files; that is, not having to have many  
14 pieces of paper, many copies. It's easier to store.  
15 Is this whole system, if you will, a convenience?

16 A I believe there are some efficiencies, yes.

17 Q So is the USPS EPM applied to the computer  
18 file which stores that fax?

19 A Could you repeat the question?

20 Q We have a situation where a doctor's order  
21 is on a piece of paper. It's faxed to this medical  
22 device company. This medical device company uses the  
23 EPMS, the EPM service, for faxes.

24 The question is the fax has been captured by  
25 this medical device company in an electronic file. Is

1 it that electronic file that is then processed and  
2 documented by a USPS EPM?

3 A The fax is received by the durable medical  
4 equipment provider. It is an electronic file. At  
5 that time that file gets hashed or a fingerprint is  
6 created of that file, as well as could be any other  
7 electronic file that is on their service, and sent to  
8 the USPS server for an electronic postmark.

9 Q This particular customer uses 85 percent of  
10 the transactions sold by the USPS EPM service, so for  
11 this specific customer what do they apply the time  
12 stamp to? Is it correct they apply time stamps, EPMS,  
13 to computer data files that contain fax images?

14 A They apply time stamps to computer data  
15 files.

16 Q The computer data files that they apply time  
17 stamps to, are they in fact these faxes that contain  
18 doctor's orders?

19 A They are doctor's orders.

20 Q Okay. Very good. When these faxes come in,  
21 do insurance company employees choose for which faxes,  
22 faxes that have been captured in a computer data file?  
23 Do employees of this medical device company choose  
24 which of these faxes to apply a time stamp to and  
25 which not?

1           A     I do not believe so. I don't know whether  
2 they do or not, but I don't believe that happens.

3           Q     Okay. So to the best of your knowledge,  
4 they're not choosing which should get the time stamp?  
5 Okay.

6                     Do you believe it's the company's intention  
7 by their design of the system that employees change  
8 the faxes -- review and potentially change the faxes  
9 -- before the electronic postmark is applied?

10          A     No.

11          Q     In their design, what do you believe would  
12 be their intention for the length of time between the  
13 fax coming in and the time stamp being applied to that  
14 fax? Is it part of the design that it happens as soon  
15 as possible? Is it hours? Days?

16          A     I do not know the exact timeframe.

17          Q     To the best of your knowledge, do you  
18 believe it's part of their design to make it as soon  
19 as possible after the receipt of the fax to apply the  
20 time stamp?

21          A     It is part of the application that utilizes  
22 the USPS EPM.

23          Q     So if the doctor sends in these orders and  
24 everyone at this company is at a company meeting, does  
25 it still get a time stamp applied to that file?

1           A     I'm not sure I can answer that.  I don't  
2 know.

3           Q     Okay.  Very good.  Do you believe this  
4 medical device company uses the USPS EPM to prove when  
5 they received a particular content and to verify that  
6 that content has not been altered?

7           A     Yes.

8           Q     If the number of faxes increases -- one  
9 particular day they just get a bunch of these doctor's  
10 orders coming in -- does the number of EPM  
11 transactions increase?

12                   Is the corollary true?  If no faxes come in  
13 then there are no EPM transactions?

14           A     If more faxes are received on the company  
15 server as electronic files then more EPMS will be  
16 provided.

17           Q     Very good.  So for this customer the need of  
18 the EPM, the act of getting the EPM, is that  
19 integrated into the system related to the part of the  
20 system which is receiving faxes?

21           A     Could you repeat the question?

22           Q     So for this customer, for this specific  
23 customer, is the need for a USPS EPM transaction, the  
24 triggering of that need, is that built into their  
25 system, the portion of the system that is for the

1 receipt of faxes?

2 A They have an application which integrates  
3 the USPS EPM.

4 Q And it's integrated in the portion of their  
5 application that receives faxes?

6 A The application is, yes.

7 Q Now, if I knew their phone number, and don't  
8 tell me, the phone number that they receive these  
9 faxes in on and I sent in an unsolicited fax, just a  
10 menu for a favorite pizza place, the way their system  
11 is set up would that get an electronic postmark  
12 applied to it?

13 A I do not know.

14 Q We do know though that no one reviews these  
15 faxes before they get a postmark.

16 A I'm not sure, but I believe that to be true.

17 Q So it sounds like anything that comes in on  
18 this fax line is going to get a postmark.

19 A Again, I do not know.

20 Q Okay. Do you agree then therefore for this  
21 specific customer their usage of the EPM service is  
22 part of receiving faxes?

23 A No. No. It's part of the application which  
24 integrates the USPS EPM.

25 Q We have established, I do believe, and

1 correct me if I'm wrong. Is it true that we have  
2 established that this customer has a system that  
3 receives faxes that are electronic communication?

4 A Again, I could dispute whether or not faxes  
5 are electronic communication.

6 Q But for this customer --

7 A And I think I did for this customer also.

8 Q Okay. In your response you gave an analogy  
9 to say that for this specific customer that an analogy  
10 would be that a secretary stamps every letter that  
11 comes in with the date and time that that letter came  
12 in.

13 A What reference is that?

14 Q We're still on No. 3.

15 A Hold on.

16 Q In your Answer No. 2, "It is similar to a  
17 protocol in which after a hard copy communication has  
18 been received by an office the very first thing that  
19 always happens is the hard copy is time and date  
20 stamped by a secretary."

21 The question is is receiving these faxes and  
22 putting the postmark on them, is it part of a business  
23 process, or is it part of an integrated end to  
24 receiving faxes?

25 Now, in your analogy do you believe this

1 analogy says that putting the postmark is part of a  
2 business process and not part of receiving faxes?

3 A I believe it's part of the business process.

4 Q In your analogy, if the stamping was put on  
5 the piece of paper in the mailroom -- in other words,  
6 the mailroom clerk has been told to put a stamp on  
7 everything that comes in before it gets delivered to  
8 the people in the organization that actually respond  
9 to those documents.

10 Is it still part of a business process, or  
11 because it's done in the mailroom it's part of  
12 receiving the mail?

13 A I believe that could be considered part of  
14 the business process.

15 Q We described a situation where I sent in a  
16 pizza menu. Because the whole system is automated,  
17 the pizza menu is also going to get the time stamp.  
18 We're not saying a pizza menu is in any sense of the  
19 word part of a business process?

20 A Again, I'm not sure that's the case that  
21 that happens.

22 Q Okay. I would like to have Exhibit 3, if  
23 you don't mind. This is the old-fashioned world. I  
24 apologize. I did not get this to your attorney in  
25 advance, but it's so simple I don't think it's going

1 to be a problem.

2 Here's a question of is this integrated into  
3 the process of receiving faxes, or is this part of a  
4 business process. This is an old-fashioned fax  
5 machine. This old-fashioned fax machine, everything  
6 that comes into it it gets the date and time written  
7 along the top.

8 Now, when faxes are received and every one  
9 of them gets the date and time applied to it, is this  
10 very unique to any business process, or in fact the  
11 printing of this date and time, is this integrated  
12 right into the fax machine?

13 A I believe it's integrated into the fax  
14 machine.

15 Q Very good. I'm going to move to  
16 Interrogatory No. 4. When asked the question by  
17 DigiStamp is it not true that the USPS EPM in its  
18 current form was introduced in 2004 and in fact uses  
19 standards developed by private industry, not the  
20 failed efforts of earlier USPS work, your answer is:

21 "The USPS EPM in its current form was  
22 introduced in 2002. Although conceptually it's  
23 essentially the same as the USPS EPM introduced in the  
24 first part of the 1990s in terms of providing a time  
25 and date stamp to an electronic file and protecting

1 the integrity of the contents."

2 Related to that response, my understanding  
3 from your bio in the beginning of your testimony is  
4 that you joined this group responsible for the EPM  
5 project in about 2002. Is that correct?

6 A Responsible for the EPM project, no. It was  
7 last year.

8 Q In your bio you referred to 2002. Can you  
9 help me make the link? What happened in 2002?

10 A I have been in my current position since  
11 2002. I assumed the responsibility of electronic  
12 postmark last year.

13 Q What department was the EPM in before it  
14 came under your department?

15 A It was in our -- I'm drawing a blank -- New  
16 Business Operations, New Business Operations Group  
17 within our Product Development Group.

18 I work within our Product Development Group.  
19 The New Business Operations Group was in our Product  
20 Development Group, so it stayed within the same group.  
21 We just shifted responsibilities.

22 Q Understood. All right. Are you familiar  
23 with the earlier version of the EPM that was  
24 terminated in about the year 2003?

25 A I'm aware of it, yes.

1           Q     From your testimony you add that, "As with  
2 many emerging markets, products evolve to better meet  
3 customer needs."

4                     You note, "The USPS EPM introduced in the  
5 first part of the 1990s...", so you feel that the USPS  
6 EPM evolved from the 1990s to what currently exists  
7 today?

8           A     I believe our entire electronic services  
9 have evolved since that timeframe.

10           Q     Do you believe the work done in the 1990s  
11 and the knowledge gained by the Postal Service in the  
12 1990s contributed to the USPS EPM service that you  
13 have today?

14           A     Yes, I believe we've learned from our  
15 experiences.

16           Q     And so those experiences contributed to what  
17 you have today? Is that correct?

18           A     That is correct.

19           Q     In your rebuttal testimony on page 14 you  
20 provide a technical description of a portion of the  
21 EPM service. I'm not going to ask you a lot of  
22 detailed questions about that. You describe a process  
23 --

24           A     Excuse me.

25           Q     -- it starts on page 14.

1           A     You described it as a portion of our EPM  
2 process. This isn't a portion, this is the entire EPM  
3 process.

4           Q     Is the Microsoft plug in shown in this  
5 process?

6           A     No, it's not.

7           Q     Very good.

8           A     Again, that is not part of the EPM process,  
9 that is part of the Microsoft Word extension.

10          Q     That Microsoft Word extension, where do I  
11 get that software?

12          A     From the USPS website.

13          Q     Is that software instrumental in convincing  
14 states to use the EPM service to replace registered  
15 and certified mail?

16          A     I can't answer. I do not know.

17          Q     So this is a portion of the EPM process, the  
18 service offering --

19          A     This is the EPM process.

20          Q     This is it. Now, this process creates an  
21 electronic date stamp. Is that correct?

22          A     That is correct.

23          Q     That is correct. The structure, the  
24 engineering, the format, the protocol of an electronic  
25 date stamp, is that structure and protocol defined in

1 an IETF specification?

2 A Yes. I believe it is.

3 Q Okay. If as a customer, and I have an EPM  
4 time stamp and I was to check whether it's a valid  
5 time stamp, I want to check to see if it's not a  
6 forgery, do I use a public key to check the  
7 authenticity of a time stamp?

8 A Could you repeat the question?

9 Q So if I have a time stamp that was created  
10 by the U.S. Postal Service EPM service and it's on my  
11 computer and I need to check the validity of that, is  
12 it a forged one or is it authentic, part of that  
13 process is that using a public key to verify the  
14 digital signature of that time stamp?

15 A Is that a question?

16 Q Yes. Yes. Is it true that to verify the  
17 authenticity of a digital time stamp provided by the  
18 EPM service I use a public key?

19 A Yes. I believe that's true.

20 Q Is that public key carried in a standard  
21 format called an X509 certificate?

22 A I believe that's true.

23 Q Was the X509 certificate, the form,  
24 structure and the engineering of that certificate, was  
25 that defined by an IETF specification?

1           A     That's my understanding.  Yes.

2           Q     Do you believe that a great deal of  
3 engineering and design effort went into developing the  
4 set of common standards to define the algorithm,  
5 structure and process for creating and verifying  
6 digital signatures?

7           A     I assume so.

8           Q     Is it correct to say that the vast majority  
9 of the digital signature standards including the time  
10 stamp standards that are used by the EPM were  
11 developed and published by working groups within the  
12 IETF?

13          A     I believe that to be true.

14          Q     Is it correct to say that the IETF is an  
15 independent -- by the way, IETF stands for Internet  
16 Engineering Task Force -- activity associated with the  
17 internet society that the engineering design work done  
18 within the IETF is via an volunteer effort?  Is that  
19 correct to say?

20          A     I don't know.

21          Q     Is there any policy reason why Postal  
22 Service employees cannot participate in the work  
23 group, the engineering efforts that take place at the  
24 IETF?

25          A     I don't know.

1           Q     In your response there was a quote -- I  
2     don't know that you need to really get to the  
3     details -- that says, "I have no information or belief  
4     about the extent of the Postal Service's direct  
5     involvement in IETF discussions because none of the  
6     Postal Service employees who were likely to have been  
7     involved are still employed by the Postal Service."  
8     Is that your testimony?

9           A     This is Response No. 4?

10          Q     Four. Wait a minute. Wait a minute. I  
11     apologize. No. I apologize. It is Response No. 1,  
12     2.B.

13          A     It's Response No. 1 or --

14          Q     I apologize. Let me find it. That is not  
15     it.

16                   MR. KOETTING: I believe it's Question 4,  
17     Part 2.

18                   MR. BORGERS: Thank you, sir. Thank you.

19                   BY MR. BORGERS:

20          Q     Okay.

21          A     Okay.

22          Q     So you did locate it?

23          A     Yeah.

24          Q     Okay.

25          A     Could you repeat the question?

1           Q     So I just need to check that this is your  
2 testimony, that you have no information or belief  
3 about the extent of the Postal Service's direct  
4 involvement in IETF discussions because none of the  
5 Postal's employees who were likely to be involved are  
6 still employed by the Postal Service. Is that your  
7 testimony?

8           A     Yes.

9           Q     Are you aware that the design work for the  
10 time stamp that's implemented by the EPM in the years  
11 1998 to 2001 and is captured in written form as work  
12 group subject forums, they look a lot like emails and  
13 they're still captured on the internet. Were you  
14 aware of that?

15          A     No.

16          Q     So I can take it that you didn't do any  
17 searches for Postal Service's employees whether they  
18 actually contributed to those work groups in that set  
19 of stored data which is the design work that was done  
20 for the time stamp in the years 1998 to 2001. You  
21 didn't pursue that kind of a search?

22          A     No.

23          Q     Would there be travel or expense records if  
24 employees went to any of the work group efforts?

25          A     I do not know. There may or may not.

1           Q     Maybe in the records, and do you know of  
2 records of those early releases where for example at  
3 DigiStamp we volunteered to build the early draft  
4 specifications into actual working systems so that the  
5 work groups could test out early designs, were there  
6 any releases of the early EPM service designed  
7 specifically to the IETF specs to facilitate the  
8 design activities taking place at the IETF?

9           A     We have a lot of the experience with an  
10 electronic postmark service. We have provided a  
11 working service since the late 1990s. I do not know  
12 what the dialogue with the participants of IETF was  
13 during that timeframe, nor do I know those providers  
14 or contractors who worked for us during this period  
15 what level of engagement they had with the IETF.

16          Q     You do know, though, that the EPM service  
17 uses the specifications that were developed within the  
18 IETF. We have that from your earlier testimony. Is  
19 that correct?

20          A     That is correct.

21          Q     Okay. Are you aware or are you involved  
22 with current work, in fact work done in November 2003?  
23 I believe you were a part of this group. That work is  
24 referred to as security standards policy requirements  
25 for time stamp authorities. I looked at that group

1 and could not find in that group related to policy of  
2 time stamp authorities and I can't find any Postal  
3 Service involvement there either.

4 Is the Postal Service involved in that work  
5 at the IETF?

6 A You just said we are part of it and now  
7 you're saying we're not part of it. I'm confused.

8 Q Let me restate the question. So I also find  
9 the IETF is working on other subject areas related to  
10 time stamping. One of those is a document that was  
11 published in November 2003. It's called *Security*  
12 *Standards and Policy Requirements for Time Stamp*  
13 *Authorities*. Is the Postal Service involved with that  
14 work at the IETF?

15 A I do not know of any direct involvement with  
16 that group.

17 Q Okay. Did the U.S. Postal Service to the  
18 best of your knowledge play a central role in  
19 developing the IETF standards for the technical and  
20 policy requirements of a time stamp authority?

21 A My belief is that since we provided a  
22 service prior to these standards that we played some  
23 role in the development of that, although they may not  
24 have been formal roles, as part of this IETF task  
25 force.

1 MR. BORGERS: Very good.

2 COMMISSIONER HAMMOND: Now, Mr. Borgers --

3 MR. BORGERS: Yes?

4 COMMISSIONER HAMMOND: -- this morning we do  
5 wish to provide you and the witness with a break.  
6 Would this be a good time to take that break or are  
7 you near the end of a line of questioning?

8 MR. BORGERS: I probably have 20 percent of  
9 my questioning remaining. This is a reasonable place  
10 to break. We can bring back the context of where we  
11 are, though.

12 COMMISSIONER HAMMOND: Okay. All right.  
13 Then let's go ahead and take about a 15 minute break  
14 and then we will resume once we're back in at about  
15 11:35 if that works for everyone. Thanks.

16 MR. BORGERS: Very good.

17 (Whereupon, a short recess was taken.)

18 COMMISSIONER HAMMOND: We are back on the  
19 record. If you would proceed, Mr. Borgers?

20 MR. KOETTING: Commissioner Hammond?

21 COMMISSIONER HAMMOND: Yes, sir?

22 MR. KOETTING: There was a request for some  
23 supplemental information to be furnished after the  
24 break and I believe the witness can answer those  
25 questions that Ms. Dreifuss and Mr. Borgers requested.

1 COMMISSIONER HAMMOND: Okay. Would you like  
2 them to go ahead and ask their questions toward that  
3 right now?

4 MR. KOETTING: That would work fine.

5 COMMISSIONER HAMMOND: Okay. If you would  
6 proceed with that then, please?

7 BY MR. BORGERS:

8 Q Please, Mr. Foti, given the research you  
9 were able to do over the break is it true that the  
10 document that was used in my demo, did it travel from  
11 the sender's computer directly to the receiver's  
12 computer or did it in fact go to U.S. Postal Service's  
13 Data Center prior to being sent to the recipient?

14 A It's my understanding that the encrypted  
15 documents may go through a postal data center, but not  
16 through the EPM service.

17 Q So let me see if I understand. So the  
18 Microsoft Word document traveled from the sender's  
19 computer to a computer owned and operated by the  
20 Postal Service and then was forwarded to the  
21 designated recipient?

22 A The encrypted document went through the USPS  
23 Postal Data Center.

24 Q From there it went to the recipient?

25 A I believe so. Yes.

1           Q     The act of encrypting the document, did that  
2 occur at the Postal Service computer?

3           A     No.

4           Q     Okay. The final step of delivery of the  
5 document in its encrypted form, it requires that the  
6 document be decrypted before it is usable, can be  
7 displayed by the recipient. To do that it must go  
8 through Postal Service software on the receiver's  
9 computer. Until it does that it cannot be seen by the  
10 receiver. Is that true?

11           MR. KOETTING: That question has been asked  
12 and answered.

13           MR. BORGERS: Very good.

14           MS. DREIFUSS: Commissioner Hammond, it  
15 seems useful to keep these concepts together. I would  
16 say even though it has been asked and answered there's  
17 really no harm, and I think the record will benefit  
18 from the witness answering the question that Mr.  
19 Borgers just posed.

20           COMMISSIONER HAMMOND: Please do respond and  
21 then, Mr. Borgers, please move on.

22           MR. BORGERS: Very good.

23           THE WITNESS: Could you repeat the question?

24           BY MR. BORGERS:

25           Q     So the last step in delivery of this

1 Microsoft Word document, so the person on the  
2 receiving end, the receiver, can actually look, and  
3 read and comprehend it's contents, the last step is  
4 that it must go through U.S. Postal Service software  
5 that's installed on the recipient's computer? Is that  
6 true?

7 A You do need software to verify and decrypt  
8 the document. Correct.

9 Q Very good. Thank you. We're back to the  
10 question of the IETF, and so the question I pose for  
11 you now is did the U.S. Postal Service play a central  
12 role in developing the IETF technical and policy  
13 standards?

14 MR. KOETTING: I believe that question was  
15 asked and answered before the break.

16 MR. BORGERS: I was just trying to get us  
17 back to a context.

18 BY MR. BORGERS:

19 Q Would you mind answering again just to kind  
20 of --

21 A Would you mind stating it again?

22 Q Do you believe that the U.S. Postal Service  
23 played a central role in developing the IETF technical  
24 and policy standards around the digital time stamp?

25 A I believe we played a role in influencing

1 the technical standards that were part of the IETF.

2 Q Is it also your testimony and do you believe  
3 that the digital time stamps, the use of digital  
4 signatures to create time stamps and development of  
5 the associated technical standards, would those have  
6 or have not occurred without the input by the Postal  
7 Service?

8 A I can't answer that. I don't know.

9 Q Well, let me ask it the other way then.  
10 Without the involvement of the Postal Service is it  
11 your testimony that the technical standards for time  
12 stamps and digital signatures would not have been  
13 developed?

14 MR. KOETTING: Objection. That calls for a  
15 speculation.

16 COMMISSIONER HAMMOND: Yes. Move on,  
17 please.

18 BY MR. BORGERS:

19 Q In your testimony on page 4 you refer to the  
20 Universal Postal Union, that it has recently adopted a  
21 set of time and date standards under the rubric  
22 digital postmarking. That was on page 9. The set of  
23 standards that were adopted, were those the IETF  
24 standards for digital signatures and time stamps?

25 A I believe so.

1           Q     I've looked through the UPU documents, and  
2     please help me, were you able to find any place in the  
3     UPU documents that make any statement that says the  
4     government must or should provide the service of  
5     trusted time stamps?

6           MR. KOETTING: I'm sorry. Is there a  
7     particular document being referred to here?

8           BY MR. BORGERS:

9           Q     In the testimony there was a reference to  
10    the work that the UPU is doing related to adopting  
11    standards -- again, this is page 9 -- and the Postal  
12    Service's involvement with policies. My assumption  
13    was, Mr. Foti, we had a chance to understand the UPU  
14    in a better context, so the question I posed was about  
15    the UPU and that's my explanation. The question was,  
16    again, does the UPU make any statement that the  
17    government should or must provide the service of  
18    trusted third-party time stamps?

19          MR. KOETTING: Commissioner Hammond, he's  
20    asking the witness a question about a document that  
21    the witness does not have in front of him.

22          COMMISSIONER HAMMOND: Mr. Borgers, can you  
23    provide a specific reference that you're asking the  
24    witness to comment on?

25          MR. BORGERS: That is a problem in that the

1 lack of it means I can't point to it. So I thought we  
2 had an expert here in UPU being involved with their  
3 policy statements and what I looked for is a policy  
4 that made a statement like this and I couldn't find  
5 it. So, no, I can't point to a particular reference.

6 COMMISSIONER HAMMOND: You're asking if the  
7 witness has knowledge?

8 MR. BORGERS: Has knowledge.

9 COMMISSIONER HAMMOND: And can the witness  
10 answer that question?

11 MR. BORGERS: I can phrase it in that way.

12 BY MR. BORGERS:

13 Q Do you know if the UPU ever makes any  
14 statements that the service of digital time stamps  
15 must or should be provided by government?

16 A No, but I'm not sure that's the UPU's role.

17 Q Very good. Thank you. In responses to  
18 interrogatories of DigiStamp, the last page, Item No.  
19 3 -- I'm not going to go into much detail here, but  
20 just a point of reference -- "No. The USPS EPM in its  
21 current technical form was introduced in 2002." When  
22 you use the word introduced do you mean testing,  
23 piloting, experimental services? Is that what was  
24 happening in the year 2002 related to the electronic  
25 postmark?

1           Q     When was the first release of the software  
2     -- and I need to separate, again, testing,  
3     experimental stages from production, ready to be  
4     used -- when was the first release of the EPM that's  
5     production status that used the IETF standards for  
6     trusted digital third-party time stamps?

7           A     I can't give you an exact date, but like I  
8     said before I believe our EPM product prior to them  
9     even having IETF standards was essentially a de facto  
10    standard which was the basis for the IETF standard.

11          Q     So in 2003 a service provider was contracted  
12    to provide the operations of the third-party time  
13    stamp service, EPM. Do you know before that period  
14    whether it was using the IETF spec or did the IETF  
15    spec come along after the new provider? Can you just  
16    give me kind of a --

17          A     I do not know the exact date that the IETF  
18    standard came into play.

19          Q     Okay. Was it used before this current  
20    version in its current configuration that you  
21    describe?

22          A     I do not know.

23          Q     Prior to the current configuration did the  
24    project lose money on an annual basis?

25                MR. KOETTING: Objection, Mr. Chairman.

1 This portion of the proceedings is limited to nature  
2 of the service not the financial results.

3 COMMISSIONER HAMMOND: Yes. I would proceed  
4 on, Mr. Borgers.

5 BY MR. BORGERS:

6 Q Is it not true that all of the U.S. Postal  
7 Service efforts prior to approximately 2003 were  
8 failed efforts?

9 A I believe you asked that in one of my  
10 interrogatories and you can refer to that response.

11 Q Prior to the current configuration were all  
12 the previous configurations terminated?

13 A We have one EPM product, so therefore there  
14 are no others. That one EPM product is the result of  
15 our experience through the 10, 12 years which we have  
16 been in this business.

17 MR. BORGERS: Commissioner, I'm not allowed  
18 to ask the question of whether this has been a  
19 profitable venture over these 10 years?

20 COMMISSIONER HAMMOND: I don't see a  
21 relevance to exactly what we have before us.

22 MR. BORGERS: The relevance that I was  
23 finding was that much expenditure not involved with  
24 the private industry's involvement in studying the  
25 standards for time stamps, during all that time a

1 great deal of loss of money. At some point we adopt  
2 the industry standards and begin to possibly make  
3 money.

4 COMMISSIONER HAMMOND: I don't like to see  
5 the Postal Service lose money, but I, again, don't see  
6 the relevance for the exact question before us.

7 MR. BORGERS: Thank you, sir.

8 BY MR. BORGERS:

9 Q We know that there were volunteer efforts  
10 involved with the IETF to create the engineering of  
11 digital time stamps and digital signatures. Private  
12 industry has to make investments.

13 Do you find that although you believe the  
14 Postal Service has contributed positively to the  
15 engineering behind digital time stamps, do you find  
16 that it might be difficult for private industry to  
17 further invest in digital time stamps considering that  
18 the competitor in that market is in fact the U.S.  
19 Postal Service?

20 MR. KOETTING: Objection. Calls for a  
21 speculation.

22 COMMISSIONER HAMMOND: I would agree with  
23 that. Yes. Please move on.

24 MR. BORGERS: Those are the end of my  
25 questions.

1                   COMMISSIONER HAMMOND: Thank you, Mr.  
2                   Borgers.

3                   Ms. Dreifuss, are you ready?

4                   MS. DREIFUSS: Yes, Commissioner Hammond.  
5                   Thank you.

6                   COMMISSIONER HAMMOND: Please proceed.

7                                   CROSS-EXAMINATION

8                   BY MS. DREIFUSS:

9                   Q     I'm Shelley Dreifuss with the Office of the  
10                   Consumer Advocate. Good morning, Mr. Foti.

11                   A     Good morning.

12                   Q     I'd like to start with your autobiographical  
13                   sketch. In 2005 you assumed the responsibility for  
14                   the functional group which manages the USPS electronic  
15                   postmark. I see that at lines 12 to 14 of your  
16                   testimony, so is that true?

17                   A     That's correct.

18                   Q     What is the functional group that manages  
19                   the USPS electronic postmark? Does that have a  
20                   special name?

21                   A     Yeah. That group is called business  
22                   development.

23                   Q     You manage the business development  
24                   functional group. Is that correct?

25                   A     That group is within my organization.

1 That's correct.

2 Q What else do you manage?

3 A I manage a group called postal technology  
4 management, I manage a group called product strategic  
5 planning, as well as I have direct staff that does  
6 product performance.

7 Q EPM comes in under business development?

8 A That is correct.

9 Q How do those four sections, business  
10 development, postal technology, product strategic  
11 planning and product performance, fit into the next  
12 higher tier of the organization? What comes above  
13 those four?

14 A I report directly to the vice president of  
15 product development.

16 Q Would I be correct in saying that all of the  
17 Postal Service activities in providing EPM ultimately  
18 come under your direction?

19 A Yes.

20 Q Could you describe what those activities  
21 are? What does the Postal Service do to provide EPM?

22 A The Postal Service manages a relationship  
23 with a partner who provides the EPM service. We set  
24 policy and oversight in that relationship.

25 Q Do any employees who report to you work

1 primarily on EPM?

2 A That report directly to me?

3 Q Yes.

4 A I have employees that report to me that work  
5 on EPM as well as other activities. Correct.

6 Q What are some of the other activities that  
7 they work on besides EPM within business development?

8 A Just that, business development activities.  
9 Other activities which could provide the Postal  
10 Service with new business initiatives.

11 Q Under business development would there be a  
12 mix of services that the Postal Service characterizes  
13 as postal services as well as non-postal services?

14 A Again, these are initiatives that are in  
15 development, so you don't necessarily know whether  
16 they'll be postal services or non-postal services. I  
17 guess if what you're getting at, the only programs  
18 which are active and implemented, there are no postal  
19 services in that group.

20 Q EPM is a program that's active right now.

21 A Yes.

22 Q It's in an active state?

23 A Yes.

24 Q Are there any other programs or projects  
25 under business development that are in an active

1 state?

2 A There are other activities that are active,  
3 but not products or services which are provided to the  
4 public if that's what you're getting at.

5 Q Just so I can get an idea give me an example  
6 or two of those other activities that are now in an  
7 active state under business development.

8 MR. KOETTING: Commissioner Hammond, I'm  
9 going to object on the basis of relevance here. We're  
10 here to talk about USPS EPM. I don't see what the  
11 relevance of other services might be at the moment.

12 MS. DREIFUSS: Well, primarily I'm just  
13 trying to figure out what the Postal Service does to  
14 provide EPM to the public, and how those duties are  
15 performed by postal employees and what other  
16 activities possibly related to EPM that they're  
17 working on. It's really more in the nature of  
18 background information.

19 COMMISSIONER HAMMOND: If it is directly  
20 related to the EPM. If you're just wanting further  
21 information outside the scope please move on, but if  
22 the witness can answer if it's directly to EPM.

23 MS. DREIFUSS: All right, sir. I'll make  
24 that a condition of my questioning.

25 BY MS. DREIFUSS:

1 Q Let me back up a little bit. You manage  
2 business development which includes EPM, correct?

3 A The business development group falls into my  
4 organization. That is correct.

5 Q In the tier just below yours do you have  
6 anybody who primarily manages EPM?

7 A There is a business development manager's  
8 position who manages the business development group.  
9 That position is vacant right now.

10 Q Who assumes those duties when the position  
11 is vacant?

12 A We have detail people come and perform those  
13 duties or managers come in on a temporary basis.

14 Q The business development manager would be  
15 managing EPM and other --

16 A Business development activities.

17 Q Is there somebody who reports to the  
18 business development manager or will report to the  
19 business development manager who will work primarily  
20 on EPM?

21 A Yes.

22 Q What position would that person hold?

23 A For lack of a better term he would be the  
24 program manager for EPM.

25 Q Does the program manager for EPM manage

1 other programs?

2 A They are active in other programs.

3 Q Besides the program manager for EPM are  
4 there other individuals within the business  
5 development section who would be working on EPM?

6 A There are others who would provide support  
7 to the program manager in that.

8 Q They all work for business development? Is  
9 that correct?

10 A I'm sorry. Could you repeat the question?

11 Q Those individuals who provide support to the  
12 EPM program manager, do all of them work within  
13 business development?

14 A Yes. I mean, we do receive support from  
15 others as needed, but yes. For instance legal  
16 support.

17 Q So legal support I think would be outside of  
18 the business development section?

19 A That is correct.

20 Q Is there any technical support required to  
21 offer EPM to the public?

22 A There are IT security aspects to it which  
23 require the support of our IT group.

24 Q Is the IT group within business development  
25 or --

1 A No.

2 Q -- outside of it? Those within business  
3 development who work on EPM, what are the activities  
4 that they perform?

5 A Generally it is oversight over our  
6 relationship with our provider.

7 Q During Mr. Borgers' questioning of you a  
8 little while back he asked you to check into something  
9 and you did and that something was you checked to see  
10 whether the Postal Service Data Center was involved in  
11 receiving an encrypted document from a customer and  
12 then forwarding it to the recipient.

13 Q Where does the Postal Service Data Center  
14 fit in with the provision of EPM, and how do they  
15 interface with your group?

16 A The Postal Data Center is what provides to  
17 the USPS EPM.

18 Q Would the program manager for EPM supervise  
19 the activities of the Postal Data Center with respect  
20 to EPM?

21 A Yes.

22 Q Could you turn to page 3 of your testimony,  
23 please? In lines 13 through 17 you talk about an  
24 internal group called technology applications. I  
25 gather from the last sentence that the electronic

1 postmark service was one of the initiatives developed  
2 by the technology applications group. Is that  
3 correct?

4 A Yes. That's what's stated there in my  
5 testimony.

6 Q In the second sentence in that paragraph you  
7 say this group was tasked with developing technology-  
8 based applications products or services oriented  
9 capabilities that would enable the Postal Service to  
10 better serve its customers. OCA asked you in  
11 interrogatory what do you mean by customers? You said  
12 there that you used customer to mean in the dictionary  
13 sense one that purchases a commodity or service.

14 You gave that answer in response to OCA  
15 Interrogatory No. 1a. Is that correct?

16 A Yes. That is correct.

17 Q I didn't find your written answer to be  
18 responsive to our question. We asked you when you  
19 stated at page 3 that the group was tasked with  
20 developing technology-based applications and so on to  
21 enable the Postal Service to better serve its  
22 customers. Were you talking about the customers who  
23 would be purchasing EPM or the Postal Service's  
24 customers in 1993?

25 A Again, I was just talking customers in a

1 generic sense.

2 Q In a generic sense. I guess what I'm asking  
3 is does the technology applications group decide it  
4 could sell to anybody and when they sold something to  
5 anybody that person or business would then become a  
6 customer?

7 A I'm not sure I can accurately respond to  
8 what the technology applications group meant in 1993.  
9 In putting this into my testimony I just used it in a  
10 generic sense. I don't know the intent of how the  
11 technology applications group --

12 Q Okay. I have to say I don't even know what  
13 you mean in a generic sense. What do you mean by  
14 saying the technology applications group in 1993 would  
15 enable the Postal Service to better serve its  
16 customers? Do you mean customers that it had at that  
17 time or customers it would obtain when it started to  
18 offer these electronic services and products?

19 A I mean customers in the sense that -- like  
20 it says in my response, one that purchases a commodity  
21 or service.

22 Q I'm trying to figure out whether you meant  
23 then current customers or future customers?

24 A I'm sorry. I can't give you a more definite  
25 answer than that. You know, I don't think there was

1 any limitation on the use of the word customers.

2 Q So would I be correct in surmising that you  
3 intended to say that customers who will be better  
4 served because of the efforts of the technology  
5 applications group would be anybody who would buy the  
6 services that were developed by that group? Would  
7 that be a correct understanding on my part?

8 A Could you repeat the question?

9 Q Sure. Is my understanding correct that you  
10 meant when you used the word customers in that  
11 sentence that customers would be anybody who bought  
12 those products and services developed by the  
13 technology applications group?

14 A I don't think there were any limitations on  
15 the word customers there.

16 Q So then that means that you did have in mind  
17 at least in part that anybody who bought the  
18 products --

19 A Again, I wasn't privy during this 1993, so  
20 what I meant in my testimony was, you know, customers  
21 in a generic sense without limitations who can  
22 purchase any commodity or service.

23 Q So if there's no limitation that means that  
24 anybody who purchases anything from the Postal Service  
25 is a Postal Service customer. That's the way you

1       meant to use it. Is that correct?

2           A       I think from a general sense it's correct to  
3       say that.

4           Q       In response to several of OCA's  
5       interrogatories you provided materials that were  
6       distributed in various forums or fora. Let's turn to  
7       your response to Interrogatory No. 14 of the OCA.  
8       Now, in that interrogatory response you provided an  
9       attachment which is at least one of the materials that  
10      were presented at a Boston trade show. Is that  
11      correct?

12          A       Yes. It's believed that this presentation  
13      was provided at a Boston trade show.

14          Q       Okay. Now, let's start with the attachment.  
15      The pages are not numbered, so we'll just have to go  
16      through them page by page. We'll have to do the  
17      counting ourselves. I'm going to count up to numbered  
18      page 4. At that page I see a quote, "to bind the  
19      nation together through the personal, educational,  
20      literary and business correspondence of the people."  
21      Do you see that quote?

22          A       Yes, I do.

23          Q       Is it your understanding that was included  
24      in the presentation because those were effectively the  
25      customers that the Postal Service wished to serve?

1           A     When you say customers who are you referring  
2     to?

3           Q     I guess those that would send and receive  
4     personal, educational, literary and business  
5     correspondence, but the customers in particular I  
6     should add because I think you're right with respect  
7     to your definition of customers, the customers would  
8     be the ones who paid for it so they would be the  
9     senders.

10          A     The senders of what?

11          Q     Of personal, educational, literary and  
12     business correspondence.

13          A     I'm sorry. What is the question?

14          Q     Okay. Well, let me ask you do you have any  
15     idea why this slide is included in the presentation?

16          A     This slide was used I believe in 1996 and  
17     this is pure speculation. I believe it was just to  
18     show the long history we have and the function that we  
19     perform as a Postal Service.

20          Q     Does the Postal Service offer EPM in pursuit  
21     of this purpose?

22          A     The Postal Service performs EPM in pursuit  
23     of providing an independent third-party-based service  
24     based on our integrity and trust.

25          Q     Do you have any idea where that authority

1 comes from to offer that service?

2 A It's in part due to our reputation as well  
3 as I know there are federal guidelines which state  
4 that, also.

5 Q I wasn't asking you why someone might buy  
6 the service from the Postal Service, which I think  
7 goes to reputation, I was asking where the Postal  
8 Service gets the authority to sell something like EPM  
9 to the public.

10 MR. KOETTING: Object because she's asking  
11 for a legal conclusion.

12 MS. DREIFUSS: Well, I'm actually not going  
13 to ask for a legal conclusion if the witness knows of  
14 the authority in some other manner. Now, it may be  
15 that there's a legal basis to his belief, but he may  
16 believe it for some other reason. He may believe it  
17 pursuant to a policy.

18 COMMISSIONER HAMMOND: I believe that it  
19 really is a legal question which I don't believe is  
20 what the witness is here for therefore I would  
21 appreciate you moving on.

22 BY MS. DREIFUSS:

23 Q Let's go further into this attachment. That  
24 was on numbered page 4. I'm going to go further.  
25 Let's go to page 7. If I found it correctly I'm at a

1 slide which says technology OCR. Do you think that  
2 the OCR technology was included in the presentation to  
3 suggest that there is some relationship between EPM  
4 and the Postal Service's regular mail activities?

5 A No. This presentation essentially describes  
6 the efforts and the initiatives which were performed  
7 by the technology applications group. As part of that  
8 they also looked into the various technology  
9 initiatives which involved OCR technology.

10 Q So they were saying they're experts at OCR  
11 technology and therefore it would be a good idea to  
12 buy EPM from them, also? Is that your testimony?

13 A No, no, no. No. Again, the electronic  
14 commerce services had a broader range of initiatives,  
15 EPM was just one of them as were a number of other  
16 initiatives which may or may not have anything to do  
17 with EPM, so there was no correlation between this and  
18 them.

19 Q You say there's no correlation to EPM. We  
20 were at page 7 I think where we saw slide technology  
21 OCR. Now, let's count further into the document at  
22 numbered page 9. Time and date stamp is mentioned  
23 there. Is time and date stamp the way you have  
24 described the EPM service in your testimony?

25 A That's one of the attributes of the USPS

1 EPM.

2 Q Do you suppose this time and date stamp  
3 that's mentioned here refers to EPM?

4 A I can't be that specific.

5 Q What other services, products do the Postal  
6 Service offer besides EPM that has a time and date  
7 stamp? Electronic time and date stamp I should say.

8 A Well, we do provide other services which  
9 provide that level of information.

10 Q What are some of those services?

11 A For instance our confirm product provides a  
12 date, time of when a mailed piece was scanned across  
13 our equipment.

14 Q Would you call that an electronic time and  
15 date stamp that one receives with confirm service?

16 A Would I call it -- excuse me?

17 Q Would you call it an electronic time and  
18 date stamp that one receives when purchasing confirm  
19 service?

20 A I'm not sure that I would call it that.

21 Q What would you call it then?

22 A I would call it a time and date stamp.

23 Q Is it a physical time and date stamp that  
24 one receives or is it something else?

25 A When you say physical what do you mean?

1 Q Well, what does one get from the Postal  
2 Service when they buy confirm service? You're talking  
3 about the confirm service that gives information as  
4 mail travels through processing and distribution  
5 centers? Is that what you were referring to as  
6 confirm services?

7 A Yes, yes. That was what I was referring to.

8 Q So you're saying that service where the  
9 Postal Service reads the sortation of a mail piece as  
10 it moves through processing equipment at a processing  
11 and distribution center, you would call that a time  
12 and date stamp?

13 A I would call that a time and date is  
14 provided as part of that service.

15 Q Okay. Does the Postal Service provide any  
16 time and date stamp services besides confirm?

17 A No. Besides confirm?

18 Q Besides confirm.

19 A The USPS EPM.

20 Q Okay. So now we're back to the slide.

21 A Thank you.

22 Q The slide indicates that the Postal Service  
23 I believe is trying to sell or intends to sell a time  
24 and date stamp, correct?

25 A It is part of this presentation, so I think

1 Q Well, what does one get from the Postal  
2 Service when they buy confirm service? You're talking  
3 about the confirm service that gives information as  
4 mail travels through processing and distribution  
5 centers? Is that what you were referring to as  
6 confirm services?

7 A Yes, yes. That was what I was referring to.

8 Q So you're saying that service where the  
9 Postal Service reads the sortation of a mail piece as  
10 it moves through processing equipment at a processing  
11 and distribution center, you would call that a time  
12 and date stamp?

13 A I would call that a time and date is  
14 provided as part of that service.

15 Q Okay. Does the Postal Service provide any  
16 time and date stamp services besides confirm?

17 A No. Besides confirm?

18 Q Besides confirm.

19 A The USPS EPM.

20 Q Okay. So now we're back to the slide.

21 A Thank you.

22 Q The slide indicates that the Postal Service  
23 I believe is trying to sell or intends to sell a time  
24 and date stamp, correct?

25 A It is part of this presentation, so I think

1 it's probably safe to assume that a time and date  
2 stamp is part of the research and development that the  
3 Postal Service was doing at this time.

4 Q Okay. As of today does the Postal Service  
5 market any time and date stamp apart from EPM?

6 A No.

7 Q That was on numbered page 9. Let's count  
8 another pages into the document. At the top of this  
9 slide there's a list of applications that apparently  
10 the Postal Service would like to market or is  
11 developing. On that list I see contracts, notarized  
12 documents, purchase orders, medical records, billing  
13 information. Do you see that list?

14 A Yes, I do.

15 Q For those individuals who might choose to  
16 use a time and date stamp to secure the transmission  
17 of a contract would you consider that to be a  
18 communication between a sender and a recipient of the  
19 contract?

20 A You would have to provide me with more  
21 details.

22 Q Well, I guess we can think about Mr.  
23 Borgers' example earlier today. I think he might  
24 actually have been talking about a contract. It was a  
25 contract he wanted to send to Chris Casady. He

1 developed the contract and he then as you explained  
2 earlier encrypted the document, sent it to a Postal  
3 Service server through EPM and the Postal Service in  
4 turn transmitted the encrypted document to a  
5 recipient. Isn't that the way it worked?

6 A If you work that way through our Microsoft  
7 Word extension.

8 Q Yes. The entire thing could be accurately  
9 described as a communication couldn't it?

10 A Within the Microsoft extension some people  
11 could consider that a communication.

12 Q A purchase order normally goes from a sender  
13 to a recipient as well doesn't it?

14 A Generally that's true.

15 Q So it's another kind of communication. Is  
16 that correct?

17 A Yes. I believe that's true.

18 Q The medical records billing information,  
19 that might also be moving from a sender to a recipient  
20 to might it not?

21 A It could potentially. Yes.

22 Q The Postal Service would like as many folks  
23 as they could get to buy and use EPM when they are  
24 sending these communications. Is that correct?

25 A The Postal Service would like people to use

1 EPM when they see value in the EPM, in their  
2 electronic communications or however they use it.

3 Q In fact EPM is very well-suited to be added  
4 to an electronic communication isn't it?

5 A Yes. That's true.

6 MS. DREIFUSS: I don't have any other  
7 questions, Commissioner Hammond.

8 COMMISSIONER HAMMOND: Thank you, Ms.  
9 Dreifuss.

10 Is there any follow-up cross-examination?

11 (No response.)

12 COMMISSIONER HAMMOND: Do we have any  
13 questions from the bench?

14 Mr. Chairman, would you like to proceed?

15 CHAIRMAN OMAS: Mr. Foti, in your testimony  
16 you refer to the Universal Postal Union and its  
17 recognition of the electronic postmark. Does the  
18 Universal Postal Union consider electronic postmarks  
19 as a postal service? If you know does the UPU  
20 consider electronic postmarks as a postal item?

21 THE WITNESS: I'm not sure what you mean by  
22 postal item, but my understanding is that a working  
23 group of the UPU has determined that the electronic  
24 postmarker or what they call the digital postmark is a  
25 postal service in cross-border transactions.

1                   CHAIRMAN OMAS:   Okay.  Thank you.  That's  
2   all I have.

3                   COMMISSIONER HAMMOND:  Thank you, Mr.  
4   Chairman.

5                   Commissioner Goldway?

6                   COMMISSIONER GOLDWAY:  I don't --

7                   COMMISSIONER HAMMOND:  All right.  Thank  
8   you.

9                   Vice Chairman Tisdale?

10                  VICE CHAIRMAN TISDALE:  Yes.  Mr. Foti, I'm  
11   going to read you a statement.  The USPS electronic  
12   postmark service was created to facilitate secure  
13   electronic communication for government and commercial  
14   systems and has the potential to strengthen the  
15   security, privacy and productivity of communication in  
16   the nation's electronic future.  Do you think that's  
17   an accurate statement?

18                  THE WITNESS:  Yes.

19                  VICE CHAIRMAN TISDALE:  Do you think the  
20   Postal Service electronic postmark is currently  
21   facilitating electronic communications with government  
22   and commercial systems?

23                  THE WITNESS:  I don't think it's  
24   facilitating it, I think it may add value to  
25   electronic communications.

1                   VICE CHAIRMAN TISDALE: Okay. The Postal  
2 Service electronic postmark is now being provided in  
3 conjunction with Authentidate. Is the current Postal  
4 Service electronic postmark service substantially  
5 different from the electronic postmark service offered  
6 by the Postal Service before it partnered with  
7 Authentidate?

8                   THE WITNESS: The pure functionality of the  
9 electronic postmark is very similar. Prior to the  
10 Authentidate relationship there were other activities  
11 which were more broader than the electronic postmark.

12                   VICE CHAIRMAN TISDALE: Like what? What do  
13 you mean?

14                   THE WITNESS: As part of our electronic  
15 commerce services, you know, I'm sure you're all aware  
16 of the post-ECS product which utilizes the USPS EPM as  
17 well as our net post certified which utilized the USPS  
18 EPM. Those were more message services whereas that  
19 the EPM was just one component of it that could verify  
20 that at this date and time this document existed and  
21 could authenticate it.

22                   VICE CHAIRMAN TISDALE: Okay. In your  
23 rebuttal testimony you discussed using the electronic  
24 postmark service on worker's compensation materials.  
25 Can you describe how that would work, and is the

1 Postal Service simply a filing cabinet or do the  
2 postmark files get transmitted to someone?

3 THE WITNESS: In the example referenced in  
4 my testimony the workmen compensation forms that come  
5 in are essentially postmarked by the USPS server and  
6 then they are sent on to a third-party administrator.

7 VICE CHAIRMAN TISDALE: That's the extent of  
8 it?

9 THE WITNESS: To my knowledge. Yes.

10 VICE CHAIRMAN TISDALE: Okay. That's all I  
11 have.

12 COMMISSIONER HAMMOND: Thank you,  
13 Commissioner Tisdale.

14 I believe all my questions have already been  
15 explored earlier, Mr. Foti.

16 We do have a request that Borgers' Exhibit  
17 No. 1, which is this document, be transcribed. Is  
18 there anyone who has difficulty with that?

19 (No response.)

20 COMMISSIONER HAMMOND: Then we shall ask  
21 that it be done so.

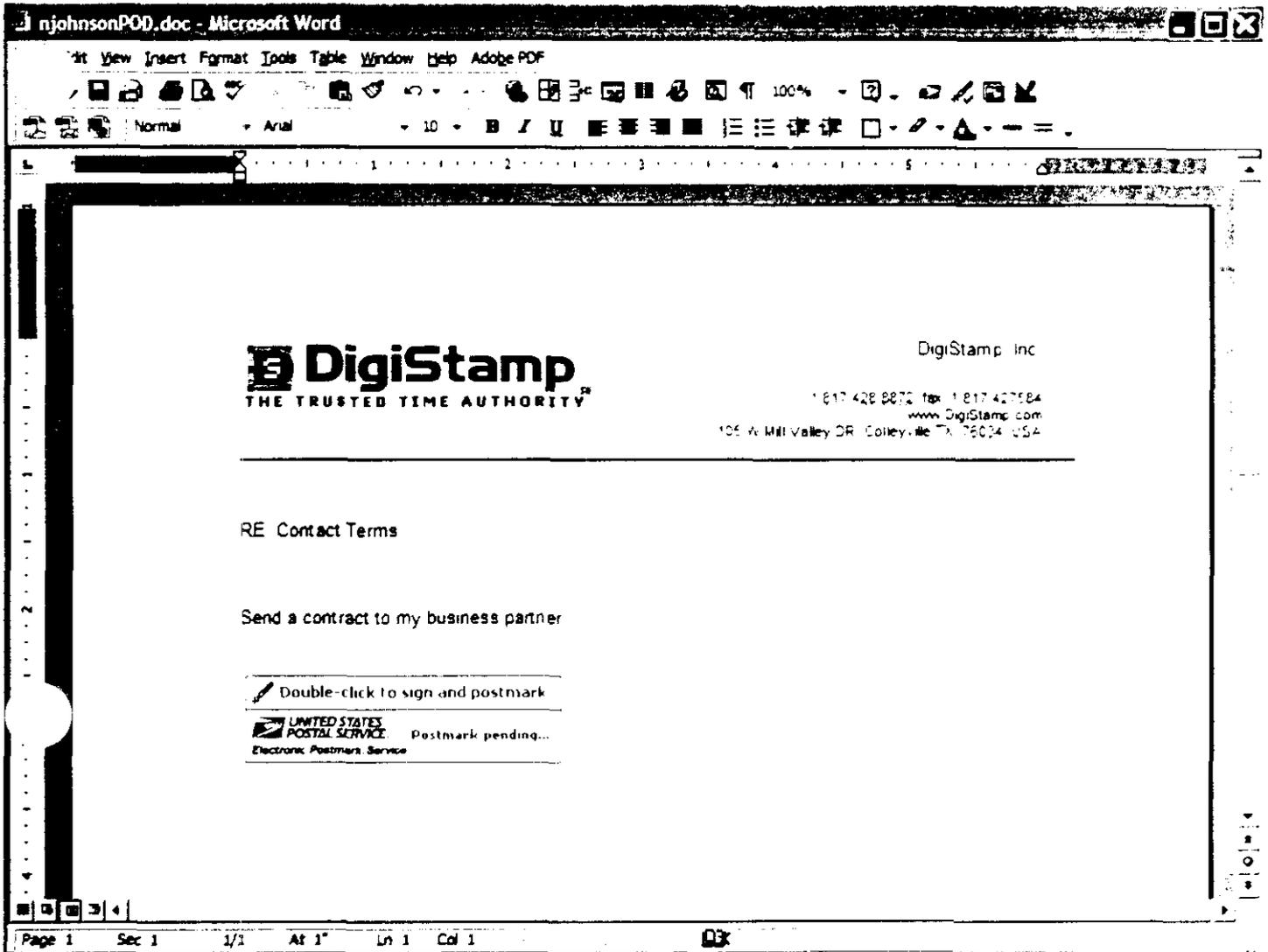
22 (The document referred to,  
23 previously identified as  
24 Exhibit No. XE-Foti-1 was  
25 received in evidence.)

# Demonstrate using the USPS Electronic Postmark® to send a MS Word Document between parties.

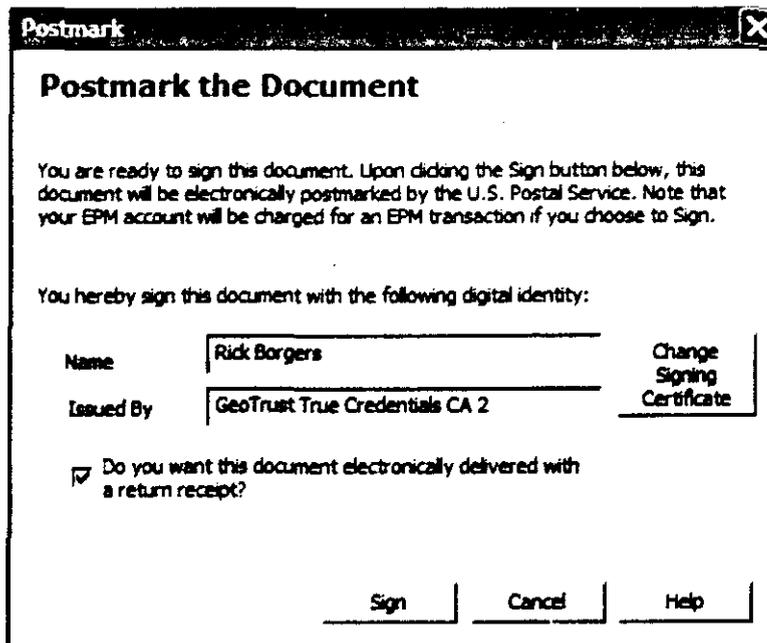
Retrieve the USPS EPM software from the Postal Service web site

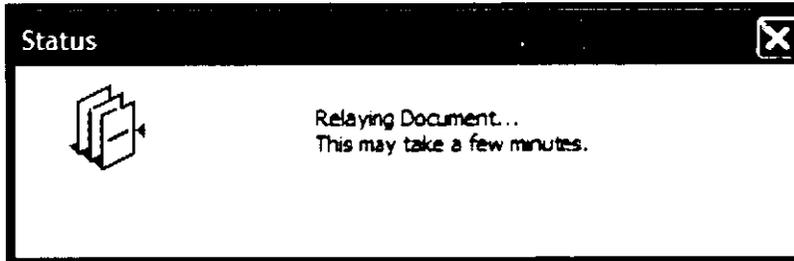
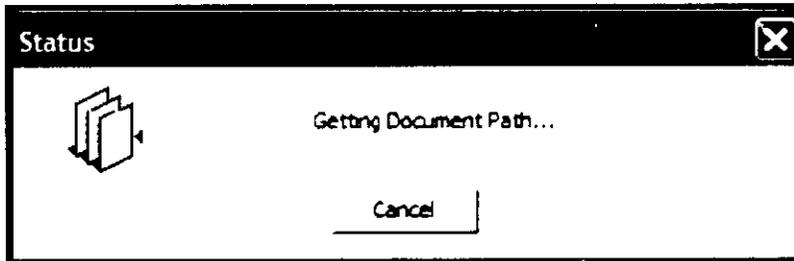
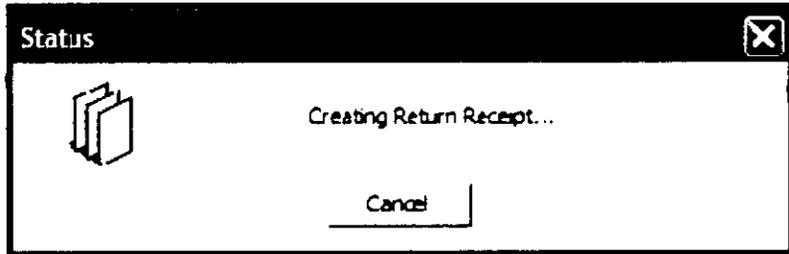
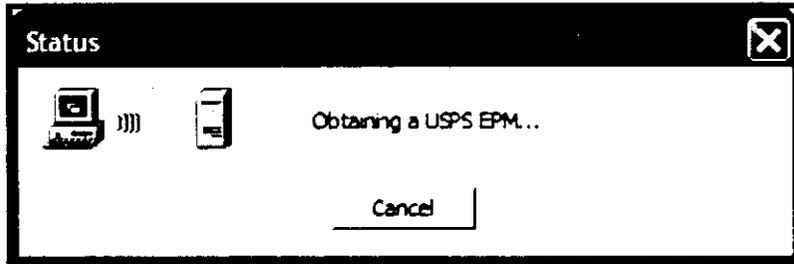
The image shows a screenshot of the USPS EPM website in a Mozilla Firefox browser window. The browser's address bar shows the URL <https://www.uspsepm.com/>. The website header features the United States Postal Service logo and the text "Electronic Postmark". Navigation links for "Home" and "About E" are visible. A "Log In" section is present with fields for "USER ID:" and "PASSWORD:". Below this, there is a "NEW USERS" section with a "View Demo" button and a "Sign Up" button. A "Certified Electronic Communication has arrived." message is displayed in a pop-up window, which includes a "Close Window" button. At the bottom of the page, there is a promotional banner for the "USPS EPM Extension for Microsoft Word® today!". The banner text reads: "Now, with the USPS EPM Extension for Microsoft Word (2000, XP, 2003) you can electronically sign and postmark Word documents and files with the USPS EPM, ensuring that any tampering or altering can be detected and verified online. Download the software for FREE!". A "TRY IT TODAY!" button is located at the bottom of the banner. The footer of the page contains the slogan "Tradition and Trust. Prove and Protect. Discern and Detect." and the text "BUY BLOCKS OF EPMs NOW".

Create a Microsoft Word document and then access the USPS EPM Service to sign and transmit.



The USPS EPM software begins a several step process that results in transmitting the signed Microsoft Word document.





### For each person that was designate to receive the Microsoft Word Document

**Inbox - Microsoft Outlook**

File View Tools Actions Help

New Reply Forward Send/Receive Find

Look for: Search In: Inbox Find Now

**Folder List**

- All Folders
  - Personal Folders
    - Calendar
    - Contacts
    - Chris
    - family
    - Deleted Items (1026)
    - DigiStamp
    - mailing list
    - Drafts (3)
    - Inbox
    - Journal
    - Junk E-mail (145)

**Inbox**

From	Subject	Rec
United_States_Postal_Service@uspsepm.com	Postmarked Document(s) (USPS EPM Service) from United States Postal Service	Fri.
Peter Casady	RE: Gifting summary and no more!	Sun
Nick Borgers		Sat
Peter Casady	FW: E-Ticket Confirmation	Sun
Julie Elliott	Fwd: Great alumna speaker	Tue
International Living Panama	RE: Can we see property on Contadora?	Thu
International Living Panama	RE: Can we see property on Contadora?	Thu
Russ	RE: Pat Miller connected us last year; another question?	We.
Julie Elliott	RE: Room setup considerations	We.

**The Sender of the document gets a confirmation that the USPS EPM Service has delivered the Microsoft Word Document**

**Delivery Notice from United States Postal Service (USPS EPM Service) - Message (HTML)**

File Edit View Insert Format Tools Actions Help

Reply Reply to All Forward [Icons]

From: United\_States\_Postal\_Service@uspsep.com  
To: rick.borgers@digistamp.com  
Cc:  
Subject: Delivery Notice from United States Postal Service (USPS EPM Service)

Sent: Fri 6/10/2005 3:23 P

Dear Rick Borgers

You requested a return receipt notice from the United States Postal Service when your document was electronically delivered (opened or displayed):

Document Sender:

Rick Borgers (rick.borgers@digistamp.com)

Document Recipient:

chris.casady@digistamp.com (chris.casady@digistamp.com)

Recipient Response:

RECEIVED

Date/Time of Electronic Delivery:

2005-06-10 20:21:00 961 GMT

Description of Document(s):

test proof of delivery

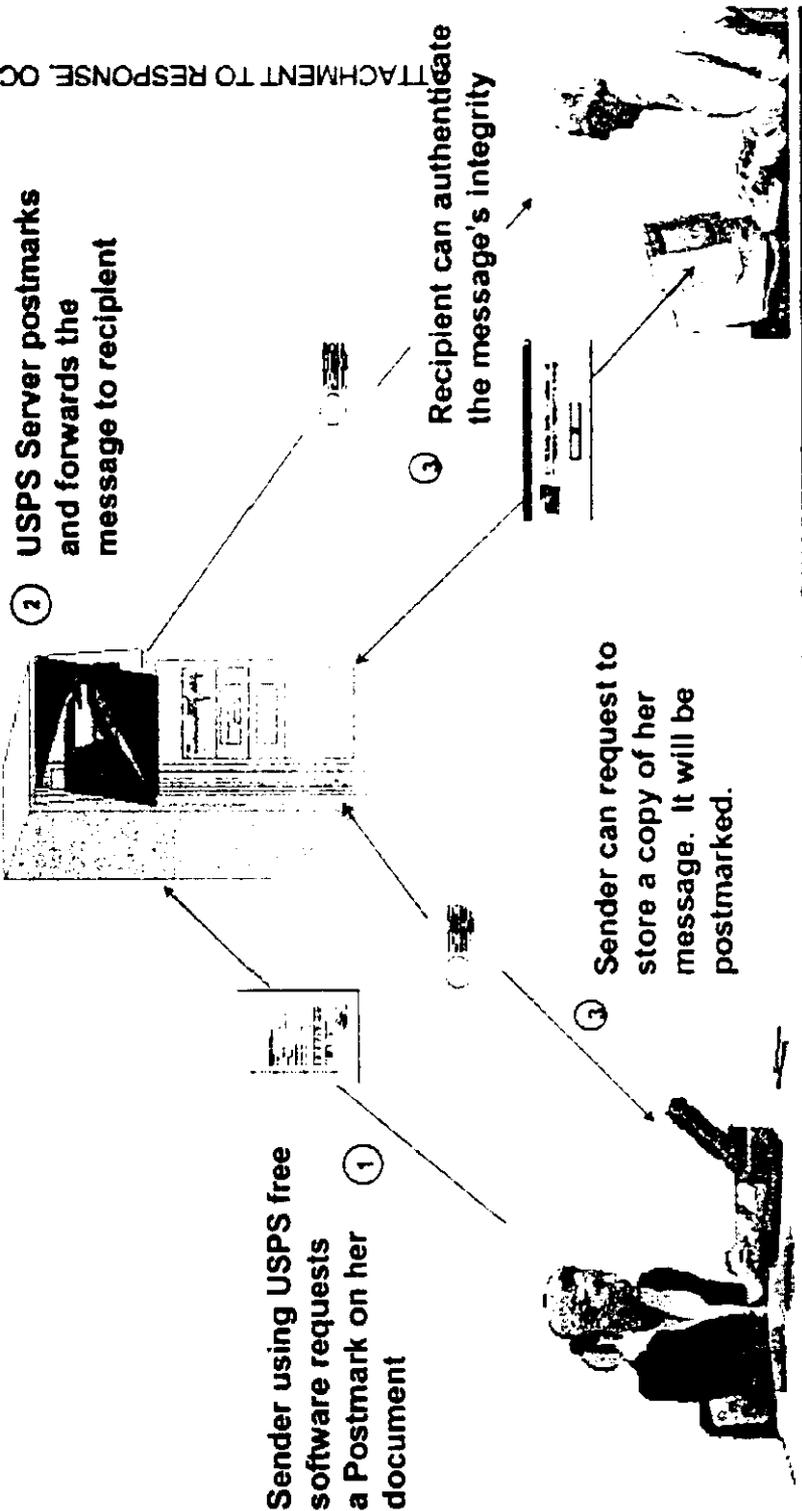
 **UNITED STATES  
POSTAL SERVICE.**  
Electronic Postmark Service

Customer support:  
Phone: (800) 870-5348 (8:30am - 6pm ET weekdays)  
Email: [support@uspsep.com](mailto:support@uspsep.com)

Document from OCA/USPS-RT-13 dated June 19, 1997

ATTACHMENT TO RESPONSE, OCA/USPS-RT-13

# How The USPS Postmarking Service Works



1                   COMMISSIONER HAMMOND: I guess I should hand  
2 this to the reporter at this time so that will be  
3 taken care of.

4                   Mr. Koetting, would you like some time with  
5 your witness to review whether there is a need for  
6 redirect?

7                   MR. KOETTING: I think we will need some  
8 time, Commissioner Hammond.

9                   COMMISSIONER HAMMOND: Okay.

10                  MR. KOETTING: Ten minutes?

11                  COMMISSIONER HAMMOND: Will that be adequate  
12 for you?

13                  MR. KOETTING: Ten minutes will be adequate.

14                  COMMISSIONER HAMMOND: Okay. Since we're  
15 wanting to go straight on through because of other  
16 matters going on today also let's take until 12:45 and  
17 come back then.

18                  ALL: Thank you.

19                  (Whereupon, a short recess was taken.)

20                  COMMISSIONER HAMMOND: Mr. Koetting?

21                  MR. KOETTING: Thank you, Commissioner  
22 Hammond. The Postal Service does have redirect --

23                  COMMISSIONER HAMMOND: Please proceed.

24                  MR. KOETTING: Thank you.

25                  //

## 1 REDIRECT EXAMINATION

2 BY MR. KOETTING:

3 Q Mr. Foti, you were asked by Mr. Borgers  
4 about contacts between Postal Service employees and  
5 officials from South Carolina with respect to the page  
6 of his cross-examination exhibit about the South  
7 Carolina press release. Do you recall that?

8 A Yes, I do.

9 Q Have you had any additional information  
10 imparted to you regarding contacts between the Postal  
11 Service and people from South Carolina?

12 A Yes. I've become aware of a telephone  
13 conversation initiated from an official from the South  
14 Carolina Court systems to the USPS attorney's office  
15 to discuss the EPM.

16 Q Also, with respect to that cross-examination  
17 exhibit would you please turn to page 8?

18 A Okay. I have it.

19 Q My recollection of your conversation of Mr.  
20 Borgers at this point went along the lines of  
21 questions from him as to who sent the document in  
22 question and your response was that it was sent by  
23 him. Again, my recollection of his question or his  
24 statement was that he doesn't see his email address on  
25 the document. Again, the record will speak for itself

1 as to what he actually said.

2 Do you see his email address on page 8 of  
3 the cross-examination exhibit?

4 A Yes, I do.

5 Q Where is that?

6 A It is in the first paragraph which it starts  
7 with attached please find. The last sentence says  
8 document sent from: Rick Borgers, and then has his  
9 email at rick.borgers@digistamp.com with a request for  
10 a return receipt.

11 Q There was quite a bit of discussion this  
12 morning about the Microsoft Windows application. Is  
13 that the only way to use the USPS EPM?

14 A No. In fact it is only used in less than  
15 one-half of one percent of all EPMs.

16 Q Before the Microsoft application was  
17 available and even before the alliance with  
18 Authentidate were there nonweb-based methods of using  
19 EPM?

20 A Yes. There were and there are server-based  
21 applications for the EPM which originates all the EPM  
22 volume or nearly all the EPM volume.

23 Q Are those server-based methods still  
24 available?

25 A Yes, they are.

1           Q     You also had an early protracted discussion  
2 with Mr. Borgers about the medical device company.  
3 That's discussed on page 11 of your testimony,  
4 correct?

5           A     Yes.

6           Q     Could you turn to that page of your  
7 testimony, page 11?

8           A     Okay. I have it.

9           Q     On line 17 what did you mean by the term  
10 compliance process?

11          A     This customer utilizes the USPS EPM as part  
12 of their business process and as part of that it's to  
13 meet third-party governmental audit requirements so  
14 that they can go back and check the validity of these  
15 documents.

16               MR. KOETTING: That's all we have,  
17 Commissioner Hammond. Thank you.

18               COMMISSIONER HAMMOND: Thank you, Mr.  
19 Koetting.

20               If there are no other re-cross then, Mr.  
21 Foti, that would complete your questioning here --

22               MR. BORGERS: Could I ask one question?

23               COMMISSIONER HAMMOND: Yes, Mr. Borgers.  
24 Please.

25     //

## 1 RE-CROSS-EXAMINATION

2 BY MR. BORGERS:

3 Q Please, this notion that this Microsoft  
4 Office plug in that we download from the USPS EPM  
5 website, whether it's the only way, the question is if  
6 I'm your average member of the general public not a  
7 software developer and I go to the USPS EPM website is  
8 this in fact the only way that I can use this service?

9 A There are other providers of the USPS EPM  
10 that customers could gain access to through partners,  
11 through software developers who develop solutions  
12 using the USPS EPM.

13 Q For the average general customer that comes  
14 to the U.S. Postal Service website, USPS EPM, this is  
15 the only way they could use the service?

16 A Certainly if they're coming to the USPS EP  
17 website that's the only way.

18 MR. BORGERS: Very good. Thank you.

19 COMMISSIONER HAMMOND: Thank you, Mr.  
20 Borgers.

21 MR. KOETTING: To follow-up on that,  
22 Commissioner Hammond, if I may?

23 COMMISSIONER HAMMOND: Yes, sir, Mr.  
24 Koetting.

25 //



1 all achieve the same functionality as the Microsoft  
2 Word plug in, communicating documents?

3 A Again, the entire application that the USPS  
4 is one component of may do that.

5 Q Okay. We refer to the send from, back to  
6 page 8, as was brought up again it has an attachment  
7 which is a Microsoft Word document. Is it not true  
8 that Microsoft Word document was sent to this party  
9 via a computer at the U.S. Postal Service?

10 A As part of the Microsoft Word extension the  
11 encrypted document travelled through a USPS server.

12 Q Very good. This is much like a piece of  
13 mail that I put my return address on and it gets to  
14 the recipient, the addressee. Yes, you can see who  
15 addressed the envelope, but in fact the Postal Service  
16 delivered the Microsoft Word document. Is that not  
17 true?

18 A The Postal Service authenticated the  
19 document. It was provided through another service  
20 provider.

21 Q Okay. The document is an attachment on an  
22 email that came from a computer at the U.S. Postal  
23 Service Data Center. Effectively did not you, the  
24 Postal Service, deliver this Microsoft Word document  
25 as an attachment on an email from the Postal Service?

1           A     We did not deliver any document.

2           Q     The document came from a computer at the  
3 Postal Service. That was the step before it got here.

4           A     It travelled to some sort of transport. We  
5 do not deliver the document.

6           MR. BORGERS: I don't know how to make that  
7 any clearer, so I will stop at that point.

8           COMMISSIONER HAMMOND: Thank you, Mr.  
9 Borgers.

10          Ms. Dreifuss, do you have any re-cross?

11          MS. DREIFUSS: No, thank you, Commissioner  
12 Hammond.

13          COMMISSIONER HAMMOND: All right. Thank  
14 you.

15          Then, Mr. Foti, that completes your  
16 testimony here today. We appreciate your appearance  
17 and your contribution to the record.

18          (Witness excused.)

19          COMMISSIONER HAMMOND: The procedural  
20 schedule established in Presiding Officer's Ruling 2  
21 provides that participants intending to submit  
22 rebuttal testimony should notify the Commission by  
23 August 17. That will conclude today's hearing, and we  
24 are adjourned. Thank you.

25         //

1                   (Whereupon, at 12:56 p.m., the hearing in  
2   the above-entitled matter was concluded.)  
3    //  
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REPORTER'S CERTIFICATE

DOCKET NO.: C2004-2  
CASE TITLE: Electronic Postmark Complaint  
HEARING DATE: 8/15/06  
LOCATION: Washington DC

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the *Postal Rate Commission*

Date: 8/15/06

Bernadette J. Hoban

Official Reporter  
Heritage Reporting Corporation  
Suite 600  
1220 L Street, N.W.  
Washington, D.C. 20005-4018