

BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON, D.C. 20268-0001

EVOLUTIONARY NETWORK DEVELOPMENT  
SERVICE CHANGES, 2006

Docket No. N2006-1

REVISED RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO OCA INTERROGATORIES OCA/USPS-T1-6, 12(a,b,d) AND 13(d)  
(July 17, 2006) [ERRATA]

The United States Postal Service hereby submits corrections to the following responses of witness Pranab Shah to interrogatories of the Office of the Consumer Advocate:

OCA/USPS-T1-6 and 12(a,b,d) – originally filed on March 30, 2006;

OCA/USPS-T1-13 (d) -- originally filed on June 6, 2006.

In the last interrogatory, the word “process” replaces the word “models”. Otherwise, the revisions correct typographical errors in the responses. The revised responses supersede the original responses.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE**

**Revised: July 17, 2006**

**OCA/USPS-T1-6**

At page 2 of your testimony, you refer to the mail distribution system as a “series of overlapping, single-product networks.” Please list each distinct single-product network to which you refer.

**RESPONSE:**

Please refer to the Figure 2 Key/Legend, which describe each of these product specific network linkages. If necessary, refer to an electronic version of the testimony which contains a color copy of the chart.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE  
Revised: July 17, 2006**

**OCA/USPS-T1-12**

Please explain how the facilities and network identified in Figure 2 of your testimony, page 5, relate to your testimony on page 2, lines 13 through page 3, line 5.

- a. Please identify overlapping, single product networks and how they would be consolidated or eliminated.
- b. Please identify excess capacity in Figure 2, as could be inferred from the discussion in lines 16 through 19 of page 2 of your testimony.
- c. In simplifying the network, how many studies, simulations, or analyses would be necessary? Also provide specific details as to types of studies, possible content, and techniques.
- d. Please explain how the network could be expected to be structured after performance and implementation of studies discussed in (c).
- e. What would be the expected cost reduction from the implementation of the recommendations of an END or other study or studies performed on the network in Figure 2?

**RESPONSE:**

The mail processing and transportation infrastructure illustrated in Figure 2 is an example of how the mail distribution system has developed over the past several decades in a portion of the country. Some facilities have single-product responsibilities, some facilities have specialized network responsibilities.

- a) Figure 2 is an illustration of current network redundancies created by overlapping single-product networks. It is color-coded to show the overlapping class-based inter-facility mailflows and transportation networks. The END model may be used to help develop a different network configuration for analysis under the AMP process, which could assign different roles to existing processing and transportation facilities, in order to eliminate redundancies. The result could be more sharing of

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE  
Revised: July 17, 2006**

**Response to OCA/USPS-T1-12 (continued)**

- transportation by different mail classes and a greater emphasis on shape-based processing.
- b) Please refer to the response to subpart (a). It might be determined, for example, that the originating operations among a cluster of facilities, such as those depicted in the illustration, could be performed at fewer locations, utilizing less equipment and fewer workhours. As a result, operations could be relocated and equipment and/or personnel could be moved from one facility to another.
- c) The scope of network modeling and simulation is dependent on a number of specific factors such as complexity of the problem to be solved, availability of data, and objective functions. The END effort has used state of the art operations research, tools, and techniques, both in the form of Optimization and Simulation modeling. When all is said and done, the END model could be used to generate many thousands of simulations as various scenarios are considered for hundreds of AMP feasibility studies. I am aware that each AMP study goes through several levels of internal review before a final decision is made and that, after implementation, there are several rounds of post-implementation review.
- d) One could expect to see somewhere in the neighborhood of 70 Regional Distribution Centers, each connected to its own cluster of some or most of the other facility types identified in Figure 3.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE**

**Revised: July 17, 2006**

**Response to OCA/USPS-T1-12 (continued)**

- e) Cost savings from changes to the network are quantified as part of individual AMP study. It cannot currently be estimated what savings estimates will emerge from each of the numerous upcoming studies. Estimates can be expected to vary from AMP study to AMP study, based upon local variables.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE  
Revised: July 17, 2006**

**OCA/USPS-T1-13.** In your discussion of the Evolutionary Network Development (END) model, you mention the model as using “computer simulations as a tool in the development of more efficient and flexible mail processing and transportation networks that are better suited to current and future postal needs”. At page 7, lines 6-8.

- a. Please describe the types of equipment, facility, and processing changes or modifications which you view as necessary to obtain “more efficiency and flexible mail processing and transportation....” in implementing the results of a restructuring study.
- b. Please furnish a case study of the application of the model, including computer inputs, outputs, assumptions, and conclusions.
- c. Please furnish the model and any instructions necessary to duplicate the work identified in (b) of this question.
- d. Please explain the effects, if any, on service standards.

**RESPONSE:**

- (a) The END project leverages the existing and planned capabilities of automation technology to achieve better economies of scale for the postal mail processing and transportation network. Where necessary, the END models recommend the need to invest in new facility infrastructure based on future network requirements.
- (b) Please review the case study reflected in the last several slides in USPS Library Reference N2006-1/9.
- (c) A detailed description of the simulation model inputs was provided in response to Question 15 of Presiding Officer’s Information Request No. 2. A detailed description of how they are utilized is reflected in USPS Library Reference No. N2006-1/9.

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS SHAH  
TO INTERROGATORY OF OFFICE OF CONSUMER ADVOCATE  
Revised: July 17, 2006**

**RESPONSE TO OCA/USPS-13 (continued):**

- (d) The END process attempts to maintain existing service standards to the greatest extent possible; however, there will be instances where the model will recommend changing current service standards to achieve an optimal network national solution. Any such changes to existing services standards are evaluated as part of individual AMPs.