The Remail Decision Process

The ABA and ABC remail decision processes are described and depicted below in the Flowcharts of the ABA and ABC Remail Decision Process

**ABA Remail Decision Process**
In order for ABA remail to be an attractive option for domestic mailers there needs to be a sufficient rate differential to justify the
- added logistical complications,
- potentially degraded service,
- questionable legality, and the financial consequences and risk of detection,
and
- possible negative perceptions by recipients.

Under the provisions of Article 43 and under the definition of domestic mailers in the USPS regulation under section 780 of the International Mail Manual, if remail were always detected the financial incentive for ABA remail would be nonexistent. This is because the US Postal Service has the option under this article to require the payment of domestic postage, assessed based on First-Class single piece rates (since the inbound letter post mail stream is processed as First-Class Single Piece mail). This rate adjustment would negate the postage arbitrage gaps by requiring domestic postage. As described later in this Appendix, mailer remail costs also include non-postage-related components. Thus if the UPU domestic postage adjustment for detected remail is applied, the cost of detected remail would be higher than if the mailing had simply been entered as domestic mail. This difference could be even greater if the remailing could have qualified for lower rates under a domestic worksharing mail category (for example as First-Class automation mail). Thus, with Article 43 provisions in effect, ABA can only be attractive if detection risks are small.

Figure 1 provides a flowchart that will be the basis for a more detailed discussion of the ABA remailing alternatives. This flowchart focuses on the financial elements of the decision process, and includes the various non-financial considerations under the “intangible” category.

The ABA flowchart illustrates four possible mail flows relevant to this discussion:
1. Conventional domestic mail entered under an appropriate domestic rate schedule,
Figure 1. Flowchart of the ABA Remail Decision Process

ABA Remail Decision Process

- **Domestic Mail**
  - Design Mail Piece
    - Printing Costs in US
      - Mail Makeup & Worksharing Costs for US Domestic Entry
        - US Domestic Postage Rates
          - Total Costs of US Domestic Rates
            - Risk-Adjusted TD Costs per UPU A.43
              - Financial Costs of Physical Re-Mailing in US $
                - Intangible Costs of Remailing
                  - Financial Savings vs. Intangible Cost Tradeoff Above Threshold?
                    - No
                      - Use US Domestic Rates
                    - Yes
                      - ABA Remail of Physical Mail Piece

- **Physical Remail**
  - Design Mail Piece
    - Printing Costs in US
      - Transportation Costs from US to Foreign Country
        - Terminal Dues Country B to US + Access Fee
          - Transportation Costs from Foreign Country to US
            - Risk-Adjusted TD Costs per UPU A.43
              - Financial Costs of Physical Re-Mailing in US $
                - Intangible Costs of Remailing
                  - Financial Savings vs. Intangible Cost Tradeoff Above Threshold?
                    - No
                      - ABA Remail of Physical Mail Piece
                    - Yes
                      - ABA Remail of Virtual Mail Piece

- **Virtual Remail**
  - Design Mail Piece
    - Printing Costs in US
      - Incremental Domestic Transportation Costs
        - Terminal Dues Country B to US + Access Fee
          - Transportation Costs from Foreign Country to US
            - Risk-Adjusted TD Costs per UPU A.43
              - Financial Costs of Virtual Re-Mailing in US $
                - Intangible Costs of Remailing
                  - Financial Savings vs. Intangible Cost Tradeoff Above Threshold?
                    - No
                      - ABA Remail of Virtual Mail Piece
                    - Yes
                      - ABA Remail of Electronic Mail

- **Electronic Remail**
  - Design Mail Piece
    - Printing Costs in Foreign Country
      - Exchange Rates US$ → Foreign Currency
        - Transportation Costs from Foreign Country to US
          - Risk-Adjusted TD Costs per UPU A.43
            - Financial Costs of Electronic Re-Mailing in US $
              - Intangible Costs of Remailing
                - Financial Savings vs. Intangible Cost Tradeoff Above Threshold?
                  - No
                    - ABA Remail of Electronic Mail
                  - Yes
                    - ABA Remail of Electronic Mail
ABA physical remail – mail produced in the US, transported out of country and then re-entered as inbound international letter post under foreign (“B” country) indicia,

3. ABA virtual remail – mail produced in the US and entered into the USPS mailstream as inbound international mail, and

4. ABA electronic remail (also called non-physical remail) – mail not printed in the US, but instead possibly prepared (designed and stored in electronic format) in the US, printed in a foreign country, and posted to the US as inbound foreign origin mail.

The flowchart classifies various aspects of mailing costs and non-financial considerations into categories represented by a color-coding scheme. Financial considerations include:

- postage rates, either domestic or terminal dues – a function of the average weight for the given type of mailing (e.g., catalogs versus letters, gray-shaded),
- an “access fee” (described below) for accessing the terminal dues system through a foreign country (included in the terminal dues boxes, gray-shaded),
- preparation and printing costs for the mailing including any mail makeup costs for accessing US domestic worksharing mail discounts (green-shaded),
- international transportation costs from (physical and electronic remail) and possibly to (physical remail only) the foreign posting location (yellow-shaded), and
- risk-adjusted detection cost liability (described below) requiring domestic postage payment under Article 43 (blue-shaded).

Non-financial considerations include:

- mail characteristics (e.g., average weight per piece, value of message, urgency),
- change in delivery time,
- degree of uncertainty or variability in delivery time,
- perception of foreign indicia as indicative of inferior or suspicious products, and
- loss of domestic drop shipping options,
- loss of address correction and undeliverable-as-addressed capabilities,
- reduction in the number of designated entry points and
- reduction in mailpiece quality

These considerations are discussed in greater detail immediately below.

ABA Remail Financial Considerations

Pure Arbitrage Gap - Postage Rates and Terminal Dues
The driving factor behind ABA remailing is the arbitrage gap between domestic rates and terminal dues. Schematically this aspect of the decision is represented in the gray-shaded boxes on the flowchart. When domestic rates are sufficiently high relative to the corresponding terminal dues payments as inbound international mail, a potential economic incentive for remailing exists. This is only one of the dimensions to the considerations, but in the absence of such a gap, remailing is not financially attractive. Based on the current UPU rates for compensating the US, an examination of which classes of US domestic mail and for which weight steps remail is potentially financially viable is discussed in Section 3 of the Final Report.

Other costs (Access Fees, Preparation and Printing Costs and International Transportation Costs)

Access Fees for Foreign Posting

The “access fee” term included in the gray-shaded boxes representing terminal dues for foreign origin mail is a fee that serves as an inducement for the foreign administration to post remail for the sender. This is not assumed to be the same as foreign postage rates in Country B, but instead represents a payment that allows the remailer direct access to terminal dues rates. The access fee could either be a fixed charge, a percentage markup term or some other combination of charges and fees.

If Article 43 were eliminated, remail options could be offered without being stigmatized as a “remail center” or without any risk of being assessed higher rates if detected. In such a scenario, it is likely that numerous DCs would find it profitable to offer remailing options. The “access fee” concept merely refers to the costs over and above terminal dues that would be assessed by DC postal administrations. The cost to the DCs of offering remail would be the terminal dues rates for the mailing, administrative costs of processing the mail, and international transportation costs depending on the arrangements with the remailer (included as a separate item on the flowchart and discussed later). There would also be a revenue “float” benefit from remail to the DC postal administration since settlement costs are only paid with a considerable lag, up to approximately two years after the mailing occurs (presumably costs will be collected for the remail at the time of mailing). Since remail could generate additional revenue for DC postal administrations at little added cost, competitive forces would likely keep the access fees close to administrative costs. If the DC postal administration also provides international transportation services these costs would also be included in

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1 Industrialized countries might also participate in remail, but for lighter weight mail the developing countries have a more favorable arbitrage gap (see Section 3 – Final Report). The discussion in Section 3 highlights developing countries, for ease of exposition.
the charges for remail. In this discussion and as illustrated on the flowchart, the access fee is grouped with terminal dues charges and any added transportation costs are considered separately.

**Preparation and Printing Costs**

Remail can either be prepared in the US and shipped abroad to be returned via the international mail stream (physical remail) or printed abroad and then posted to the US (electronic remail).\(^2\) The extent that foreign printing costs differ from domestic printing costs is another element of the financial impact of remailing. If foreign printing costs are lower than in the US, then an enhanced incentive to this category of remail exists.\(^3\)

**International Transportation Costs**

The necessity to transport mail from an international location adds expense to remail (with the exception of virtual remail which never leaves the US). Depending on the location of the foreign administration and the mode of transportation, these costs can range from small to significant and are an important component of the financial aspects of the remailing decision. The provider of international transportation services could be either the postal administration through which the remailing occurs, or an international freight transporter. These costs will be considered later in the study.

**Risk Adjusted Detection Costs**

Article 43 provides postage adjustments for detected ABA remail. This article allows the USPS to assess First-Class rates for any remail that is identified by screening systems in the US. Given the extra costs of international transportation, detected remail will be more costly to the sender than domestically entered mail (ignoring changes in mail production costs). High rates of detection would likely serve to eliminate the attractiveness of this option, especially if the mail would have readily qualified for USPS worksharing discounts.

A highly simplified illustration can be made by assuming that international transportation costs for a 1-ounce item are 2.8 cents per piece and that the access fee (assumed to be 5% of terminal dues) is 0.7 cents. From a developing country, terminal dues cost for a piece weighing 1 ounce is 13 cents. The total costs for this hypothetical item entered as international

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\(^2\) Equivalent to electronic remail would be the case where a US company had a foreign printing operation in Country B.

\(^3\) Even if part of the remailing incentive were driven by lower printing costs in the posting country, printing costs alone may be insufficient to justify foreign posting. Printing could be accomplished in Mexico facilitated by NAFTA and ready access to Mexico is available with border operations in close proximity to US entry locations for domestic mail (e.g., San Diego, El Paso).
mail are 16.5 cents. USPS First-Class single piece postage is 34 cents, and it is assumed that this is the rate that would be assessed if detected as remail (since this is the service provided by the USPS). Thus, with the access fee and transportation costs, detected remail cost would be 37.5 cents. If the remailed piece would have qualified for the First-Class Automation Basic rate, the US domestic postage would have been 27.8 cents. Thus, if detected, the remail would be liable for increased postage of 9.7 cents. If undetected, the savings are 11.3 cents (27.8 – 16.5).

If the probability of detection is zero, remail entails a savings of 11.3 cents per item for the above example, nearly half of the domestic postage of 27.8. If the probability of detection is 50%, the expected postage cost is 50%*16.5 + 50%*37.5 = 27.0 cents, for a per item savings of only 0.8 cents. If detection risks are 54%, the risk-adjusted savings are zero. For higher detection rates, the risk adjusted “savings” become a loss to the mailer (i.e., the expected costs are greater than domestic postage).

Non Financial Considerations

All of these considerations are represented together by the red-shaded boxes on the flowchart. They are briefly described here by way of an introduction, and are explicitly and quantitatively addressed in Section 4 of the Final Report.

Mail Characteristics

Mail characteristics are another component of the remail decision process. The propensity to post items as ABA remail is potentially dependent on mail content. Highly urgent financial documents might be less likely to be rerouted as ABA mail due to the inherent delays in remailing (relative to domestic First-Class service), increased risk of non-delivery, no notification for change of address, and further delays if detected as remail. Also the physical nature of the mail plays an important role – it will be shown that the ABA arbitrage gap varies greatly depending on average mail weight (see Section 3 – Final Report).

Comparative Service Levels - Delivery Time and Variability

**Delivery Time**

The time to delivery for remail will normally be longer than for First-Class domestic mail due to handling by two independent postal administrations, additional transportation segments, and the acceptance processing of inbound international mail. However, the

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4 Under Article 43, the remailer has the option of “abandoning” the mail. Under this option, the domestic postage charges would be avoided, but there may be an additional fee for redirection or disposal.
reverse may be true for Standard A remail. Standard A inbound international remail would receive First-Class treatment when it enters the US mail stream. Therefore taking into consideration the significant difference in domestic service standards between First-Class and Standard A mail it is conceivable that the delivery times for Standard A remail may be shorter than the same mail posted as domestic mail into the US mail stream.

Variability in Delivery Time
The three factors identified as contributors to increased delivery time also cause there to be less certainty as to the total time required from posting to ultimate delivery. That is, potential delays occur at every step in the process. Since several new steps are added to those required for processing and delivering domestic mail, the end result is increased variability (or variance) in the time to delivery relative to domestic First-Class service. However, in the case of virtual ABA remail, tight control of the entry into the domestic mail stream combined with subsequent treatment as First-Class mail may offer potential reductions in delivery variability relative to Standard Mail.

Perception of Foreign Indicia
Another attribute of ABA remail is that mail that would normally travel under a US Postal Service indicia would travel under foreign indicia. This feature may be taken as a quality or credibility signal by the recipient and affect his or her response to such mail, and in turn the viability of certain remailing operations.

Loss of Domestic Drop Shipping Options
Domestic dropship alternatives have a positive impact on delivery times and in some cases may accrue cost savings to the mailer. The use of ABA remail precludes the use of domestic dropship options and thereby may have a negative impact on, delivery times, the variability of delivery times and costs.

Reduction in the Number of Designated Entry Points
ABA remail enters the US as part of the international mailstream, therefore the entry points into the US mailstream are restricted to a total of 14. In contrast domestic mail can be rated and entered at hundreds of acceptance points based on its make-up and level of sortation. The loss of loss of a large number of domestic entry points may have a significant impact on delivery times and
therefore may negatively impact a mailers propensity to engage in ABA remail.

Reduction in Mailpiece Quality

Remail can either be prepared in the US and shipped abroad to be returned via the international mail stream (physical remail) or printed abroad and then posted to the US (electronic remail). The extent that foreign printing costs differ from domestic printing costs is an element of the financial impact of remailing. However, even if the costs of preparation and printing are lower in a foreign country there may be problems with: the quality of the printing technology and paper used in foreign printing operations; the dimensions of the address area; and the lack of automation compatibility standards. Further, there may be general quality control and management control issues that reduce the impact of printing cost savings.

These quality control failures may have an impact on service, costs and the mail recipient’s acceptance of the mailpiece, thereby having a negative impact on mailer behavior.

Loss of Address correction and Undeliverable-as-Addressed Capabilities

ABA remail is not accorded the same treatment as domestic mail in terms of address correction and mail that is undeliverable-as-addressed. The loss of these services may have a negative impact on service levels and cost and as a result dampen the use of ABA remail as an alternative for domestic mail.

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5 Equivalent to electronic remail would be the case where a US company had a foreign printing operation in Country B.
**ABC Remail Decision Process**

ABC remail arbitrage opportunities are created based on the differential between an industrialized country’s terminal dues rates and a developing country’s terminal dues rates. As will be shown in Section 3 of the Final Report, neither country classification enjoys rate advantages over the entire range of letter post weights. By design, the industrialized country rate is more expensive for the lightest items, because of the item-based component of the rate. For a mailer residing in an industrialized country, lighter weight mailings are potential candidates for ABC remail through a developing country. Conversely, for a mailer residing in a developing country, heavier weight items become attractive for remailing through an industrialized country.

Several considerations are modified from their ABA remailing counterparts. There is no longer a direct comparison with domestic postage (domestic postage rates will enter only into the risk-adjusted costs, since up to 80% of the domestic tariff can be assessed). The issue of foreign indicia is a moot point, since regardless of routing, the mail will carry a foreign indicia (although there might be certain indicia more preferred than others).

The ABC flowchart (Figure 2) illustrates four possible mail flows relevant to the discussion of this type of remail:

1. Conventional international mail entered via a direct flow from the sender’s country of residence to the US,
2. ABC physical remail – mail produced in Country A and transported abroad (to Country B) and then re-entered as international mail to the US under Country B’s indicia,
3. ABC electronic remail (also called non-physical remail) – mail not printed in Country A, but instead possibly prepared (designed and stored in electronic format) in Country A, then printed in Country B and posted to the US under Country B’s indicia, and
4. ABC virtual remail
   a) mail produced in Country A with the international indicia of Country B and then routed from Country A to Country C, or
   b) mail produced in Country C with the international indicia of Country B, but entered into Country C’s international mail stream without ever crossing the border.

Note in the ABC flowchart all costs are assumed to be unitized in “country A” costs for ease of exposition. As for ABA remail the flowchart highlights the components comprising the financial considerations that include:

- terminal dues differentials between developing and industrialized countries (gray-shaded),
- access fee for accessing terminal dues system through a foreign country (gray-shaded),
• possibly increased international transportation costs due to altered routing (yellow-shaded),
• for electronic remail printing costs in foreign posting country versus resident country (green-shaded), and risk-adjusted liability for 80% of domestic postage, or revision mechanism-based payments, whichever is greater (blue-shaded).

The intangible costs and considerations (red-shaded) include:
• mail characteristics,
• increased delivery time depending on printing location,
• increased variance in delivery time depending on printing location, and
• greater risk of mail loss / more complicated tracking of mail.

ABC Remail Financial Considerations

Pure Arbitrage Gap - Differential Terminal Dues Depending Upon Country of Posting

The driving factor behind ABC remailing is the existence of arbitrage gaps in terminal dues payments to the US between country A and country B. In the context of the UPU, the primary differential is the distinction between industrialized country and developing country. The arbitrage gaps will be described in more detail in the ABC Arbitrage Opportunities section, below. The terminal dues arbitrage aspect of the remail decision is represented once again by the gray-shaded boxes on the flowchart. When an arbitrage gap occurs, a potential economic incentive for remailing exists.

Other costs ( Access Fees, Preparation and Printing Costs and International Transportation Costs

Access Fees for Foreign Posting

As for ABA, the access fee term included in the gray-shaded boxes representing terminal dues for foreign origin mail is a fee that serves as an inducement for the foreign administration to post remail for the sender. The rationale for this fee is the same as for ABA remail as described above.

Preparation and Printing Costs

Remail can either be prepared in the resident country (A) and shipped abroad (to country B) to be posted to the US (physical remail) or ABC remail can be printed in country B and then posted directly to the US (electronic remail). The extent that country B printing costs differ from domestic (country A) printing costs is as
before another component of the financial impact of remailing. For virtual remail, printing may also occur in Country C (denoted by the box with dashed border for this component).

International Transportation Costs

The necessity for indirect routing is one of the features of ABC physical remail. The cost impact of any rerouting depends upon the geographic locations of the three countries. In general, routing distances increase and terminal transfer fees apply. ABC electronic remail may actually incur reduced transportation costs depending again on the locations of Countries A and B relative to Country C. For virtual remail, transportation costs to Country A would be avoided if the mail were prepared in Country C instead of Country A (denoted by the transportation box with dashed border in Figure 2).
Figure 2. Flowchart of the ABC Remail Decision Process

ABC Remail Decision Process

Conventional International

A-C Virtual Remail

ABC Physical Remail

ABC Electronic Remail

Design Mail Piece

Design Mail Piece

Design Mail Piece

Design Mail Piece

Printing Costs in Country A

Printing Costs in Country A

Printing Costs in Country A

Printing Costs in Country A

Terminal Dues Country A to US

Terminal Dues Country B to US + Access Fee

Terminal Dues Country B to US + Access Fee

Terminal Dues Country B to US + Access Fee

Transportation Costs from Country A to Country B

Risk-Adjusted TD Costs per UPU A.43

Risk-Adjusted TD Costs per UPU A.43

Risk-Adjusted TD Costs per UPU A.43

Financial Costs of Direct Routing Country A to US

Financial Costs of Virtual Remailing Country A to US

Financial Costs of Physical Re-mailing

Intangible Costs of Remailing

Intangible Costs of Remailing

Intangible Costs of Remailing

Financial Savings vs. Intangible Cost Tradeoff Above Threshold?

No

Use Conventional Routing

Yes

Use A-C Virtual Remail

Use ABC Physical Remail

Use ABC Remail
Risk-Adjusted Detection Costs for ABC

Article 43 provides for cost adjustments to terminal dues for ABC remail. It allows the US to assess the higher of the following two calculations:

- 80% of the domestic rates for equivalent items (i.e., First-Class rates)
- a charge of 0.14 SDR per piece plus 1.0 SDR per kilogram

It should be noted that the latter charge is lower than IC terminal dues payable to the US across all weight steps. For lighter-weight ABC remail posted through a developing country, the revision mechanism provides higher rates through approximately the first two ounces than under unadjusted DC terminal dues. However, the 80% provision will provide the highest compensation and represent a severe financial disincentive to ABC remail.\(^6\) Given the extra costs of international transportation, detected ABC remail will be more costly to the sender than conventional international mail. So for lighter weight remail through developing countries, as for the ABA case, high rates of detection would likely serve to eliminate the attractiveness of this mode of remail under the provisions of Article 43.

For heavier-weight ABC remail the additional postage costs that can be assessed under Article 43 are inadequate to eliminate the arbitrage gap between developing country rates and industrialized country rates. After a weight of 24 ounces, a developing country remailing heavier items though an IC into the US would actually still pay less than its home country terminal dues under the Article 43 even with the adjusted costs allowed for remail. Thus Article 43 offers only a reduction in the arbitrage gap for heavier weight mail. Given the high average weight where this anomaly occurs for the US, there may not be a large revenue risk, but this point will be

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\(^6\) For ABA remail, the financial adjustment is merely the rate that it would have paid had it been posted in accordance with Article 43 (ignoring worksharing discounts that the remailer might have otherwise qualified for if prepared for domestic entry). For light weight ABC remail, the 80% compensation adjustment is higher than the industrialized country terminal dues rate for the US – presumably the rate that it would have been posted under had it not been ABC remail.
investigated more fully as more of the considerations of remail decisions are developed, and as billing determinant data are reviewed.

Non-Financial Considerations

Mail Characteristics

Mail characteristics are another component of the ABC remail decision process. As for ABA remail mail content may affect the propensity for ABC remail. Similarly, the physical nature of the mail plays an important role – if it is lightweight mail, then remailing through developing countries is attractive, the reverse is true for heavy weight mail.

Delivery Time

The time to delivery for physical remail will normally be longer than for similar conventional international mail due to handling by an additional postal administration, the additional and possibly indirect (or circuitous) transportation segment to country B, and the acceptance in country B for posting. For ABC electronic remail, delivery time may not be degraded, and could conceivably be quicker depending on the location and circumstances in Country B. For virtual ABC remail, delivery time would probably be quicker than for conventional international or other forms of ABC remail.

Variability in Delivery Time

The three factors identified as contributors to increased delivery time also cause there to be less certainty as to the total time required from posting to ultimate delivery. That is, potential delays occur at every step in the process. Since several new steps are added to those required for processing and delivering domestic mail, the end result is increased variability (or variance) in the time to delivery relative to conventional direct international mail. However, the virtual remail configurations offer the potential for reduction in delivery time variability if managed efficiently.

Mail Tracking

The addition of the country B postal operator and for physical ABC remail, an extra international transportation segment to ABC mail flows, means that any form of tracking will be more difficult.