# VISA

# *Welcome to*

## *VisaNet Settlement Service (VSS) User's Guide, Volume 1, Specifications*

The updated *VisaNet Settlement Service (VSS) User's Guide, Volume 1, Specifications* (Document ID 2403-05), is the first volume of a two-volume set of books for Visa members currently using VSS and for new Visa members. This guide does not include references to either the BASE II Settlement Service, or the SMS Settlement Service. This version has not been updated to include changes to VSS reports or the tables included in this document.

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Effective:   1 October 2004

# VisaNet Settlement Service (VSS) User's Guide

**Volume 1, Specifications**

*Effective: 1 October 2004*

2403-05

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# About This Guide

The VisaNet Settlement Service (VSS) is the settlement service of the Single Message System (SMS), including Interlink, and the BASE II System.

VSS provides flexibility in defining financial relationships, selecting reports and report destinations, and establishing funds transfer points.

## Purpose

The purpose of the *VisaNet Settlement Service (VSS) User's Guide* is to provide existing Visa members, new members, and their processors the information they need to use VSS and to define VSS options and parameters.

## Audience

This document is intended for a variety of audiences. It should be read by business managers and technical and operations staff at member and processor sites. The information provided is applicable to SMS- and BASE II-connected members worldwide.

# Organization

The *VisaNet Settlement Service (VSS) User's Guide* is divided into two volumes.

## Volume 1

Volume 1 contains 10 major sections as described in Table 1.

**Table 1:   Volume 1 Content Description (1 of 2)**

| Chapter | Title | Description |
|---------|-------|-------------|
| 1 | VSS Overview | This chapter provides members with an overview section describing VSS, including its features and functions. |
| 2 | VSS Settlement Concepts | This chapter defines for members the settlement reporting entities and VSS settlement hierarchies. |
| 3 | Settlement Processing Schedule | This chapter provides members with information on the daily VSS settlement schedule and optional services that allow for earlier settlement reporting. |
| 4 | Funds Transfer | This chapter describes for members the funds transfer process, including information on establishing a new funds transfer or changing an existing one. |
| 5 | VSS Reporting and Messages | This chapter provides information about VSS reports, including reporting terminology, features, fees and charges reporting, report formats and delivery, and a list of mandatory and recommended VSS reports. |
| 6 | SMS Reports and Raw Data | This chapter describes the SMS reports and raw data available to SMS members. |
| 7 | Reconciliation | This chapter provides the information that members and processors need to develop settlement reconciliation procedures. |
| 8 | Member Testing | This chapter describes the test planning and VSS testing available for members using the VisaNet Certification Management System (VCMS). |

**Table 1:   Volume 1 Content Description (2 of 2)**

| Chapter | Title | Description |
|---------|-------|-------------|
| 9 | Implementation | This chapter describes for members and processors the internal considerations necessary to implement VSS and provides information to assist them in defining their VSS requirements. |
| Glossary | Glossary | This section provides definitions of VSS-related terms. |

## Volume 2

Volume 2 of the *VisaNet Settlement Service User's Guide* contains five appendixes as described in .

**Table 2:   Volume 2 Content Description**

| Appendix | Title | Description |
|----------|-------|-------------|
| A | VSS Reports—<br>Print-Ready Formats | This appendix contains a sample of each VSS report and detailed field descriptions. |
| B | VSS Reports—<br>Machine-Readable Formats | This appendix contains machine-readable report formats for VSS reports. |
| C | VSS Codes | This appendix contains codes that are used in the machine-readable report formats. |
| D | SMS Reports and Raw Data | This appendix contains report layouts for SMS detail reports and record layouts for V.I.P. Raw Data Release 2.2 (VSS version). |
| E | VSS Business Transaction Types Cross-Reference | This appendix contains a cross-reference of current SMS—including Interlink (ILM)—and BASE II settlement reports to the VSS settlement reports. |

# VSS Overview 1

The VisaNet Settlement Service (VSS) provides settlement functions for the Single Message System (SMS), including Interlink, and the BASE II System. Members and processors receive settlement information in a standardized set of reports using common business-oriented terminology. VSS provides flexibility in defining financial relationships, selecting reports and report destinations, and establishing funds transfer points.

This chapter provides an overview of VSS. The overview includes the following:

- [Introduction](#introduction)

- [Settlement Services](#) [Features](#)

- [Summary](#)

## Introduction

Visa processes interchange transactions for SMS, including Interlink, and BASE II through separate systems. SMS and BASE II perform their own clearing functions and VSS performs the settlement functions for both SMS and BASE II. Clearing and settlement are defined as follows:

- Clearing is the process of collecting an individual transaction from one member or processor and delivering it to another.

- Settlement is the process of calculating and determining the net financial position of each member for all transactions that are cleared.

The VSS clearing and settlement process is shown in .

**Figure 1–1:    VisaNet Settlement Service (VSS) Process**
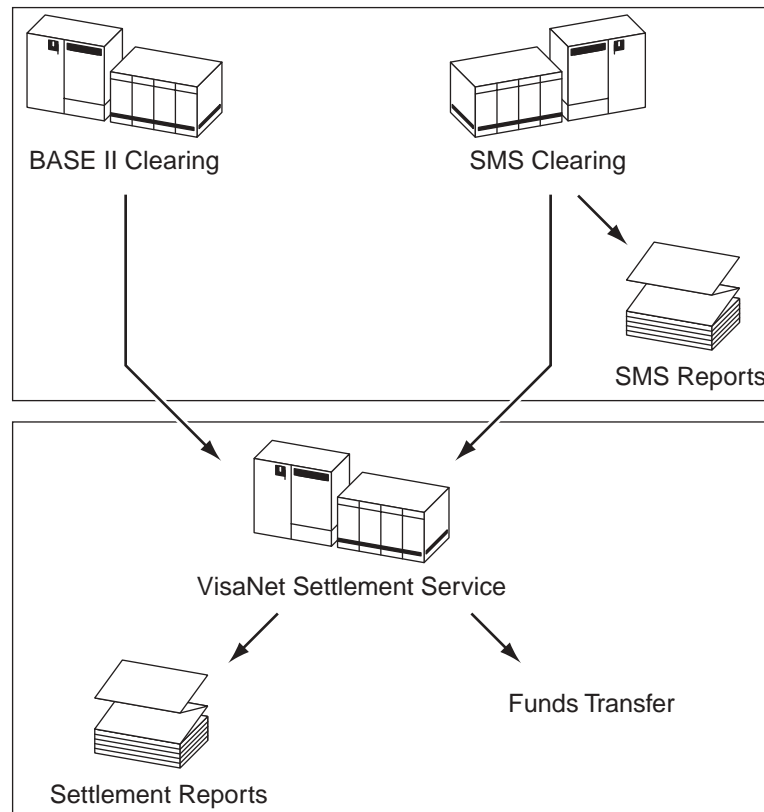


## Settlement Services

Visa offers two settlement services:

- International Settlement Service
- National Net Settlement Service (NNSS)

The International Settlement Service is used to settle all international transactions and domestic transactions for members that do not participate in an NNSS.

The NNSS allows members within a country to settle qualifying domestic transactions through a central settlement agent bank. Qualifying transactions are those for which the merchant, acquirer, and issuer are in the same country, and the transaction currency is the local currency for that country.

# Features

VSS provides members with the following features:

- Flexibility in establishing settlement relationships

- Standardized report layouts in print-ready and machine-readable formats

- Several report delivery options

- Member-defined funds transfer points

- Choice of settlement options for alternately-routed and split-routed transactions

- Ability to specify end-of-day cutoff times for all members participating in an NNSS

- Alternative report formats

## Settlement Relationships

VSS provides flexibility when defining settlement relationships.

Members can define from two to eight levels of settlement relationships. The different levels allow members to build and maintain the most appropriate settlement relationships for their business needs. For example, the settlement relationship levels can be used to reflect the products in a member's organization. With this flexibility, members can easily and efficiently manage settlement functions.

For an explanation on how settlement relationships are defined in VSS, see Chapter 2, VSS Settlement Concepts.

## Report Layouts and Formats

VSS reports provide a common layout for BASE II- and SMS-cleared members. This common layout allows all members to streamline their internal procedures.

All VSS reports are available in print-ready and machine-readable formats. To reflect the business needs of members, VSS reports use business-oriented terminology.

## Report Delivery

Members can have their reports sent to multiple locations of their choice, including locations other than their processing centers. Interchange routing does not determine the routing of settlement information.

**NOTE:** *Reports for BASE II-connected members must be sent to locations that are VisaNet Access Point (VAP)-connected.*

## Funds Transfer Point

The funds transfer point can be defined at any level in the settlement structure. This flexibility allows members using third-party processors to be responsible for their own funds transfer.

## Alternately-Routed and Split-Routed Transactions

Members can use an alternate processor, such as the BackOffice Adjustment System (BOAS), to collect and deliver (switching) selected transactions. This option is called alternate routing for SMS and split routing for BASE II.

Members can specify how they want to settle their alternately-routed or split-routed transactions. They can elect to settle these transactions with their normally-routed transactions or separately.

## National Settlement Cutoff Time

BASE II members that participate in an NNSS have the option to settle domestic activity at a time appropriate to their business day. This time can be different from the International Settlement Service cutoff time. To use this feature, all members participating in the particular NNSS must agree on a common settlement cutoff time.

**NOTE:** *SMS national settlement cutoff functionality is being developed for a future release of VSS. In the meantime, countries participating in an NNSS that elect to use national settlement cutoffs must process transactions involving SMS members through the International Settlement Service.*

# Summary

VSS provides benefits to members and processors, such as:

- A centralized settlement service that ensures consistency in settlement and reporting.

- Flexibility when defining financial and settlement relationships.

- The ability to define a funds transfer point at any level in the settlement structure. This flexibility allows members to establish funds transfers at points other than their processing centers.

- VSS reports that use common, business-oriented terminology and are easy to read and reconcile.

- Standardized report layouts.

- More control over settlement reporting and the ability to send reports to multiple locations.

- Reports in print-ready and machine-readable formats. Receiving reports in machine-readable formats allows members and processors to provide automated interfaces to internal systems and to automate their reconciliation process.

- For BASE II transactions, members in countries using an NNSS have the option of defining a local settlement end-of-day cutoff time that is appropriate for their business day.

# VSS Settlement Concepts 2

VisaNet Settlement Service (VSS) provides flexibility to members through the use of settlement reporting entities (SREs) and VSS settlement hierarchies. This chapter describes and defines SREs and settlement hierarchies. The following subjects are included:

- Settlement Reporting Entities (SREs)

- Settlement Hierarchies

- Considerations for Establishing SREs and Settlement Hierarchies

## Settlement Reporting Entities (SREs)

An SRE represents any business entity for which Visa performs settlement, provides settlement reporting, or both. Settlement reporting is available for every SRE. An SRE is identified by a unique 10-digit number (for example, 1000010205) that is assigned by Visa.

An SRE can represent a processing center, member, or any segment of a member's business, for example:

- Card product

- Issuer or acquirer business type

- Account ranges

- A combination of business entities or a summary of other SREs

- Funds transfer point

- Exception transactions

- Network affiliation, such as Plus or Visa

VSS maintains the following information for every SRE in a hierarchy:

- SRE number

- SRE name

- Reporting options

    – VSS reports selected

    – Report formats

    – Delivery endpoints

- Funds transfer specifications

## Types of SREs

The following SRE types are used to construct a VSS hierarch:

- Lowest-level—A lowest-level SRE is the lowest-level at which VSS produces settlement reports. A lowest-level SRE can be associated with a BASE II BIN, an account range or, for SMS to a BIN plus a network.

- Summary-level—A summary-level SRE is a consolidation of lower-level SREs directly linked to a summary-level SRE through the settlement hierarchy.

- Top SRE—A top-SRE is mandatory for each hierarchy and includes a set of parameters that applies to the entire hierarchy such as the settlement currency information.

- Funds Transfer SRE—The SRE or SREs within where funds transfers (movement of funds) take place.

### Funds Transfer SRE

Funds transfer can occur at any level of the hierarchy, lowest-level, summary-level or at the top-level of the hierarchy. When an SRE is established as funds transfer point, the SRE is often called the funds transfer SRE.

There can be from one to many Funds Transfers SREs in a hierarchy depending on the number of levels in the hierarchy and the business requirements that are supported by the hierarchy. The structure of funds transfers within a hierarchy must follow one rule: a funds transfer SRE cannot be directly linked to another funds transfer SRE, either above it or below it.

## Lowest-Level SREs

The following terms are used to help define a lowest-level SRE:

- **Clearing Entity**—The entity used by the clearing systems to determine processing rules. In BASE II, a clearing entity is a 6-digit Visa-assigned BIN or an International Organization for Standardisation (ISO)-assigned card range. In the Single Message System (SMS), a clearing entity is the 6-digit Visa-assigned BIN, which is the first six digits of the affiliate BIN. The clearing entity is always included in the definition of a lowest-level SRE.

- **Network**—For Visa and VisaNet a network is the telecommunications facilities used for message switching. In relation to other card programs, the network provides the product rules under which a transaction is processed. Examples of other card program networks are Plus and Interlink.

- **Settlement Service**—A settlement service directs transactions through either the Visa International Settlement Service, the most commonly-used settlement service, or through a National Net Settlement Service, a National Net or Area Net Settlement Service is used by participating countries to settle domestic transactions when the issuer, acquirer, and merchant are in the same location. Every member must participate in the International Settlement Service. The settlement service identifier is always included as part of the definition of a lowest-level SRE. All SREs within a settlement hierarchy must be for the same settlement service.

- **Processor**—A processor is a Visa endpoint that submits or receives transactions from SMS or BASE II. This endpoint is also referred to as a member processing center. The processor is always included in the definition of a lowest-level SRE and is used to differentiate transactions when a member uses multiple processors for processing its transactions. An example is when original transactions are processed through one processor, and exception transactions are processed by Visa's BackOffice Adjustment System (BOAS).

- **Transaction Currency**—When a transaction currency is included to define a lowest-level SRE, members can settle in different currencies without the need for a new BIN. Transactions in currencies that are not specified in an SRE will be settled in the default settlement currency of the member. Therefore, the member need not define a lowest-level SRE for all transaction currencies. This option applies to the International Settlement Service only.

The following are examples of how lowest-level SREs are defined in certain situations:

**EXAMPLE 1**

When an SMS-connected member does not participate in a
National Net Settlement Service, the lowest-level SRE is
defined by the affiliate BIN (which is a combination of the
clearing entity and network), the processor, and the
International Settlement Service.

**EXAMPLE 2**

When a BASE II-connected member does not participate in
a National Net Settlement Service, the lowest-level SRE is
defined by the clearing entity (BIN), the processor, and the
International Settlement Service.

**EXAMPLE 3**

When a member participates in a National Net Settlement
Service, two lowest-level SREs must be established for each
BIN. One SRE, for the National Net Settlement Service, is
defined by the clearing entity (BIN), the network (SMS
only), the processor, and the National Net Settlement
Service. The other SRE, for the International Settlement
Service, is defined by the clearing entity (BIN), the network
(SMS only), the processor, and the International
Settlement Service.

**EXAMPLE 4**

When a member has work processed by two different
processors, two lowest-level SREs must be established.
Both SREs are defined by the clearing entity, the network
(SMS only), the processor, and the settlement service. An
example of a member with work processed by two
processors is a member that uses a third-party processor to
handle its original interchange and its own processing
center to handle its backoffice transactions.

An issuing member that wants reporting by account type, brand, cardholder
type, or co-branding relationship must be set up as a lowest-level SRE with
the corresponding card range as the clearing entity. SMS members must
establish a BIN that corresponds to the card range.

# Considerations for Establishing SREs and Settlement Hierarchies

Members need to consider the following rules when establishing SREs and settlement hierarchies:

- Every member must participate in the International Settlement Service. An SRE must be established for every clearing entity in an International Settlement Service settlement hierarchy.

- A lowest-level SRE must be established for each clearing entity (BIN or card range in BASE II and affiliate BIN in SMS).

- All SREs within a settlement hierarchy must use the same settlement currency.

- Every member has the option to participate in a National Net and Area Net Settlement Service if they are available in the member's region.

- Separate settlement hierarchies with different SRE identifiers must be established for each settlement service.

- Settlement reporting for International Settlement Service transactions and National Net Settlement Service transactions cannot be consolidated.

- Every clearing entity must be associated with a funds transfer point. The funds transfer point can be either the lowest-level SRE or a summary-level SRE.

- Each clearing entity can be associated with only one funds transfer point within a single hierarchy.

- An SRE can have only one summary-level SRE at the level above it. A summary-level SRE summarizes settlement information for all SREs linked to it in the settlement hierarchy.

The considerations for establishing SREs and settlement hierarchies will be described further in the following sections and hierarchy examples.

# Settlement Hierarchies

SREs are linked together to form a structure called a settlement hierarchy. A diagram of the hierarchy is created in a vertical pattern to illustrate how one level connects to (rolls-up to) the level above or below it. Understanding the connection between levels is important when determining the location of funds transfer SREs and report subscriptions.

A settlement hierarchy is designed by a member to support the member's business needs. Members have the option to have one or more settlement hierarchies depending on their business requirements. A basic hierarchy must include the following:

- At least two levels:

- One top SRE

- One or more lowest-level SREs

- At least one funds transfer SRE

**NOTE:** *The exception to the requirements for a basic hierarchy is a hierarchy for a Copy Request Manager (CRM) or a Chargeback Documentation Manager (CDM). These hierarchies are one level and do not require a funds transfer SRE and are used for exception item processing.*

There are two types of hierarchies: standard and customized. Each type is described in the following sections.

## Standard Settlement Hierarchies

The standard settlement hierarchy is a two-level settlement structure with the funds transfer point at either the highest level or at the lowest-level. SREs are linked together to form a structure called a settlement hierarchy.

Standard settlement hierarchies can be customized at any time after they are established to better support member business. For details and illustrations of customized standard hierarchies, refer to the Customized Settlement Hierarchies section.

The standard SMS hierarchy is shown in <u>Figure 2–1</u>.

### Single Message System (SMS)

The standard hierarchy for SMS-connected settlement is a two-level settlement hierarchy. The lowest-level is defined by settlement service, affiliate BIN (the 6-digit, Visa-assigned BIN and the 4-digit network identifier), and processor. Lowest-level SREs are consolidated to a summary-level SRE, which represents the processor and funds transfer point.

**Figure 2–1:    Standard Settlement Hierarchy—SMS Member**



Top SRE and Funds Transfer SRE
(Processor)

Lowest-Level SRE*    Lowest-Level SRE*    Lowest-Level SRE*    Lowest-Level SRE*

*Defined by Settlement Service, Affiliate BIN, and Processor
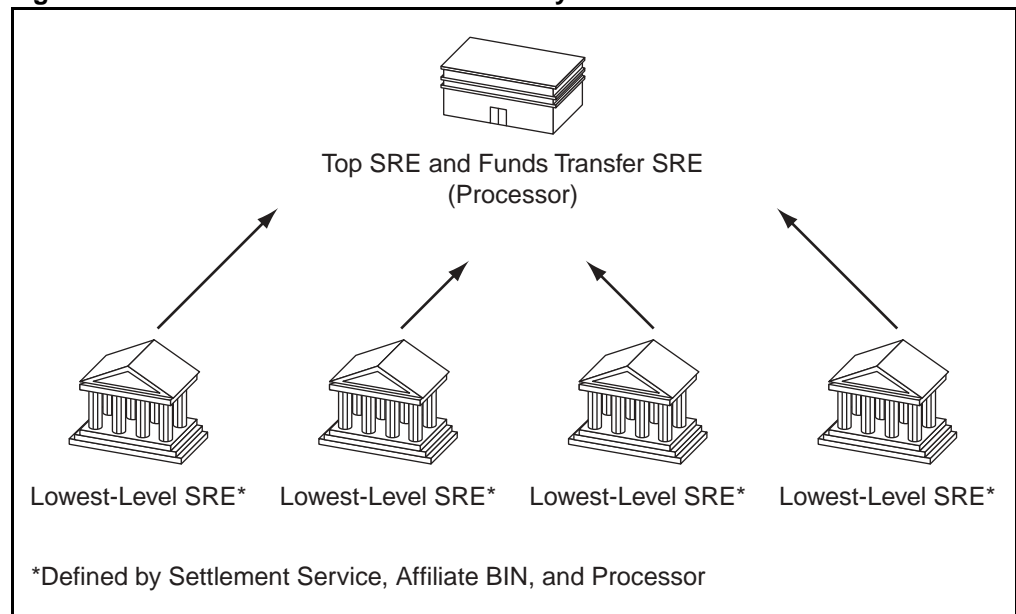
If a member uses SMS routing options, a separate settlement hierarchy is
established for each processor and must include a separate funds transfer for
each hierarchy. If the member wants to consolidate the funds transfers, a
custom hierarchy must be used to combine the two hierarchies into one
hierarchy with one funds transfer.

## BASE II

The standard hierarchy for BASE II-connected settlement is a two-level
settlement hierarchy. The lowest-level SREs are consolidated to a top-level
SRE, which represents the processor. Funds transfer occurs at the either the
top-level or at the lowest-level SRE.

The standard BASE II settlement hierarchy is shown in <u>Figure 2–2</u>.

**Figure 2–2:    Standard Settlement Hierarchy—BASE II Member**



Top SRE Processor
(Defined By CIB)

$*

Lowest-Level SRE*    Lowest-Level SRE*    Lowest-Level SRE*    Lowest-Level SRE*

*In this example, the funds transfer is at the top level of the hierarchy.
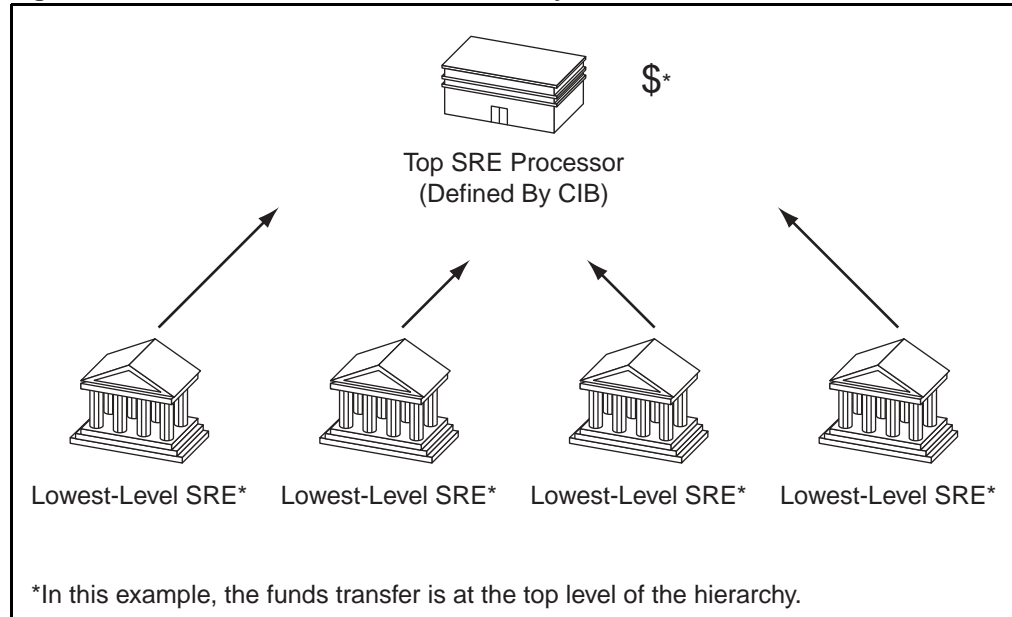
## International and National Net Settlement Services

When a member participates in a National Net Settlement Service or an Area Net Settlement Service, separate settlement hierarchies are established: one for the International Settlement Service and one for the National Net and Area Net Settlement Service.

In a standard National Net Settlement Service hierarchy, the funds transfer point can be either at the top-level or at the lowest-level.

An example of the standard hierarchy established for each settlement service is shown in <u>Figure 2–3</u>. In the example of the National Net Settlement Service, all BINs for this processor settle at the BIN level. In the examples:

- The standard settlement hierarchies for the two settlement services are structured the same, but they have two separate sets of SREs.

- The funds transfer for the International Settlement Service and National Net Settlement Service are reported separately. The funds transfer for the International Settlement Service is at the top-level. The funds transfer for the National Net Settlement Service is at the lowest-level.

This is illustrated in <u>Figure 2–3</u>.

**Figure 2–3:    Standard Settlement Hierarchy for Each Settlement Service**



**International Settlement Service**

Top-Level and Funds Transfer SRE

Lowest-Level SRE    Lowest-Level SRE    Lowest-Level SRE    Lowest-Level SRE

**National Net Settlement Service**

Top-Level

Lowest-Level and Funds Transfer SRE    Lowest-Level and Funds Transfer SRE    Lowest-Level and Funds Transfer SRE    Lowest-Level and Funds Transfer SRE
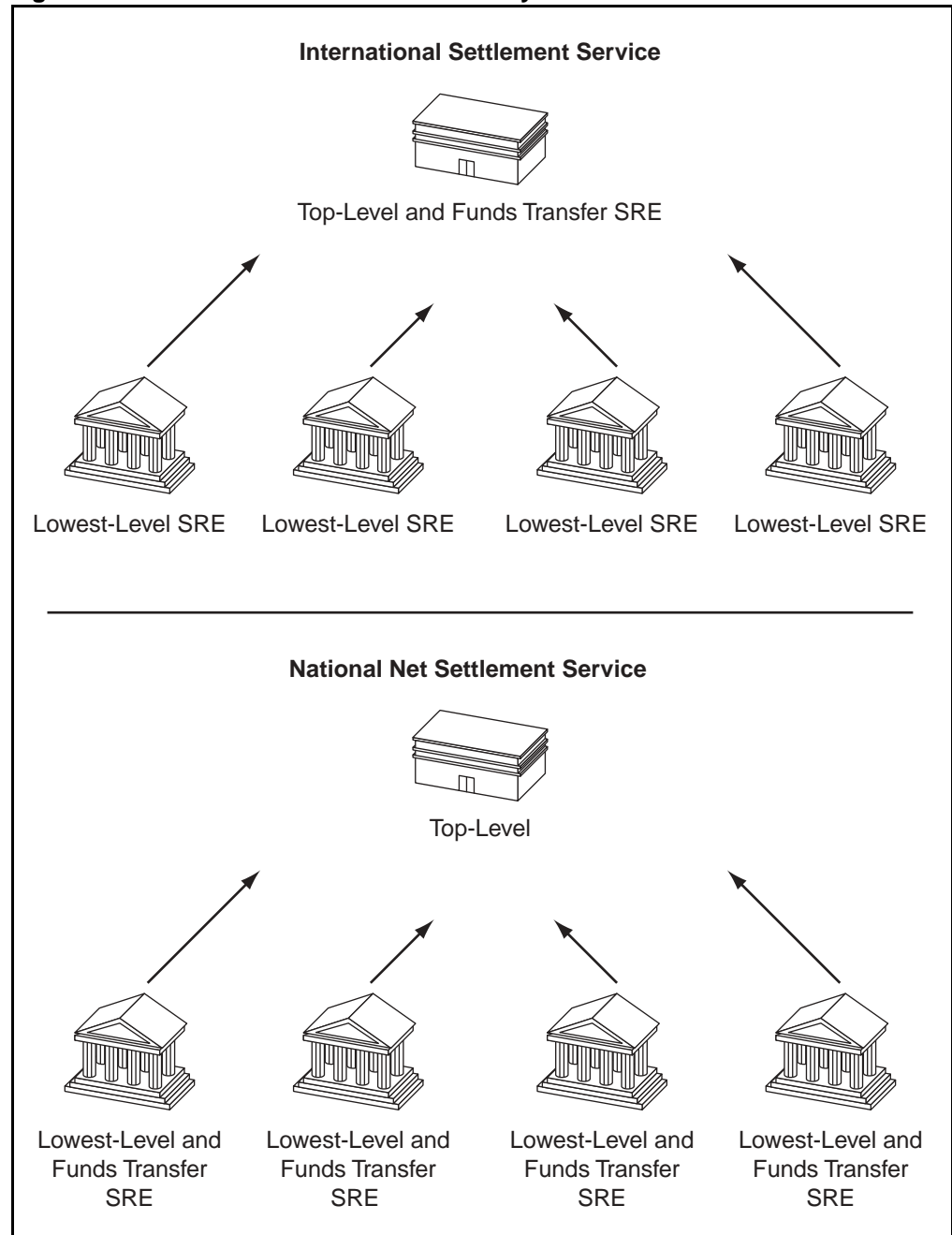
*NOTE:*    *In this example, all BINs participate in the National Net Settlement Service.*

## Customized Settlement Hierarchies

A custom hierarchy is one that has from three levels up to a maximum of eight levels. In general, a multiple level hierarchy is used to include summary-level points for reporting and funds transfer, represented by a summary-level SRE. A summary-level SRE can be the designated SRE wherever a member wishes to have reporting or funds transfer for the SREs at levels below the summary-level SRE.

If a member wants to establish a customized settlement hierarchy, the following objectives can be met:

- Member settlement across processors—A member using multiple processors consolidates its funds transfer.

- Combined BASE II and SMS settlement activity

- Additional lower level reporting

- Different settlement structures for International Settlement Service and National Net Settlement Service

### Hierarchy Examples

The following subsections provide examples of different types of hierarchies that are designed to provide settlement reporting and funds transfers for specific member requirements. The following hierarchy types are illustrated and described:

- Standard member-level settlement

- Customized member-level settlement

- Member settlement across processors

- Combined BASE II- and SMS-connected activity

- Additional lower-level reporting

- International and National Net Settlement Services

### Standard/Member-Level Settlement

VSS can accommodate members that use processors but want to handle their own funds transfer. A funds transfer SRE can be defined at any level within a hierarchy. In Figure 2–4 the processor is represented by SRE4 and the members behind the processor by SRE 1, 2, and 3. Funds transfers are located at SRE 1, 2, and 3 and these SREs subscribe to detail level reporting SRE 4 does not need to perform funds transfer and subscribes to processor level reporting.

**Figure 2–4:   Customized Settlement Hierarchy—Member-Level Settlement**
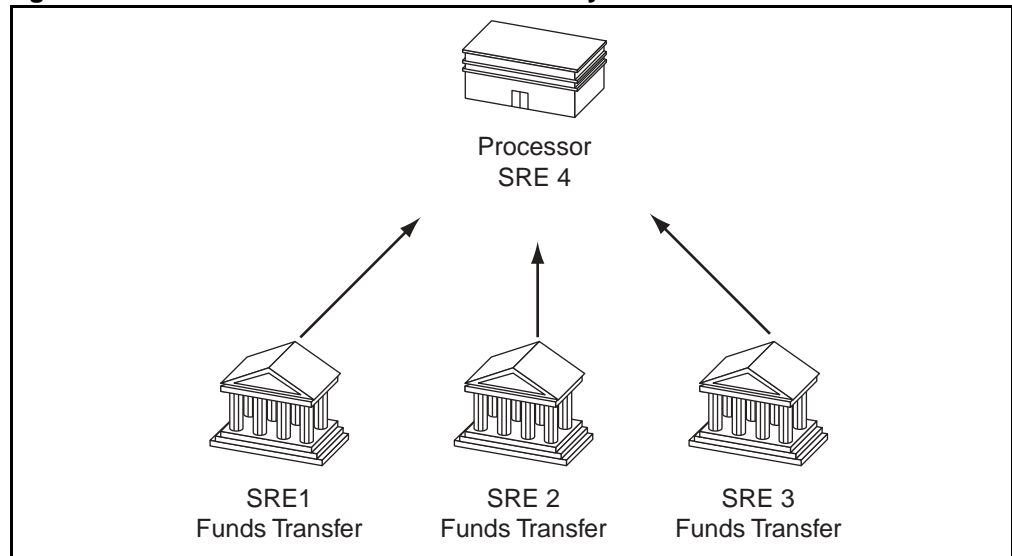


## Customized Member-Level Settlement

In some cases, the processor can be the funds transfer point for some of its members, while other members act as their own funds transfer points. This hierarchy is illustrated in Figure 2–5.

**Figure 2–5:   Customized Settlement Hierarchy—Combining Member and Processor Settlement**
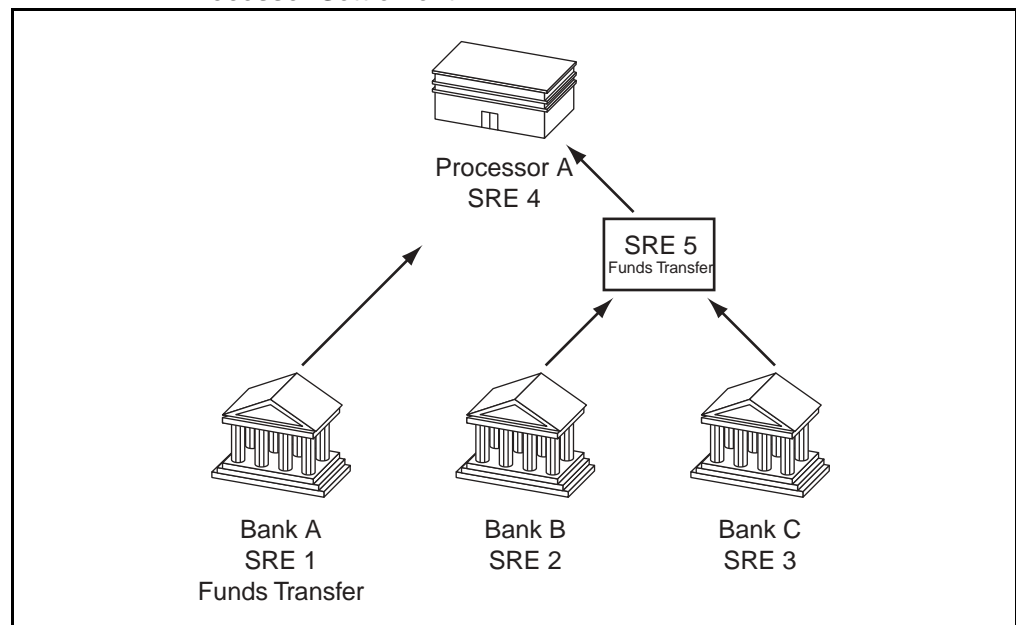


In this illustration, Bank A has its own funds transfer, and funds transfer for Banks B and C is through the processor. A summary-level SRE (SRE 5) is defined as the funds transfer SRE for Banks B and C.

All three banks use Processor A to send and receive transactions to and from VisaNet. To receive settlement reports for all three banks, Processor A is defined with an SRE in the settlement hierarchy.

SRE 1 represents the member-level funds transfer for Bank A, and SRE 5 represents the funds transfer for Banks B and C.

## Member Settlement Across Processors

Through VSS, a bank that uses multiple processors can receive a single funds transfer. This is done by establishing a summary-level funds transfer SRE to handle funds transfer for the bank as shown in Figure 2–6.

**Figure 2–6:    Customized Settlement Hierarchy—Member Settlement Across Processors**
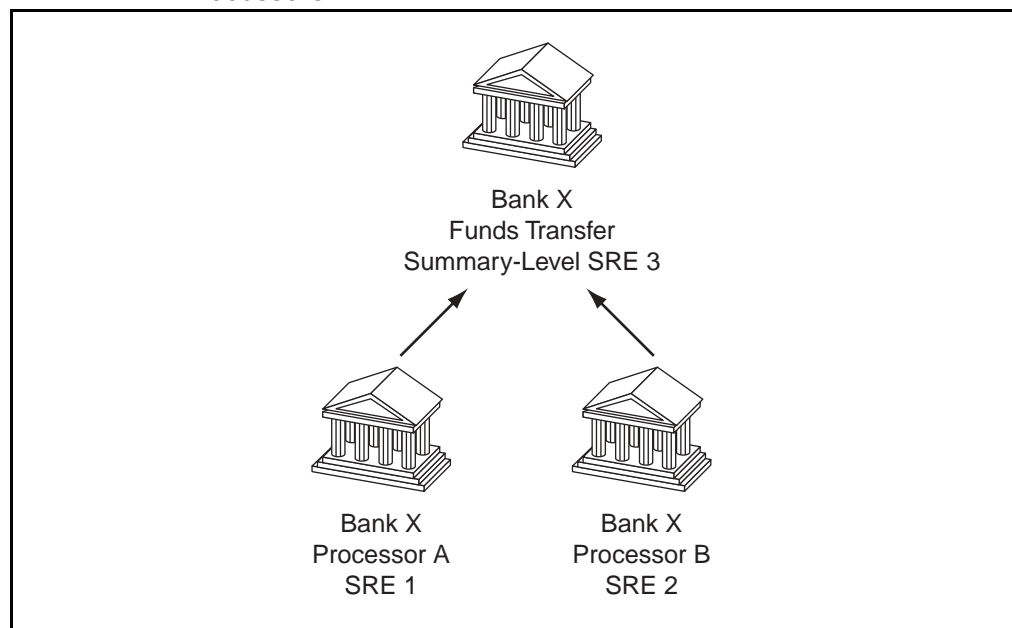


When a member establishes the structure in Figure 2–6, the member processors may no longer be included in a settlement hierarchy that represents all of their work. For information on how that affects reconciliation, see Chapter 7, Reconciliation.

## Combined BASE II- and SMS-Connected Activity

The flexibility to define funds transfer points and reporting levels within VSS also provides the ability to consolidate funds transfer activity and settlement reporting for SMS and BASE II BINs, as shown in Figure 2–7.

**Figure 2–7:**   **Customized Settlement Hierarchy—
Combined BASE II- and SMS-Connected Activity**
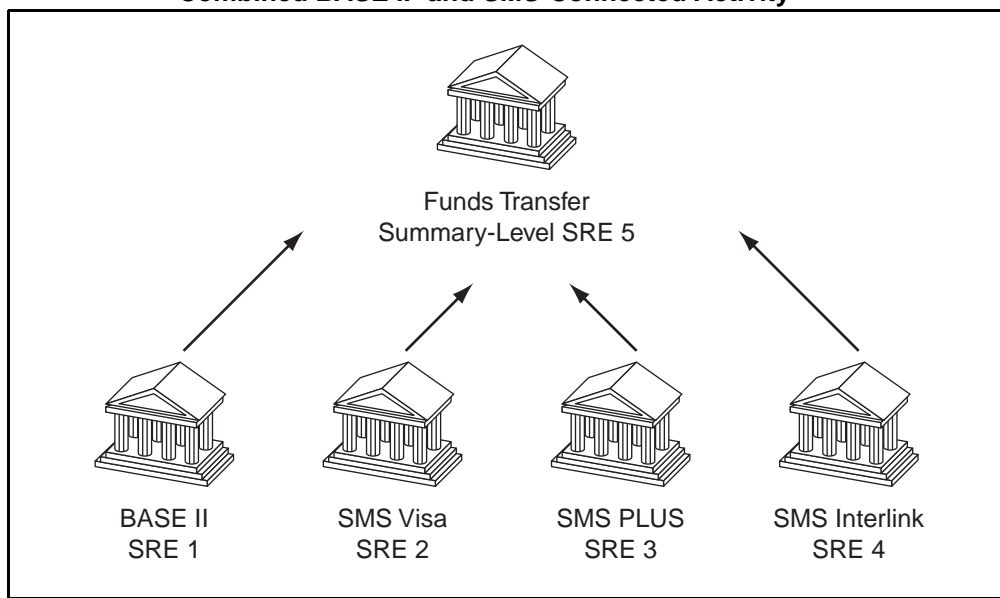


The settlement reports requested for SRE 5 in Figure 2–7 provide SMS and BASE II consolidated information. Settlement reports requested for SRE 1 provide BASE II-connected settlement information. Settlement reports requested for SREs 2, 3, and 4 provide SMS-connected settlement information for Visa, Plus, and Interlink transactions, respectively. SRE 5 is defined as the funds transfer SRE.

## Additional Lower-Level Reporting

In some cases, members may want to receive settlement reports that include information at a lower-level of detail. A multilevel settlement hierarchy enables members to define multiple tiers of settlement reporting, allowing reporting based on a subset of a processor's or member's activity. Various factors including settlement reporting can be defined by the following:

- Issuer or acquirer business mode

- Processor

- BASE II or SMS clearing system

- Product

For example, Bank C in <u>Figure 2–8</u> wants to receive separate settlement reports for Visa commercial card transactions and Visa consumer card transactions. Two additional, lower-level SREs must be established under SRE 3 (Bank C), one for each cardholder type.

**Figure 2–8:    Customized Settlement Hierarchy—Additional Lower-Level Reporting**
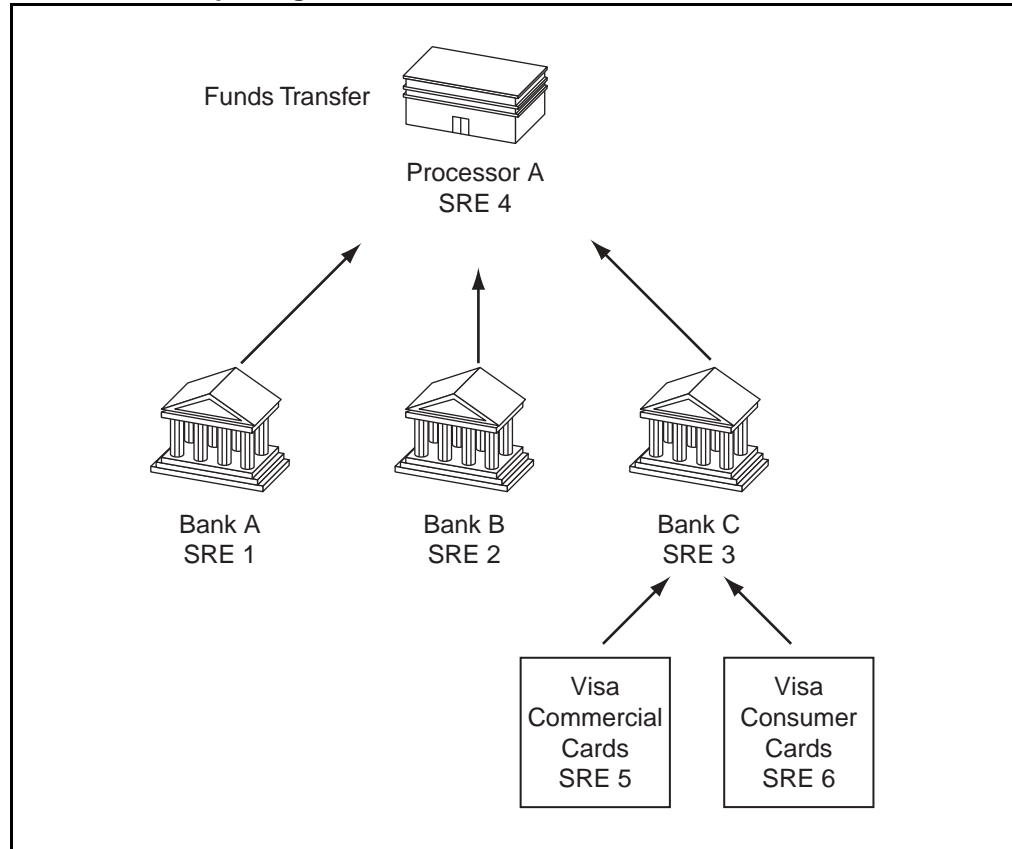
## International and National Net Settlement Services

VSS members have the option to establish an international hierarchy in one configuration and the National Net Settlement hierarchy in a different configuration.

Standard settlement hierarchies for the International and National Net Settlement Services are shown in Figure 2–3 earlier in this chapter. When the processor wants to receive additional levels of reporting within the International Settlement Service and wants to perform funds transfer for some of its BINs in the National Net Settlement Service, the processor could establish the hierarchies shown in Figure 2–9 and Figure 2–10.

**Figure 2–9:    Customized Settlement Hierarchy—Summary-Level With Funds Transfer at Top Level**
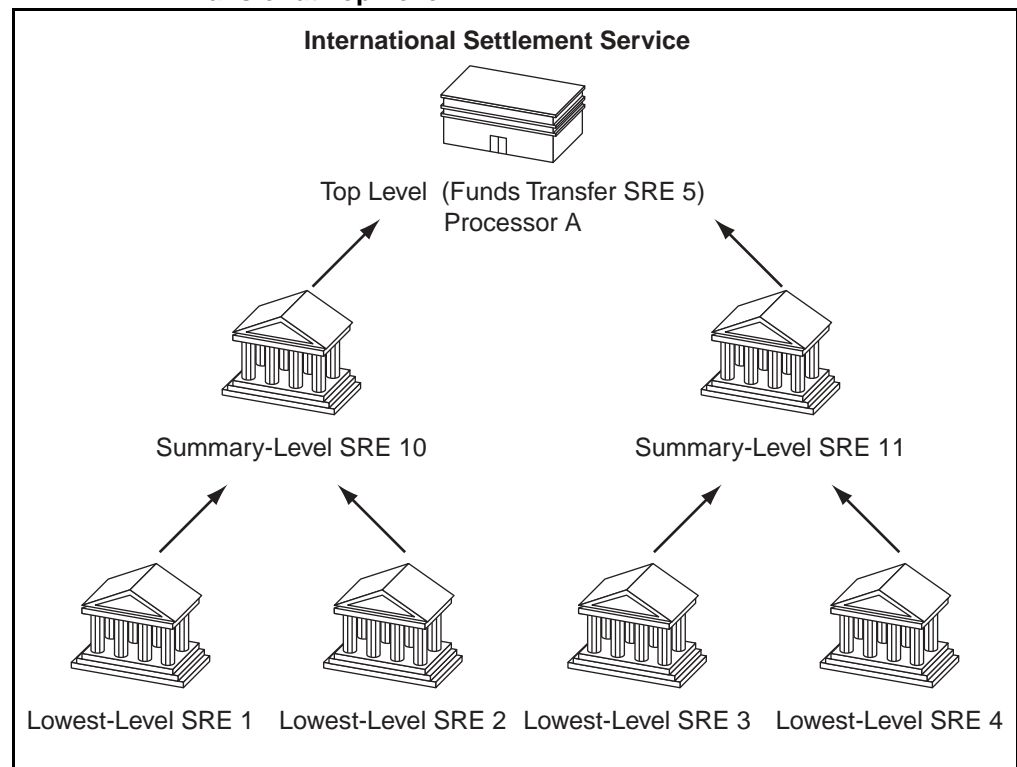
**Figure 2–10:  Customized National Net Settlement Hierarchy—Summary-Level and Member Level Settlement**



National Net Settlement Service

Summary-Level SRE 13
Processor A

Funds Transfer SRE 12

Funds Transfer
Lowest-Level SRE 6     Lowest-Level SRE 7     Lowest-Level SRE 8     Lowest-Level SRE 9
Funds Transfer
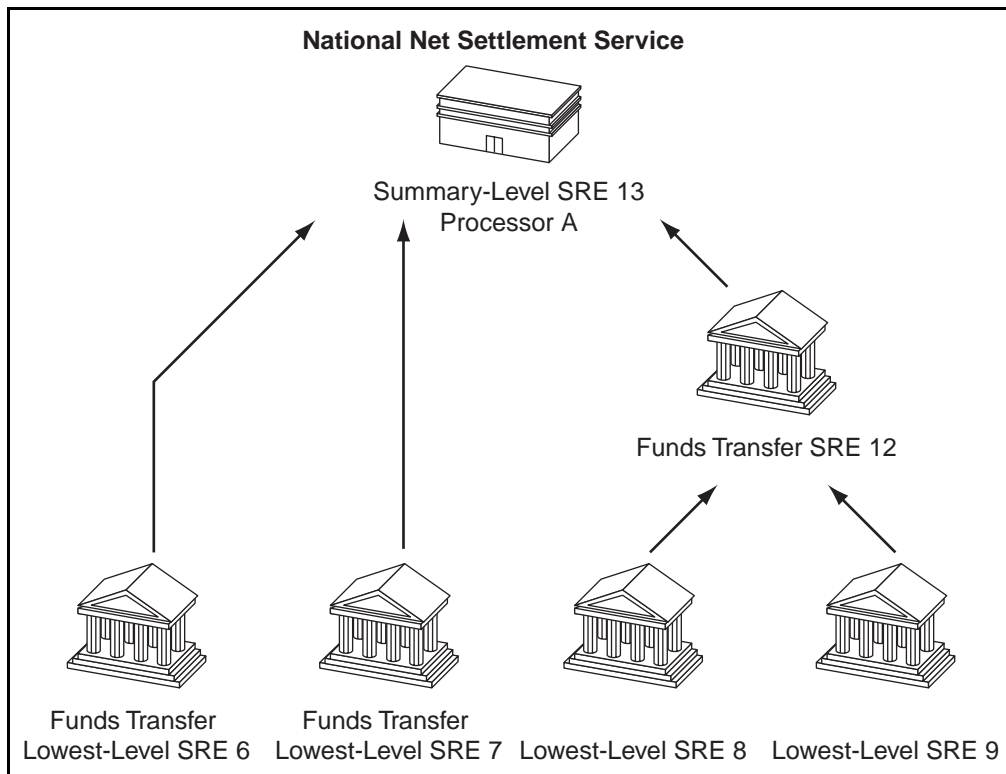
## VSS Report Reconciliation

To reconcile VSS reports to clearing system reports, Visa recommends that SMS-connected members establish an SRE that represents the affiliate BIN (and processor if more than one processor is used), and BASE II-connected members establish an SRE that represents the BIN. This SRE can be established at the lowest-level or the summary-level.

# Settlement Processing Schedule 3

This chapter specifies the key times in the daily settlement process for Single Message System (SMS) and BASE II-connected members. In addition, it describes the following optional services that allow for earlier settlement reporting:

- National Settlement Cutoff Time

- Trial Balance Service

## Settlement Schedule

The cutoff times for transactions processed by VisaNet for SMS- and BASE II-connected members are shown in Greenwich mean time (GMT) in Table 3–1.

**Table 3–1:    Settlement Cutoff Times**

| GMT Dates | GMT Cutoff Times | | |
|---|---|---|---|
| | SMS | | BASE II |
| | Visa, Plus, and Electron | Interlink | |
| First Sunday in April to last Sunday in October | 0500 | 0300 | 1000 |
| Last Sunday in October to first Sunday in April | 0600 | 0400 | 1100 |

Other key times in the daily settlement process are shown in .

**Table 3–2:    Daily Settlement Process**

| Event | GMT | |
| --- | --- | --- |
| | Apr – Oct | Oct – Apr |
| Settlement report processing and report delivery begins | 1000 | 1100 |
| Delivery of SMS reports and raw data to VisaNet endpoints completed | 1500 | 1600 |
| Reporting of net settlement positions to the National Settlement Banks for domestic transactions | 1500 | 1600 |
| Delivery of funds transfer positions to the Visa Settlement Bank completed | 1630 | 1730 |

An internal transaction (TC 49) is sent to the BASE II processor's VisaNet Access Point (VAP) at the end of each BASE II processing cycle. In VisaNet Settlement Service (VSS) terms, the end of the BASE II processing cycle is after the close of the International Settlement Cutoff. The information in this transaction is displayed by the VAP. This VAP message can be used as an end-of-day marker by processors.

# National Settlement Cutoff Time

BASE II-connected members that participate in a National Net Settlement Service have the option of establishing a national settlement end-of-day cutoff time. This allows member settlement activity to be calculated at a time more convenient to their business day instead of the international settlement cutoff time of 1100 GMT (1000 GMT from April through October). Any national interchange that is collected after the national settlement end-of-day cutoff time is processed, settled, and reported with the following cycle's National Net Settlement reports.

## Establishing Cutoff Time

National Net Settlement Service cutoff times can be defined between 0100 GMT and 1000 GMT. VSS can accommodate local time changes. If a national settlement cutoff time is defined, all members participating in the national settlement service must agree on the cutoff time. The default settlement cutoff time for all National Net Settlement Services is the same as the International Settlement Service cutoff time.

**NOTE:** *SMS national settlement cutoff functionality is being developed for a future release of VSS. In the meantime, countries participating in a National Net Settlement Service that elect to use national settlement cutoffs must process transactions involving SMS members through the International Settlement Service.*

## Member Considerations

If a national settlement cutoff time is defined, members need to be aware of the following potential areas of impact:

- File collection and clearing cutoff times need to be changed to ensure that all domestic transactions are included in the current day's National Net Settlement.

- Members will receive two sets of settlement reports at different times—one set for national settlement and one set for international settlement. Reconciliation procedures may need to be modified to accommodate this feature.

- Members that participate in a National Net Settlement Service with a custom cutoff time must be able to support multiple delivery files in each BASE II delivery.

- File and report delivery times may need to be modified to ensure that the national settlement reports are received during the country's business day. Settlement reports are produced approximately one hour after the national settlement cutoff time.

- Members need to inform their operational staff about the additional cutoff time to support the sending and receiving of domestic activity and settlement report data.

- National interchange that is cleared after the national settlement cutoff time is processed, settled, and reported with the following cycle's National Net Settlement reports.

# Trial Balance Service

Countries that participate in a National Net Settlement Service may participate in the trial balance service. Settlement agents in these countries receive interim reports that are based on an early interim cutoff time that is earlier than the International Settlement cutoff time. National interchange that is collected after the early interim cutoff time is processed, settled, and reported with the current cycle's National Net Settlement reports. The settlement agent's final report and members' National Net Settlement reports are produced with the International Settlement Service reports and reflect transactions collected between the early interim cutoff time and International Settlement Service cutoff time.

# Funds Transfer 4

This chapter describes the funds transfer process. The process is different depending on whether the member settles in U.S. Dollars or non-U.S. Dollars.

This chapter also includes the information needed to establish a new funds transfer and to change an existing funds transfer.

## Funds Transfers

The final step in the settlement process is funds transfer, during which funds are collected from settlement entities with a net debit position and paid to settlement entities with a net credit position.

Funds transfer refers to the movement of funds between the member's settlement bank and Visa's settlement bank for the purpose of settlement. Funds transfers are a net of the member's credits and debits.

The settlement account can be either a Demand Deposit Account (DDA) or a general ledger account depending on the member's business requirements. Whichever is used, the account must be open and funded before settlement begins. The account type must be set up to receive and process drawdown requests. For funds transfer to take place, Visa must be granted authority to draw down against the member's settlement account through the completion of Settlement Funds Transfer (SFT) forms and the exchange of authorization letters when required.

Each funds transfer is associated with only one settlement account although several funds transfers can be associated with the same account.

Funds can be settled in U.S. Dollars (USD) or non-USD currency with a member-selected settlement bank, but the currency must be one that has been established by Visa as a settlement currency. If there are questions regarding which currencies can be used for settlement, members should contact their Visa representative.

# Settlement Currency—U.S. Dollars

The following describes the funds transfer process using U.S. Dollars:

• **Timing of Funds Transfers**—Funds transfers occur every business day with same-day value. In this context, the processing date is the day that VSS reports and files are delivered. If the VisaNet Settlement Service (VSS) processing date falls on a weekend or a New York Federal Reserve Bank holiday, funds transfers occur on the next available business day. For further information regarding member responsibility for holiday settlement, refer to Visa's Operating Regulations.

• **Settlement Bank**—Settlement that occurs in U.S. Dollars must settle through a bank located in the United States that is an online member of the Federal Reserve Bank. Advice of funds movement for U.S. Dollar settlement is sent through the Federal Reserve FEDWIRE system.

Members located outside the United States settling in U.S. Dollars must have a settlement account with a bank located in the United States. Funds transfer advices are between Visa's settlement bank and the member's U.S. settlement bank. For members located outside the United States, settlement account information must be obtained from the U.S.-located settlement bank.

• **Member in a Credit Position**—When the member is in a credit position, Visa's settlement bank transfers same-day funds using a FEDWIRE 1000 payment instruction to the member's account at its designated settlement bank.

• **Member in a Debit Position**—When the member is in a debit position, Visa's settlement bank uses a FEDWIRE 1031 "request for funds" instruction to request that the member's settlement bank transfer same-day funds to Visa's settlement bank. The member's settlement bank responds to a "request for funds" message with a FEDWIRE 1032 payment instruction.

Funds transfers occur through the Federal Reserve Bank's FEDWIRE system unless the member's designated settlement bank is Visa's settlement bank. If Visa's settlement bank is the member's designated settlement bank, funds transfers occur internally through a book (account to account) transfer.

# Settlement Currency—Non-U.S. Dollars

The following describes the funds transfer process using non-U.S. Dollars:

- **Timing of Funds Transfers**—Funds transfers occur two business days after the processing date of a settlement transaction. When a holiday is observed by the Central Bank of the designated settlement currency, funds transfers scheduled for that day occur on the next available business day. In either case, the VSS processing date is the day on which VSS reports and files are delivered.

- **Settlement Bank**—Funds transfers occur through the local clearing system of the country of the designated settlement currency. Because the settlement bank must be in the country of the settlement currency, a correspondent relationship may be required. Funds are transferred between the member's designated settlement bank and Visa's settlement bank or its correspondent bank in the country of the settlement currency.

- **Member in a Credit Position**—When the member is owed funds, Visa's settlement bank first notifies the member's settlement bank or correspondent that funds will be sent to it through a Society for Worldwide Interbank Financial Telecommunications (S.W.I.F.T.) MT 202 message. Visa's settlement bank then transfers funds to the member's account at its designated settlement bank through a S.W.I.F.T. MT 202 payment instruction.

- **Member in a Debit Position**—When the member is in a debit position, Visa's settlement bank requests payment from the member's designated settlement bank through a S.W.I.F.T. MT 100 payment request. The member's settlement bank is required to respond to the request. The member's settlement bank first delivers to Visa's settlement bank a S.W.I.F.T. MT 100 payment instruction to credit Visa's account, then transfers the funds through the local clearing system to Visa's settlement bank or its designated correspondent bank.

# Establishing a Funds Transfer

To establish a funds transfer, the member must complete a set of Settlement Funds Transfer (SFT) forms. The number of forms required depends on the number of entities needed to complete settlement. The SFT forms provide Visa with information required to establish the route in which settlement information is exchanged.

Settlement can be performed by:

- The member settling for itself.

- An alternate bank settling for the member.

- A correspondent bank settling in conjunction with the settlement bank if the settlement bank is not located in the country of the settlement currency (non-U.S. Dollars), or is not an online member of the Federal Reserve Bank (U.S. Dollars).

Visa accepts and processes SFT forms with a 30 day lead time provided that the forms are complete and accurate and all the settlement arrangements are in place. Lead time can be lowered to 15 days if the forms are completed using the Settlement Account Management (SAM) system now in place. This process would require either the member to complete and submit forms electronically via email or the Visa member services representative to input the data into SAM using completed forms from the member. Settlement arrangements include debit authority or S.W.I.F.T. key exchange or both. For more information on establishing a funds transfer, please refer to the *Visa Settlement Funds Transfer Instruction Guide*. This guide could obtained by sending an email to Docline@visa.com.

## Funds Transfer Maintenance

After the funds transfer has been established, there may be business changes that require modifications to the banking details. A new set of Settlement Funds Transfer (SFT) forms must be completed to amend the original forms and instruct what changes must be made. Members making a change to their current banking details should advise their Visa representative when the change can be made.

The following is a list of possible changes that require completion of new SFT forms:

- A new funds transfer endpoint is required.

- A new settlement bank will be performing settlement.

- A new settlement account is required.

- A new correspondent bank will be used.

- A new correspondent settlement account is required.

- The settlement currency is changing.

- The member has merged with another bank.

- The member's name has changed due to a restructure.

When only the changes described in the following bullet points are changing, the new information can be submitted to Visa's Treasury in letter format on the bank's letterhead. The letter must be signed by an officer of the member bank.

- A change to the member's ABA number or the member's settlement bank's ABA number

- A change to the members S.W.I.F.T. address or the member's settlement bank's S.W.I.F.T. address.

**NOTE:** *The member should include new address or contact information when a letter is sent to change either the ABA number or S.W.I.F.T. address.*

# VSS Reporting and Messages 5

VisaNet Settlement Service (VSS) supports settlement reporting needs for both Single Message Service (SMS) and BASE II-connected members by producing reports with standardized layouts. This chapter contains a complete list of VSS reports and provides the following information:

- VSS Reporting Terminology

- VSS Reporting Features

- Fees and Charges Reporting

- Currency Conversion Reporting

- Report Formats

- VSS Reports

- Mandatory and Recommended Reports

- Report Delivery

- BIN Identification

- SMS Funds Transfer Totals (0620) Messages

## VSS Reporting Terminology

This section defines the following VSS terms:

- Business Mode

- Charge Type

- Business Transaction Type

- Business Transaction Cycle

- Jurisdiction

## Business Mode

VSS reports are divided into sections based on business mode. The business mode designates whether the amounts reported are for the following:

- Issuer

- Acquirer

- Other

The business mode "Other" contains all transactions that are neither issuer nor acquirer. These include fee collection and funds disbursement transactions.

## Charge Type

Charge type provides a means of classifying charges on VSS reports. The charge types include the following:

- BASE II processing charges

- Currency conversion fees

- Currency conversion fee allocations

- International Outgoing Interchange (IOI) fees

- Special Airline Fees (SAF)

- Returned item charges

For a complete list of VSS charge types, refer to *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, *Appendix C, VSS Codes*.

## Business Transaction Type

To support consistent settlement reporting, and to make the reports more business-oriented, VSS business transaction types are used to classify transactions by their business purpose.

In the clearing process, BASE II uses transactions codes, and SMS uses message types to differentiate transactions. For example, in BASE II, the transaction code TC 05 is used for a purchase transaction, while in SMS, the message type 0200 is used. In VSS, the business transaction type is Purchase for both a TC05 and a message type 0200.

On VSS reports, transactions that represent different business transaction types are reported separately, such as purchase, and quasi-cash transactions.

A complete list of VSS business transaction types is included in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix C, VSS Codes. Cross-references between SMS and BASE II transactions are included in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2, Appendix E, VSS Business Transaction Types Cross-Reference*.

## Business Transaction Cycle

The business transaction cycle further qualifies business transaction types to identify which presentment is being reported.

For example, a purchase transaction that is presented for the first time by an acquirer has a cycle description of ORIGINAL. If it is sent back by the issuer, the cycle description is CHARGEBACK. If it is resubmitted by the acquirer, the cycle description is REPRESENTMENT. Any of these presentments can be reversed. A reversal is indicated on the report by RVRSL next to the business transaction.

For a complete list of business transaction cycles, refer to *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, *Appendix C, VSS Codes*.

## Jurisdiction

Jurisdiction identifies the operating regulations governing the reimbursement fees and charges imposed on a transaction. Examples of jurisdiction are Visa International, Visa Canada, Plus System, Inc. U.S.A, and Interlink International. For a complete list of jurisdictions, refer to the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2, Appendix C, VSS Codes*.

# VSS Reporting Features

The VSS reporting features are as follows:

- Reporting is available for every settlement reporting entity (SRE) in the settlement hierarchy.

- Reports showing multicurrency transactions include subtotals by currency and the date of the currency rate table used so members can reconcile settlement amounts to clearing amounts.

- Settlement amounts are reported in the minor units of currency appropriate to the settlement currency. For example, Japanese yen is reported as 100 and Canadian dollars as 100.00.

- Issuers are able to receive detailed reconciliation information for currency conversion fees and optional issuer fees.

- Interchange amounts, reimbursement fees, and Visa charges that are settled by VSS are summarized on one report.

- Most settlement reports are available on a monthly basis.

- Fees and charges reports include a jurisdiction name that specifies the operating regulations, such as Visa International or Visa Canada, that govern reimbursement fees and charges for a transaction. Members can use this information to help with reconciliation.

- All VSS reports are available in machine-readable formats. This eliminates the need for members to extract data fields from print-ready reports.

- Members can have settlement reports sent to multiple locations of their choice.

- All VSS National Net Settlement Service reports have the same name and format as their international counterparts. Members that participate in a National Net Settlement Service receive two sets of VSS reports: one set that shows transactions, fees, and charges settled through the International Settlement Service, and another that shows transactions, fees, and charges settled through the National Net Settlement Service. The settlement service identifier appears in the report heading.

- VSS reports are produced and delivered seven days a week.

- Any SRE participating in the International Settlement Service receives null reports when there is no activity during a reporting period. This feature is not available for National Net Settlement Service reports.

# Fees and Charges Reporting

This section defines reimbursement fees and Visa charges and explains how VSS reports these amounts.

- Reimbursement fees are amounts paid by one member to another member for transactions entered into interchange.

- Visa charges include all amounts that are assessed by Visa and paid by the member or the member processor to Visa. This category also includes amounts paid by Visa to the member or member processor.

## Report Categories for Fees and Charges

Fees and charges are grouped by the following categories on VSS reports:

- Business mode—Designates whether the amounts reported are for issuer, acquirer, or other.

- Charge type—Provides a means of classifying charges on the VSS reports.

- Business transaction type—Classifies transactions according to their business purpose.

- Jurisdiction—Identifies the Operating Regulations that govern the reimbursement fees and charges imposed on a transaction.

- Transaction routing—Describes the source and destination of the transaction. When the transaction is interregional, the routing indicates the source and destination regions. When the routing is intraregional, the reports show the source and destination countries.

- Fee level—Indicates the type of fee assessed.

For a complete list and descriptions of business modes, business transaction types, jurisdictions, and charge types, refer to the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, *Appendix C, VSS Codes*.

## Reimbursement Fees

Interchange Reimbursement Fees (IRF) are noninterchange amounts paid by one member to another member.

Reimbursement fees are reported on the following reports:

- VSS-130—Reimbursement Fees Report

- VSS-130-M—Monthly Reimbursement Fees Report

- VSS-131—Volume Discount Detail Report (U.S. only)

- VSS-131-M—Monthly Volume Discount Detail Report (U.S. only)

- VSS-135—Month-to-Date Reimbursement Fees Report

- VSS-136—Month-to-Date Volume Discount Detail Report (U.S. only)

These reports include all fees that are settled in a given settlement service. Fees are reported by the following categories:

- Business mode

- Business transaction type

- Jurisdiction

- Transaction routing

- Fee level

## Visa Charges

Visa charges include all amounts that are assessed by Visa and paid by the member or the member processor to Visa. This category also includes amounts paid by Visa to the member or member processor.

These charges include the following:

- BASE II processing charges

- International Outgoing Interchange (IOI) fees

- Special Airline Fees (SAF)

- Currency conversion fees

- Currency conversion fee allocations

- Returned item charges

**NOTE:**  *Some charges are called fees, such as the currency conversion fee, but they are actually charges based on the definition for Visa charges.*

In all regions, SMS processing charges are billed monthly through the Integrated Billing Statement. In some regions, BASE II processing charges are billed monthly using the Integrated Billing Statement. In these cases, processing charges are not included in VSS reports.

Visa charges are reported on the following reports:

- VSS-140—Visa Charges Report

- VSS-140-M—Monthly Visa Charges Report

- VSS-210—Currency Conversion Fees Report

- VSS-210-M—Monthly Currency Conversion Fees Report

- VSS-230—Visa Charges Reconciliation Report

On the Visa Charges Report (VSS-140), Monthly Visa Charges Report (VSS-140-M), and Visa Charges Reconciliation Report (VSS-230), charges are reported by the following categories:

- Business mode

- Charge type

- Business transaction type

- Jurisdiction

- Transaction routing

On the Currency Conversion Fees Report (VSS-210) and its equivalent monthly report (VSS-210-M), currency conversion fees for issuer transactions are reported by the following categories:

- Business transaction type

- Jurisdiction

## BASE II-Connected Charges Assessed to Member or Processor

In regions that bill their BASE II-connected processing charges daily through VSS, these charges may be assessed either to the member or to the processor.

When BASE II-connected processing charges are assessed to a processor rather than to a member, a lowest-level settlement reporting entity (SRE) must be created for that purpose. The function of this SRE is to report charges for all member-level SREs in the hierarchy for which charges are to be assessed to the processor.

An example of a hierarchy with member-level charges reported in a separate SRE is shown in <u>Figure 5–1</u>.

The SRE can be in any hierarchy specified by the processor as long as the processor (CIB) is in the same hierarchy as the SRE.

The following rules govern the placement of this SRE in the settlement hierarchy:

- The SRE must reside in the same hierarchy as those BIN-level SREs (SREs 2 and 3) for which charges are to be assessed to the processor.

- The SRE must be a lowest-level SRE.

**Figure 5–1:    Settlement Hierarchy With Separate SRE for Member-Level Charges**
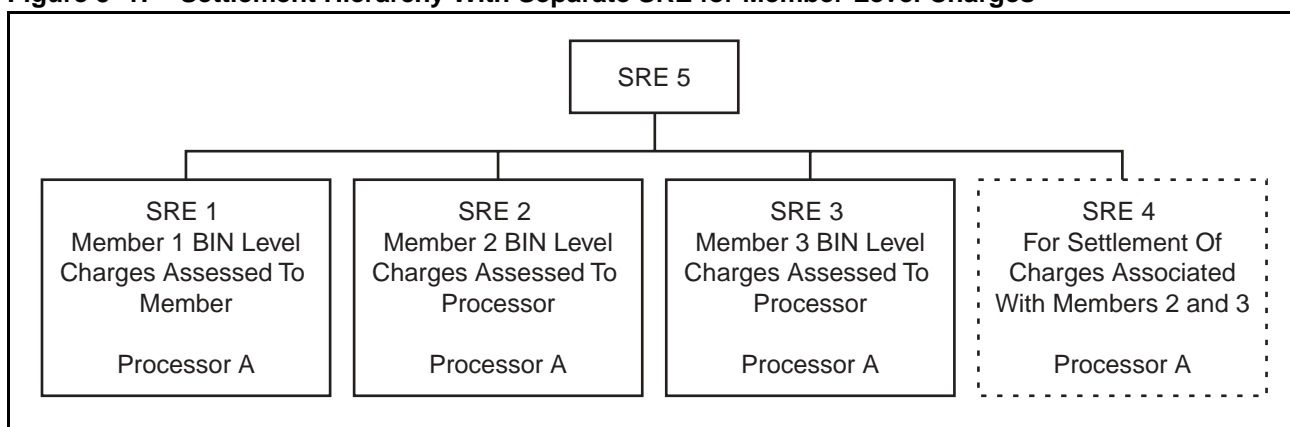


VSS reports for the processor SRE (SRE 4) should include the Visa Charges Report (VSS-140).

## National Settlement Charges

For BASE II-connected members, charges for transactions that are settled in a National Net or Area Net Settlement Service are settled either within the National Net or Area Net Settlement Service or within the International Settlement Service, depending on the rules of the National Net or Area Net Settlement Service. Charges are reported for these two scenarios as shown in Table 5–1.

*NOTE:* *Processing charges for SMS members are billed monthly through the Integrated Billing Statement.*

**Table 5–1:     Charge Activity Reporting by Settlement Service**

| Transactions Settled In | Charges Settled In | Charges Reported On |
|---|---|---|
| International Settlement Service | International Settlement Service | VSS-140 for International Settlement Service |
| National Net or Area Net Settlement Service | National Net or Area Net Settlement Service | VSS-140 for National Net and Area Net Settlement Service |
| National Net or Area Net Settlement Service | International Settlement Service | VSS-140 for International Settlement Service<br><br>VSS-230 for National Net and Area Net Settlement Service |

A member that participates in a National Net Settlement Service, for which the charges are settled within the International Settlement Service, can select the following two charge reports:

- **Visa Charges Report (VSS-140)**—This report is used for the International Settlement Service, which lists all charges assessed on transactions settled in the International Settlement Service and the National or Area Net Settlement Service.

- **Visa Charges Reconciliation Report (VSS-230)**—This report is used for the National Net or Area Net Settlement Services, which lists only charges assessed on transactions settled in the National Net or Area Net Settlement Service but settled in the International Settlement Service.

A member that participates in a National Net Settlement Service, for which the charges are settled within the National Net Settlement Service, can select the Visa Charge Report (VSS-140) to report:

- The International Settlement Service, which lists only charges assessed on transactions settled in the International Settlement Service.

- The National Net Settlement Service, which lists only charges assessed on transactions settled in the National Net Settlement Service.

## Currency Conversion Fees

The Currency Conversion Fees Report (VSS-210) and Monthly Currency Conversion Fees Report (VSS-210-M) list currency conversion information for issuers. These reports list Visa currency conversion fees and associated interchange in both the settlement and clearing currency (cardholder billing currency). In addition, the optional issuer fee is listed in the clearing currency.

## Other VisaNet Processing and Nonfinancial Charges—U.S. Only

U.S. members that do not have their own VisaNet Access Point (VAP) endpoint, that decide to settle for themselves, should review the *Visa U.S.A. Inc. Operating Regulations, Volume 1—General Rules (May 15, 2004)* section 9.2.G under Other VisaNet Processing Charges. This regulation establishes a monthly amount to be billed to funds transfer members. The charge is intended to offset the added expense for Visa to send settlement wires to those that want to settle directly with Visa. The monthly charge is billed through the Integrated Billing Statement. There is no charge for the primary VisaNet funds transfer point, usually the VAP-connected processor if the processor is a funds transfer point. Members that settle for themselves should also expect to receive wire charges from their settlement banks.

All U.S. members will be billed monthly for nonfinancial transaction processing charges per *Visa U.S.A. Inc. Operating Regulations, Volume 1—General Rules (May 15, 2004)* section 9.2.F.6. These costs include a charge for each report generation record and for each item of member settlement data. These charges will also apply to report generation records and each item of member settlement data for any summary-level SREs that the member establishes.

# Currency Conversion Reporting

The effective date of the currency conversion rate is shown in the Interchange Value Report (VSS-120) in the following two cases:

- For a reversal transaction, the date of the currency conversion rate that was used for the original transaction is displayed whenever currency conversion has been performed.

- For all other transactions, the date of the currency conversion rate is displayed when the clearing currency (transaction or cardholder billing currency) is different from the settlement currency.

For transactions in which both of these conversion situations occur, the date of the currency rate that was used for the original transaction is displayed on the report.

For additional information about currency conversion reporting, see [Chapter 7, Reconciliation](#).

# Report Formats

All VSS reports are available in machine-readable and print-ready formats. Reports can be delivered in either or both formats. A different format option can be selected for each report. For example, some reports can be delivered in machine-readable format, other reports can be delivered in print-ready format, and still other reports can be delivered in both formats. In addition, the same report can be sent to separate locations in the same or different formats.

For more information on how these reports are delivered, see the "[Report Delivery](#)" section in this chapter. The print-ready and machine-readable formats for all VSS reports are shown in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix A, VSS Reports—Print-Ready Formats, and Appendix B, VSS Reports—Machine-Readable Formats.

Members can take advantage of the machine-readable reports in a number of ways, including:

- Producing customized settlement reports.

- Providing automated interfaces to internal processing systems. (For example, automated procedures can be developed for general ledger posting of reimbursement fees or Visa charges).

- Automating reconciliation procedures.

# VSS Reports

Except for processor reports, all VSS reports shown in the tables in this section are available for any SRE. All VSS reports are optional except the VSS 110 which is required for each Funds Transfer SRE. The counts and amounts in the summary-level SRE reports are totals of the counts and amounts from all the lowest-level SREs below it in the settlement hierarchy.

The daily VSS settlement reports are described in .

**Table 5–2:**    **Daily VSS Settlement Reports (1 of 2)**

| Report ID | Report Title | Report Description |
|-----------|--------------|--------------------|
| VSS-110 | Settlement Summary Report | Provides summarized totals of the interchange values, reimbursement fees, and Visa charges for a given SRE. Funds transfer information is shown at the top of the report for a funds transfer SRE. |
| VSS-115 | SRE Settlement Recap Report | Contains a summary of all transactions grouped by the following:<br>• Original transactions listed by business transaction type<br>• All reversal transactions<br>• All chargeback transactions that are not reversals<br>• All representment transactions that are not reversals<br>• All debit and credit adjustment transactions that are not reversals<br>All reimbursement fees and Visa charges settled through VSS are summarized on this report. |
| VSS-120 | Interchange Value Report | Provides interchange values in settlement currency and clearing amounts in clearing currency summarized by business transaction type. |
| VSS-130 | Reimbursement Fees Report | Provides reimbursement fees information summarized by business transaction type. |
| VSS-131 | Volume Discount Detail Report | Provides volume-tier activity details (U.S. only). |
| VSS-135 | Month-to-Date Reimbursement Fees Report | Provides daily and month-to-date reimbursement fees summarized by fee level and business mode. |
| VSS-136 | Month-to-Date Volume Discount Detail Report | Provides volume-tier activity details summarized by the fee level and business mode (U.S. only). |

**Table 5–2:**     **Daily VSS Settlement Reports  (2 of 2)**

| Report ID | Report Title | Report Description |
|---|---|---|
| VSS-140 | Visa Charges Report | Provides details of all charges settled through VSS summarized by business transaction type. |
| VSS-210 | Currency Conversion Fees Report | Provides issuers with reconciliation information about currency conversion fees and optional issuer fees. |
| VSS-230 | Visa Charges Reconciliation Report | Provides reconciliation information about charges for National Net Settlement Service transactions for which the charges are settled through the International Settlement Service. Charges are summarized by business transaction type. |
| VSS-300 | SRE Financial Recap Report | Provides summarized totals of the interchange values, reimbursement fees, and Visa charges for each immediately subordinate SRE. |
| VSS-600 | Pending Settlement Report | Provides summarized totals of the interchange values, reimbursement fees, and Visa charges for transactions pending settlement because they have been deferred (used for Brazil National Net and Japan National Net only). |

The VSS settlement reporting hierarchy lists are described in .

**Table 5–3:**     **VSS Hierarchy Lists**

| Report ID | Report Title | Report Description |
|---|---|---|
| VSS-100-R | Revised Settlement Reporting Hierarchy List | Lists the settlement reporting hierarchy below each given SRE when the VSS hierarchy changes and when a member first implements VSS. The report is delivered on Thursdays and Sundays. |
| VSS-100-W | Weekly Settlement Reporting Hierarchy List | Lists the settlement reporting hierarchy below each given SRE. The report is delivered on Thursdays and Sundays. |

The monthly VSS settlement reports are described in Table 5–4.

**Table 5–4: Monthly VSS Settlement Reports**

| Report ID | Report Title | Report Description |
| --- | --- | --- |
| VSS-110-M | Monthly Settlement Summary Report | Monthly version of the VSS-110. |
| VSS-115-M | Monthly SRE Settlement Recap Report | Monthly version of the VSS-115. |
| VSS-120-M | Monthly Interchange Value Report | Monthly version of the VSS-120. |
| VSS-130-M | Monthly Reimbursement Fees Report | Monthly version of the VSS-130. |
| VSS-131-M | Monthly Volume Discount Detail Report | Monthly version of the VSS-131 (U.S. only). |
| VSS-140-M | Monthly Visa Charges Report | Monthly version of the VSS-140. |
| VSS-210-M | Monthly Currency Conversion Fees Report | Monthly version of the VSS-210. |

The daily reconciliation reports are described in Table 5–5.

**Table 5–5: Daily Reconciliation Reports**

| Report ID | Report Title | Report Description |
| --- | --- | --- |
| VSS-900 | Reconciliation Report | Provides summarized totals of transaction counts and values by clearing currency, business mode, and business transaction type for an SRE. |
| VSS-900-S | Summary Reconciliation Report | Provides summaries across business modes and business transaction types by clearing currency. |

The monthly reconciliation reports are described in Table 5–6.

**Table 5–6:    Monthly Reconciliation Reports**

| Report ID | Report Title | Report Description |
|---|---|---|
| VSS-900 M | Monthly Reconciliation Report | Monthly version of VSS-900. |
| VSS-900-SM | Monthly Summary Reconciliation Report | Monthly version of VSS-900-S. |

The daily VSS processor reports are described in Table 5–7.

**Table 5–7:    Daily VSS Processor Reports**

| Report ID | Report Title | Report Description |
|---|---|---|
| VSS-900-P | Processor Reconciliation Report | Provides summarized totals of transaction counts and values by BIN, clearing currency, settlement service, and business transaction type for a processor. |
| VSS-900-PS | Processor Summary Reconciliation Report | Provides summarized totals of transaction counts and values by BIN, clearing currency, and settlement service for a processor. |

The monthly VSS processor reports are described in Table 5–8.

**Table 5–8:    Monthly VSS Processor Reports**

| Report ID | Report Title | Report Description |
|---|---|---|
| VSS-900-PM | Monthly Processor Reconciliation Report | Monthly version of VSS-900-P. |
| VSS-900-XM | Monthly Processor Summary Reconciliation Report | Monthly version of VSS-900-PS. |

# Mandatory and Recommended Reports

With the exception of processor reports, VSS reports can be selected for each SRE. The report selection for one SRE in a settlement hierarchy can be different from the report selection for another SRE. The same report can be sent to multiple locations.

## Mandatory Report

The Settlement Summary Report (VSS-110) is mandatory for any SRE that is a funds transfer point.

## Recommended Reports

In addition to the mandatory report, Visa recommends that members elect to receive, at a minimum, the reports listed in .

**Table 5–9:    Recommended VSS Reports**

| BASE II Member | SMS Member |
|---|---|
| Revised Settlement Reporting Hierarchy List (VSS-100-R) | Revised Settlement Reporting Hierarchy List (VSS-100-R) |
| Settlement Summary Report (VSS-110) | Settlement Summary Report (VSS-110) |
| Interchange Value Report (VSS-120) | SRE Settlement Recap Report (VSS-115) |
| Reimbursement Fees Report (VSS-130) | Monthly Reimbursement Fees Report (VSS-130-M) |
| Visa Charges Report (VSS-140) | SRE Financial Recap Report (VSS-300) |
| Summary Reconciliation Report (VSS-900-S) | Reconciliation Report (VSS-900) |

In addition to the reports shown in , Visa also recommends the following reports in the specific instances:

- Currency Conversion Fees Report (VSS-210) when a member reconciles multicurrency fees.

- Visa Charges Reconciliation Report (VSS-230) when a member participates in a National Net Settlement Service that settles its charges in the International Settlement Service.

# Report Delivery

Members can have VSS reports sent to multiple locations of their choice, including locations other than their member processing centers. SMS members can also receive SMS reports and SMS raw data as described in [Chapter 6, SMS Reports and Raw Data](#).

## SMS Members Using BASE II VAP or DAS Delivery

SMS members can receive their VSS and SMS reports and SMS raw data from a BASE II VAP or through the Direct Access Service (DAS). SMS members electing to receive their settlement reports in machine-readable formats will receive them as TC 46 transactions. Members electing to receive print-ready reports will receive them as TC 47 transactions. SMS reports are received as TC 45 transactions, and SMS raw data is received as TC 33 transactions.

Depending on the delivery method a member selects, VSS reports will be delivered as follows:

- Members using a BASE II Edit Package have their settlement reports printed by the Edit Package.

- Members using DAS delivery have their settlement reports in the file type SETLR.

- Machine-readable reports are delivered in the file type SETLM.

- SMS reports are delivered in DBRPT and raw data in DBRAW.

## SMS Members Using Non-VAP Delivery

For U.S. SMS members, SMS supports non-VAP report delivery mechanisms.

If an SMS member using non-VAP delivery elects to receive any of the following reports and raw data, it is in a separate transmission:

- VSS print-ready reports

- VSS machine-readable reports

- SMS reports

- SMS raw data

## BASE II-Connected Members

Reports for BASE II-connected members must be sent to locations that are VAP-connected.

# BIN Identification

Processors that want to distribute VSS reports directly to members can have the BIN identified in their report records. When this option is selected, the BIN of the lowest-level SRE is placed in the Destination BIN field of the machine-readable (TC 46) and print-ready (TC 47) report records. This BIN identifies the report records of the member that owns the BIN. Reports are grouped under the BIN.

The Edit Package strips the header information from reports, which includes the Destination BIN field on print-ready (TC 47) records. Processors that choose the Destination BIN field to facilitate report distribution must pull the TC 47 records from the original delivery file (ITF).

If the BIN identification option is not used, the processor identifier is placed in the Destination BIN field. The processor is always in the report records for summary-level SREs.

The BIN Identification option can be used to affect the sequence that report records are received. If the BIN is identified in report records, the records are received in BIN sequence.

# SMS Funds Transfer Totals (0620) Messages

SMS members may receive an 0620 funds transfer totals message after the completion of settlement. These messages can be received for any funds transfer SRE as long as there is an SMS endpoint for delivery.

The funds transfer totals (0620) message contains the following totals:

- Acquirer gross interchange
- Acquirer reimbursement fees
- Acquirer Visa charges
- Issuer gross interchange
- Issuer reimbursement fees
- Issuer Visa charges
- Other gross interchange
- Other reimbursement fees
- Other Visa charges
- Net funds transfer amount

For more information on the SMS funds transfer totals (0620) messages, refer to V.I.P. System SMS processing specification and technical specifications for the U.S. and international audiences. The complete list of these manuals can be found in the *V.I.P. System Overview.*

# SMS Reports and Raw Data 6

This chapter describes the Single Message System (SMS) reports and raw data available to SMS members. SMS reports and raw data can be used to reconcile a member's daily work.

## SMS Reports

The following types of SMS reports are available:

- Transaction detail reports

- Maintenance reports

- Reconciliation reports

- Error reports

All SMS reports are optional. Data is reported on the SMS detail reports by the following:

- Funds Transfer settlement reporting entity (SRE)

- Processor

- Affiliate BIN

- Lowest-level SRE

Each of these reporting entities is defined in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2,* Appendix D, SMS Reports and Raw Data.

The SRE identifier is printed on the SMS reports to facilitate reconciliation with VSS reports. To accommodate a member's business needs, some SMS reports are available in different sort orders.

One SMS detail report contains data for only one SRE and only one affiliate BIN. However, an affiliate BIN can also appear on multiple detail reports. This situation occurs when an affiliate BIN uses SMS routing options or participates in a National Net Settlement Service.

The SMS reports are listed in <u>Table 6–1</u>. Layouts for the SMS reports are provided in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Chapter D, SMS Reports and Raw Data.

**Table 6–1:     SMS Reports  (1 of 3)**

| Report Number | Report Title and Function | Report Sort Order |
|---|---|---|
| SMS600 | Issuer Transaction Detail<br><br>Lists 01*xx*, 02*xx*, and 04*xx* messages processed by VisaNet for the issuer. | A, C, R, T |
| SMS601 | Acquirer Transaction Detail<br><br>Lists 01*xx*, 02*xx*, and 04*xx* messages processed by VisaNet for the acquirer. | C, I, R, T |
| SMS608 | Fee Collection & Funds Disbursement Detail<br><br>Lists TC 10s and TC 20s received from BASE II and applied to the issuer or acquirer. | C |
| SMS610 | Issuer Chargeback Detail<br><br>Lists issuer-initiated chargebacks. | A, C, R |
| SMS611 | Acquirer Chargeback Detail<br><br>Lists acquirer-processed chargebacks. | C, I, R |
| SMS612 | Issuer Representment Detail<br><br>Lists issuer-processed representments. | A, C, R |
| SMS613 | Acquirer Representment Detail<br><br>Lists acquirer-initiated representments. | C, I, R |
| SMS614 | Issuer Adjustment and Merchandise Credit Detail<br><br>Lists issuer-processed adjustment transactions. | A, C, R |
| SMS615 | Acquirer Adjustment and Merchandise Credit Detail<br><br>Lists acquirer-processed adjustment transactions. | C, I, R |

Report Sort Key

A = Acquirer ID
C = Card Number
I  = Issuer ID
R = Retrieval Reference Number
T = Transmission Date and Time

**Table 6–1:**  **SMS Reports  (2 of 3)**

<table>
<tr><td colspan="2"></td></tr>
</table>

| Report Number | Report Title and Function | Report Sort Order |
|---|---|---|
| SMS616 | Issuer Cancellation and Reversal Detail<br><br>Lists issuer-initiated and received cancellations and reversals. | C, R |
| SMS617 | Acquirer Cancellation and Reversal Detail<br><br>Lists acquirer-initiated and received cancellations and reversals. | C, R |
| SMS620 | Issuer File Maintenance Daily Summary<br><br>Lists accepted and rejected Exception File and PIN Verification File updates sent by the issuer. | T |
| SMS624 | Routing Table Update Daily Summary<br><br>Lists Routing Table additions and deletions by card prefix. | C |
| SMS626 | Administrative Message Daily Summary<br><br>Lists issuer- or acquirer-processed 06*xx* administrative messages. | R |
| SMS630 | Gross Interchange Value Summary<br><br>Provides a summary listing of gross interchange counts and amounts for each batch during the processing day. (Amounts are exclusive of fees, charges, BASE II-connected transactions, and suspended Chargeback Reduction Service transactions.) | not applicable |
| SMS640 | Issuer Error Detail<br><br>Lists messages rejected by VisaNet due to edit errors and late responses. | T |
| SMS641 | Acquirer Error Detail<br><br>Lists messages rejected by VisaNet due to edit errors and late responses. | T |

Report Sort Key

A = Acquirer ID
C = Card Number
I  = Issuer ID
R = Retrieval Reference Number
T = Transmission Date and Time

**Table 6–1:**     **SMS Reports  (3 of 3)**

| | Report Number | Report Title and Function | Report Sort Order |
|---|---|---|---|
| **Report Sort Key**<br><br>A = Acquirer ID<br>C = Card Number<br>I  = Issuer ID<br>R = Retrieval Reference Number<br>T = Transmission Date and Time | SMS642 | Issuer CRS Returned Exception Detail<br><br>Shows exception items returned by the Exception Manager due to Chargeback Reduction Service errors. | T |
| | SMS643 | Acquirer CRS Returned Exception Detail<br><br>Shows exception items returned by the Exception Manager due to Chargeback Reduction Service errors. | T |

# SMS Raw Data

As an optional service, Visa provides raw data files that contain detailed information about the settlement day's transactions for a given participant. Raw data is available to all SMS issuers and acquirers. Participating members can use the data delivered in raw data files to create customized reports and to reconcile to data reported by their own systems.

Raw data is different from report data because it is suited for automated processing. The raw data records are produced from the same sources as SMS reports.

V.I.P. Raw Data Release 2.2 is available to SMS members. Raw data always includes a header record and a trailer record for file control. The following types of records are available:

- Header (V22000)

- Settlement information (V22120)

- Financial transaction (V22200–V22282)

- File maintenance (V22300–V22310)

- Administrative message (V22400–V22430)

- Reconciliation message (V22500–V22510)

- Advice notification transaction (V22600–V22610)

- Trailer (V22900)

For the record formats for the V.I.P. Raw Data Release 2.2, refer to the *VisaNet Settlement Service (VSS) User's Guide, Volume 2,* Appendix D, SMS Reports and Raw Data.

# Reconciliation 7

This chapter provides the information that both Single Message System (SMS) and BASE II-connected members and processors need to develop reconciliation procedures.

The information in this chapter enables members and processors to reconcile their internal totals to those provided by VisaNet. Specifically, the information describes how to:

- Match counts and amounts of financial transactions cleared by VisaNet.

- Match counts of nonfinancial transactions cleared by VisaNet.

- Match counts and amounts of transactions sent to or received from VisaNet for settlement with members' and processors' settlement totals.

- Find specific fields on the VisaNet Settlement Service (VSS) reports that are needed for reconciliation.

All VSS reports are illustrated in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix A, VSS Reports—Print-Ready Formats.

This chapter includes the following sections:

- **Processors and Settlement Hierarchy**—Provides examples of the relationships between processors and settlement hierarchies and the effect of those relationships on reconciliation.

- **VSS Reconciliation Reports**—Describes the VSS reconciliation reports.

- **SMS to VSS Reconciliation**—Describes reconciliation information specific to SMS members.

- **BASE II to VSS Reconciliation**—This section provides reconciliation information specific to BASE II members.

- **VSS to VSS Reconciliation**—This section describes the internal consistency of the VSS reports.

- **Currency Conversion Reporting**—This section explains the currency conversion reporting provided by VSS.

- **Reconciliation of Processing Charges**—This section describes how members can reconcile Visa processing charges.

- **Examples**—This section illustrates how SMS detail reports and BASE II Edit Package reports can be cross-referenced to the VSS reports.

## Processors and Settlement Hierarchy

To establish effective reconciliation procedures, it is important to understand the relationship between processors and VSS settlement hierarchies.

**NOTE:** *This chapter assumes the reader has a thorough understanding of* *Chapter 2, VSS Settlement Concepts.*

A processor is included in the settlement hierarchy when a settlement reporting entity (SRE) represents the total of that processor's work. The relationship of the processor to the settlement hierarchy determines the processor's reconciliation process.

This section provides the following examples of the relationship of processors to VSS settlement hierarchies:

- Processor performing funds transfer for all members

- Processor performing funds transfer for some members and not others (with two distinct subsets)

    – Processor included in the settlement hierarchy

    – Processor not included in the settlement hierarchy

- Processor supporting National Net Settlement Service transactions

This section provides examples of these relationships, along with the settlement structures, as they would be shown on either the Weekly Settlement Reporting Hierarchy List (VSS-100-W) or the Revised Settlement Reporting Hierarchy List (VSS-100-R). The VSS-100-W and VSS-100-R show how the settlement hierarchy is defined in VSS and should be used to confirm that the settlement hierarchy has been established correctly.

**NOTE:** *The report format of the VSS-100-W and the VSS-100-R is exactly the same. The VSS-100-W report is used in this chapter to illustrate how hierarchies are reported, but the VSS-100-R can be used instead.*

## Processor Performing Funds Transfer for All Members

A processor can perform funds transfer for all of its members. In this case, the processor is always part of the settlement hierarchy as shown in Figure 7–1. Processor 1 (SRE 4) is a summary SRE that represents both the funds transfer totals for Banks A, B, and C, as well as the total work performed by the processor. Processor 1 (SRE4) must receive the VSS-110 report because it is the only funds transfer in the hierarchy.

**Figure 7–1:**    **Settlement Hierarchy—Processor Performing Funds Transfer for All Members**
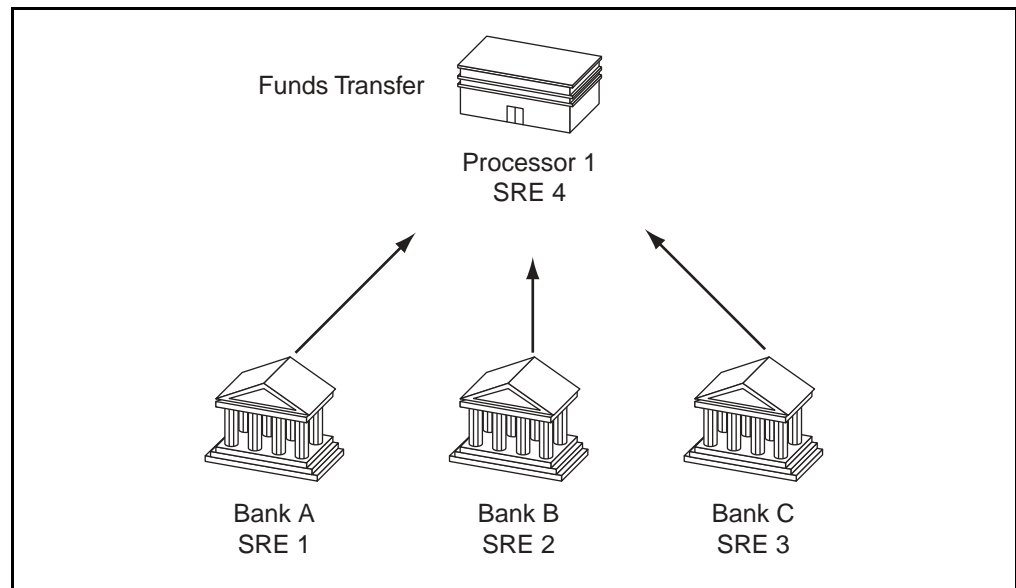


This hierarchy is reported on the Weekly Settlement Reporting Hierarchy List (VSS-100-W) as shown in Figure 7–2.

**Figure 7–2:**    **VSS-100-W Report—Processor Performing Funds Transfer for All Members**

```
REPORT ID: VSS-100-W                     VISANET SETTLEMENT SERVICE                    PAGE          1
REPORTING FOR: 0000000004 PROCESSOR 1    INTERNATIONAL SETTLEMENT SERVICE             REPORT DATE: 02JUN97
                                  WEEKLY SETTLEMENT REPORTING HIERARCHY LIST          LAST CHANGE: 05MAY97
SETTLEMENT CURRENCY: SEK
SETTLEMENT REPORTING ENTITY(SRE) SRE NAME      FUNDS                            PROCESSOR    NETWORK    TXN
        HIERARCHY                              TRANSFER     CLEARING ENTITY ID   ID           ID        CURR
     SRE4

0000000004                       PROCESSOR 1   YES
    0000000001    SRE1           BANK A                       400001            4000010000    ALL
    0000000002    SRE2           BANK B                       400002            4000010000    ALL
    0000000003                   BANK C                       400003            4000010000    ALL
                  SRE3

                            ***END OF VSS-100-W REPORT***
```

## Processor Performing Funds Transfer for Some Members

In some cases, processors do not perform funds transfer for all of their members. The processor may or may not be in the settlement hierarchy depending on member requirements for funds transfer.

### Processor Included in Settlement Hierarchy

In Figure 7–3, Processor 1 (SRE 4) performs funds transfer for some of its members and not for others while continuing to be included in the settlement hierarchy. In this case, SRE1 and SRE5 must subscribe to the VSS-110 report.

- SRE 4 is a summary SRE that represents the total work performed by processor 1 for Banks A, B, and C.

- Bank A does its own funds transfer through SRE 1.

- SRE 5 is a summary-level that performs funds transfer for banks B and C.

**Figure 7–3:    Processor Included in Settlement Hierarchy**
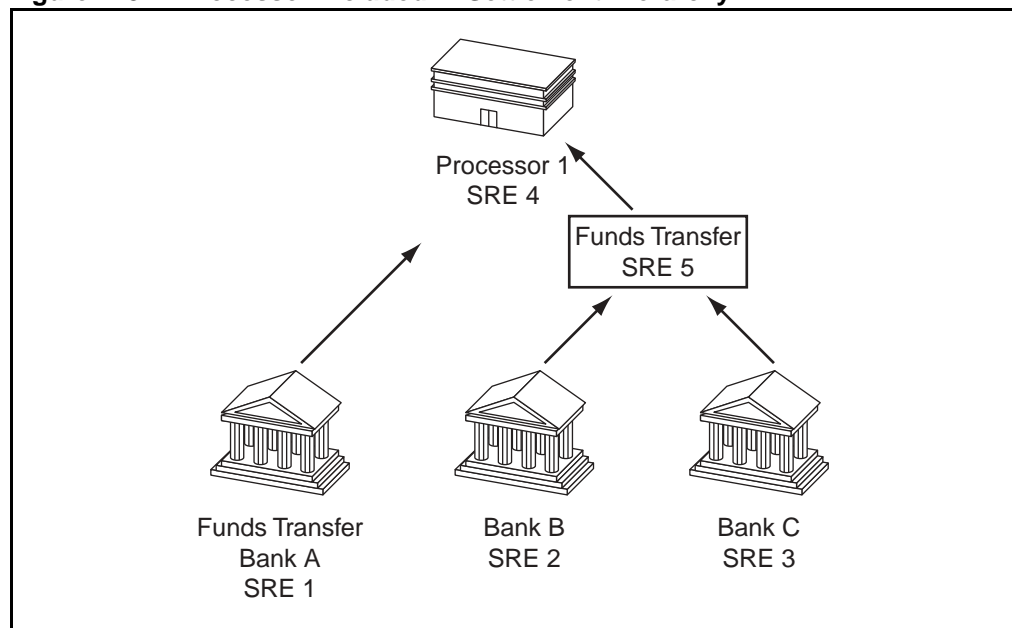
This hierarchy is reported on the Weekly Settlement Reporting Hierarchy List (VSS-100-W) report as shown in Figure 7–4. The SREs that perform funds transfers include YES under the column title "Funds Transfer." The two SREs that perform funds transfer are at the same level and reporting consolidates to SRE 4. In addition, SRE 2 and SRE 3 are at a level below SRE 5, and their reporting consolidates SRE 5.

**Figure 7–4:    VSS-100-W Report—Processor Performing Funds Transfer for Selected Members**

```
REPORT ID: VSS-100-W                      VISANET SETTLEMENT SERVICE                      PAGE            1
REPORTING FOR: 0000000004 PROCESSOR 1   INTERNATIONAL SETTLEMENT SERVICE               REPORT DATE:02JUN97
                              WEEKLY SETTLEMENT REPORTING HIERARCHY LIST                LAST CHANGE:05MAY97
SETTLEMENT CURRENCY:SEK
SETTLEMENT REPORTING ENTITY(SRE)SRE NAME        FUNDS                        PROCESSOR   NETWORK   TXN
       HIERARCHY                                TRANSFER    CLEARING ENTITY ID   ID          ID        CURR


0000000004                          PROCESSOR 1
 0000000001                         BANK A        YES           400001         4000010000    ALL
 0000000005                         FT SRE B/C    YES
   0000000002                       BANK B                      400002         4000010000    ALL
   0000000003                       BANK C                      400003         4000010000    ALL

                                       ***END OF VSS-100-W REPORT***
```

## Processor Not Included in Settlement Hierarchy

While processors are usually part of a settlement hierarchy, there are cases in which this is not true. One example is a member that uses two processors and wants its funds transfer combined. As shown in Figure 7–5, Bank A has some of its work performed by Processor 1 and some by Processor 2. This might occur if a bank uses one processor for its ATM business and another for its POS business. Banks B and C have all their processing performed by Processor 1.

Figure 7–5 represents processing work of the banks, A, B, and C, that is processed by two different processors, 1 and 2. The banks and processors do not represent a hierarchy.

**Figure 7–5:    Processing Work by Two Processors**
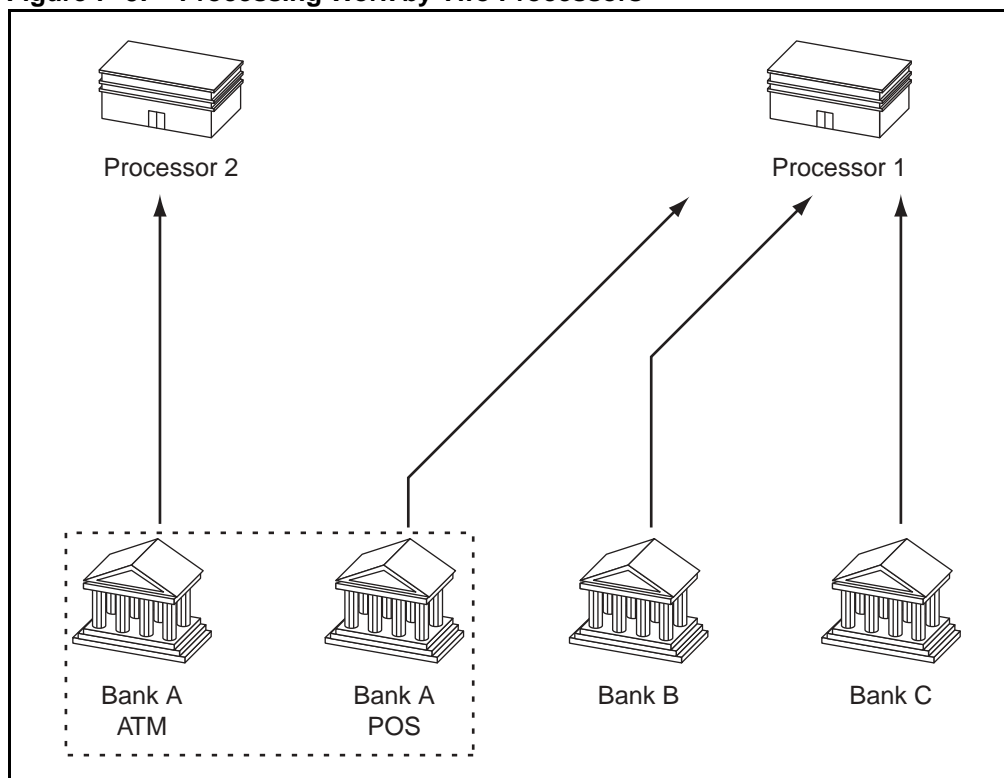
Bank A wants one funds transfer that includes all its work performed by both processors. Banks B and C have their funds transfers performed by Processor 1.

- SRE 7 provides a combined settlement and funds transfer point for Bank A.

- SRE 5 provides the funds transfer point performed by Processor 1 for Banks B and C.

The settlement view is shown in Figure 7–6.

**Figure 7–6:    Funds Transfer Requirements for Banks A, B, and C**
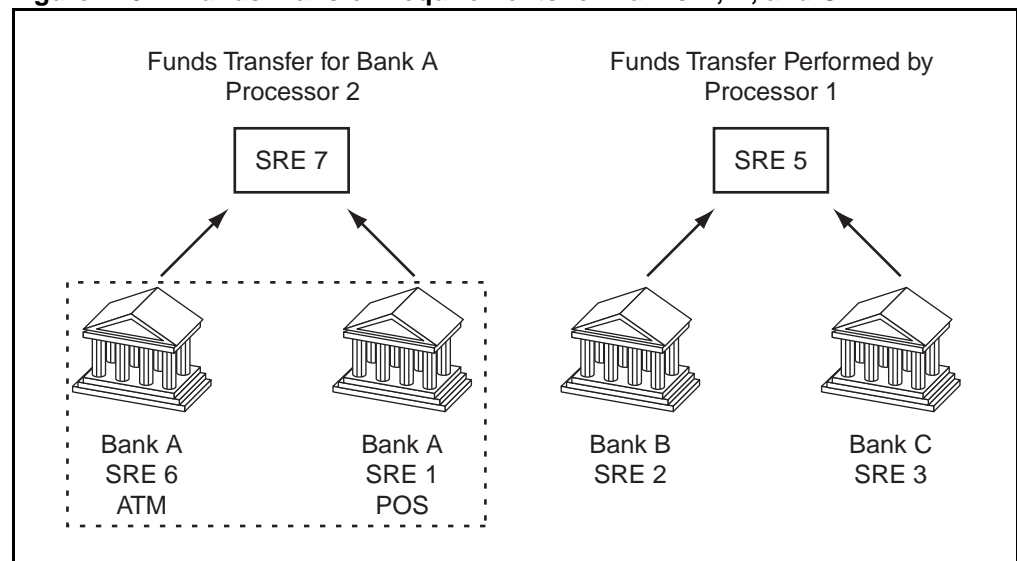


As illustrated in Figure 7–6, processor 1 and processor 2 must be part of two separate hierarchies. Funds transfer for ATM, SRE 6, and POS, SRE 1, activity for bank A is at the top SRE, SRE 7. Bank B, SRE 2, and bank C, SRE 3, are in another hierarchy, and the funds transfer for both banks is performed by SRE 5. SRE 4, which represents Processor 1 in Figure 7–3 earlier in this chapter, no longer exists because the totals for SRE 1 cannot be added to both SRE 7 and SRE 4.

Bank A's hierarchy is reported on the Weekly Settlement Reporting Hierarchy List (VSS-100-W) as shown in Figure 7–7. The report shows that Bank A does its own funds transfer using an SRE that is a sum of the two SREs for the work done by two different processors. The clearing entity ID (BIN) for Bank A in this case is the same for both SRE 1 and SRE 6. The member can have the report sent to any delivery location.

**Figure 7–7:   VSS-100-W Report—One Member With Two Processors**

```
REPORT ID: VSS-100-W                      VISANET SETTLEMENT SERVICE                   PAGE            1
REPORTING FOR: 0000000007 SRE 7          INTERNATIONAL SETTLEMENT SERVICE             REPORT DATE:02JUN97
                                     WEEKLY SETTLEMENT REPORTING HIERARCHY LIST       LAST CHANGE:05MAY97
SETTLEMENT CURRENCY:SEK
SETTLEMENT REPORTING ENTITY(SRE)SRE NAME        FUNDS                       PROCESSOR   NETWORK      TXN
     HIERARCHY                             TRANSFER    CLEARING ENTITY ID      ID         ID        CURR

 [SRE7]

0000000007                  [SRE1]    SRE 7          YES
   0000000001                         BANK A/PROC 1               400001     4000010000    ALL
   0000000006              [SRE6]     BANK A/PROC 2               400001     4000010000    ALL


                          ***END OF VSS-100-W REPORT***
```

The Weekly Settlement Reporting Hierarchy List (VSS-100-W) for SRE 5, which is the funds transfer point for Banks B and C, is shown in Figure 7–8. This report would continue to go to Processor 1.

**Figure 7–8:   VSS-100-W Report—Processor With Two Members**

```
REPORT ID: VSS-100-W                      VISANET SETTLEMENT SERVICE                   PAGE            1
REPORTING FOR: 0000000005 SRE 5          INTERNATIONAL SETTLEMENT SERVICE             REPORT DATE:02JUN97
                                     WEEKLY SETTLEMENT REPORTING HIERARCHY LIST       LAST CHANGE:05MAY97
SETTLEMENT CURRENCY:SEK
SETTLEMENT REPORTING ENTITY(SRE)SRE NAME        FUNDS                       PROCESSOR   NETWORK      TXN
     HIERARCHY                             TRANSFER    CLEARING ENTITY ID      ID         ID        CURR

 [SRE5]

0000000005                  [SRE2]    SRE 5          YES
   0000000002                         BANK B                      400002     4000010000    ALL
   0000000003              [SRE3]     BANK C                      400003     4000010000    ALL


                          ***END OF VSS-100-W REPORT***
```

Processors 1 and 2 should subscribe to the Processor Reconciliation Report (VSS-900-P) or Processor Summary Reconciliation Report (VSS-900-PS), described in the "VSS Reconciliation Reports" section in this chapter, so they can reconcile their total work.

## Processor with National Net Settlement Service Transactions

In VSS, separate settlement hierarchies with different SRE identifiers must be established for each settlement service. A single SRE cannot be created to represent all the work performed by a processor whose members participate in both the International Settlement Service and a National Net Settlement Service. Therefore, a processor that handles both International Settlement Service and National Net Settlement Service transactions cannot be part of a settlement hierarchy.

In the example shown in Figure 7–9, Processor 3 performs processing for Banks D, E, F, and G. All four banks participate in the International Settlement Service and the same National Net Settlement Service.

**Figure 7–9:    Processing View—Multiple Settlement Services**
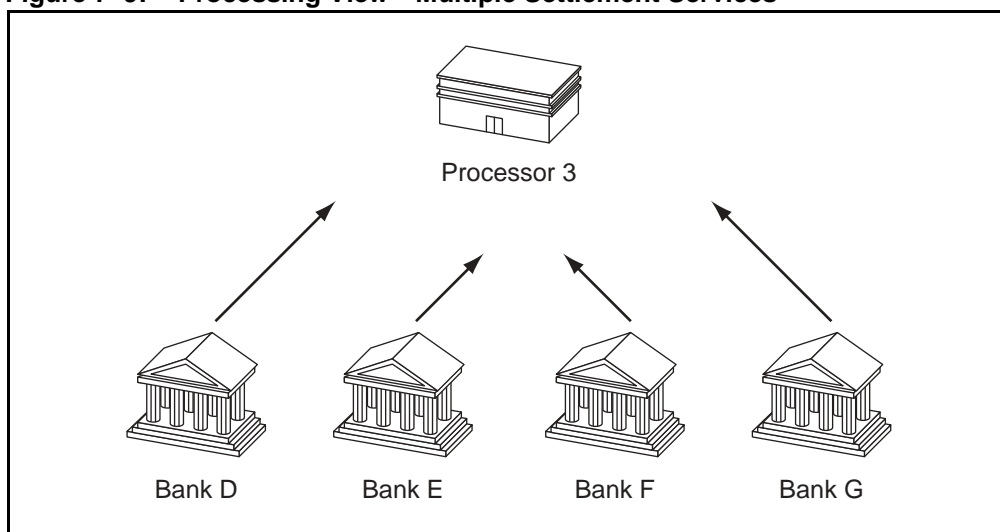


A separate settlement hierarchy must be created for the International Settlement Service and for the National Net Settlement Service. The example in Figure 7–10 shows that the SRE representing Processor 3 performs funds transfer for the International Settlement Service hierarchy. In the National Net Settlement Service hierarchy, each bank is responsible for its own funds transfers for National Net Settlement Service transactions.

Even if Processor 3 is responsible for funds transfer for both International Settlement Service and National Net Settlement Service transactions, two settlement hierarchies with different SREs must be established because separate settlement hierarchies must be established for each settlement service.

**Figure 7–10:  Settlement View—Multiple Settlement Services**
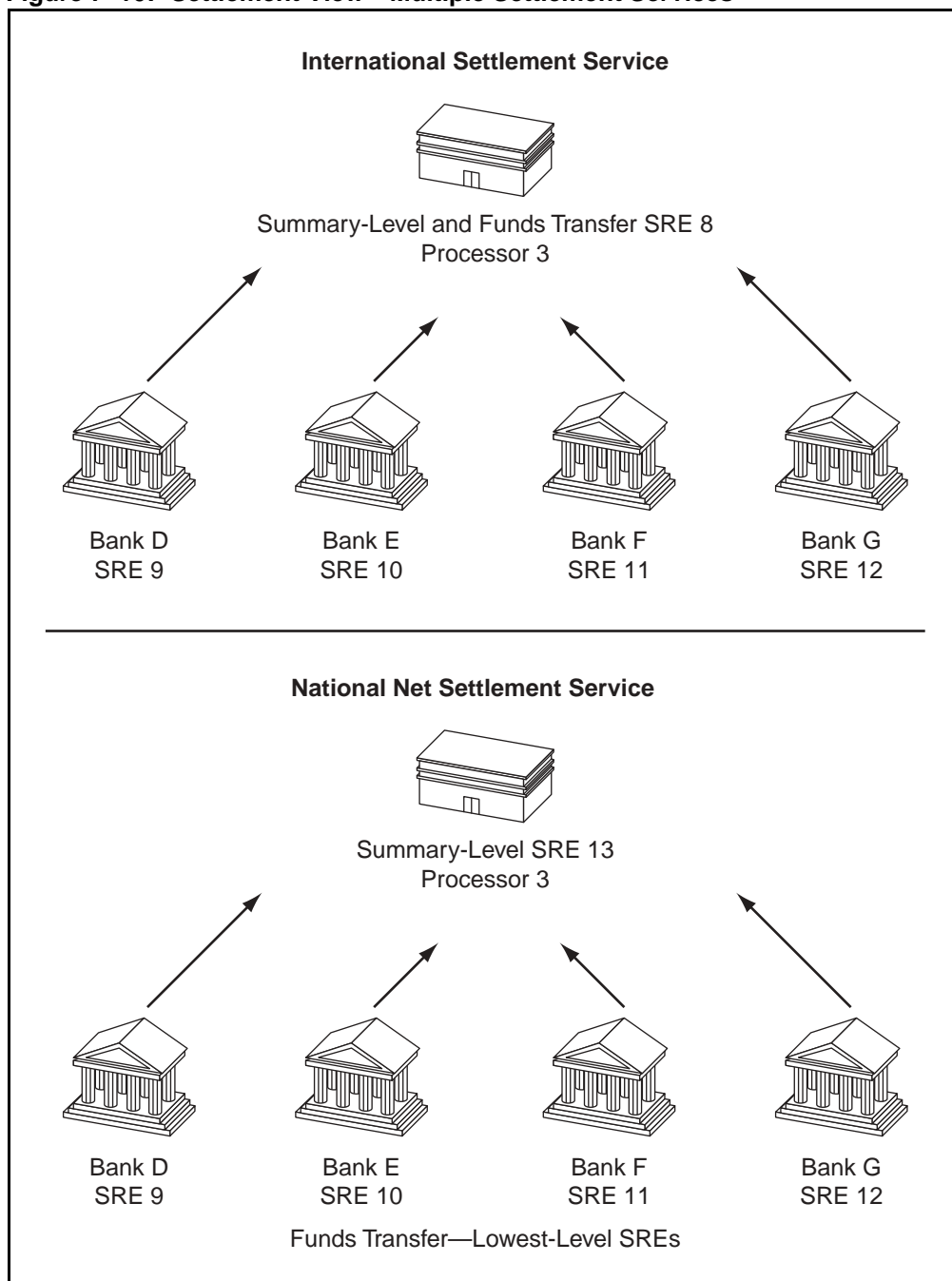


Processor 3 should subscribe to the Processor Summary Reconciliation Report (VSS-900-PS), described in the "VSS Reconciliation Reports" section in this chapter, so it can reconcile its total work.

The Weekly Settlement Reporting Hierarchy List (VSS-100-W) for the International Settlement Service is shown in Figure 7–11. This report shows the processor as represented by SRE 8 as the funds transfer point for International Settlement Service transactions.

**Figure 7–11:  VSS-100-W Report for International Settlement Service**

```
REPORT ID: VSS-100-W                     VISANET SETTLEMENT SERVICE                    PAGE            1
REPORTING FOR: 0000000008 SRE 8         INTERNATIONAL SETTLEMENT SERVICE               REPORT DATE:02JUN97
                                  WEEKLY SETTLEMENT REPORTING HIERARCHY LIST           LAST CHANGE:05MAY97

SETTLEMENT CURRENCY:SEK
SETTLEMENT REPORTING ENTITY(SRE) SRE NAME        FUNDS                        PROCESSOR     NETWORK     TXN
 SRE8        HIERARCHY                          TRANSFER     CLEARING ENTITY ID    ID          ID        CURR


0000000008                  SRE9       SRE 8            YES
   0000000009                          BANK D INTL                  400009        4000030000     ALL
   0000000010         SRE10            BANK E INTL                  400010        4000030000     ALL
   0000000011                          BANK F INTL                  400011        4000030000     ALL
   0000000012         SRE11            BANK G INTL                  400012        4000030000     ALL

              SRE12
                                  ***END OF VSS-100-W REPORT***
```

The VSS-100-W for the National Net Settlement Service is shown in Figure 7–12. This report shows the member (rather than the processor) as being responsible for funds transfer for National Net Settlement Service transactions.

**Figure 7–12:  VSS-100-W Report for National Net Settlement Service**

```
REPORT ID: VSS-100-W                     VISANET SETTLEMENT SERVICE                    PAGE            1
REPORTING FOR: 0000000013 SRE 13        INTERNATIONAL SETTLEMENT SERVICE               REPORT DATE:02JUN97
                                  WEEKLY SETTLEMENT REPORTING HIERARCHY LIST           LAST CHANGE:05MAY97

SETTLEMENT CURRENCY:SEK
SETTLEMENT REPORTING ENTITY(SRE)SRE NAME         FUNDS                        PROCESSOR     NETWORK     TXN
SRE13        HIERARCHY                          TRANSFER     CLEARING ENTITY ID    ID          ID        CURR


0000000013                  SRE14      SRE 13
   0000000014                          BANK D NNS      YES          400009        4000030000     ALL
   0000000015         SRE15            BANK E NNS      YES          400010        4000030000     ALL
   0000000016                          BANK F NNS      YES          400011        4000030000     ALL
   0000000017         SRE16            BANK G NNS      YES          400012        4000030000     ALL

              SRE17
                                  ***END OF VSS-100-W REPORT***
```

# VSS Reconciliation Reports

This section describes the reconciliation reports produced by VSS. There are two types of VSS reconciliation reports:

- The VSS-900 series reports provide transaction counts and amounts by SRE and includes the Reconciliation Report (VSS-900) and the Summary Reconciliation Report (VSS-900-S).

  – The VSS-900 report provides a detailed breakdown by business transaction type.

  – The VSS-900-S report provides a summary across business transaction types.

- The VSS-900-P series reports provide transaction counts and amounts by processor and BIN and includes the Processor Reconciliation Report (VSS-900-P) and the Processor Summary Reconciliation Report (VSS-900-PS).

  – The VSS-900-P report provides a detailed breakdown by business transaction type.

  – The VSS-900-PS report provides a summary across business transaction types.

Members and processors can use these reports to reconcile all transactions sent to and received from Visa, including nonfinancial transactions.

Members must use the VSS-900 series to reconcile their totals. The reconciliation report to be used by processors depends on the relationship between the processor and the VSS settlement hierarchy as previously described in the "Processors and Settlement Hierarchy" section in this chapter.

The recommended reports for processors and alternative reports, if applicable are shown in .

**Table 7–1:    VSS Reports for Processors**

| Processor Relationship in Settlement Hierarchy | Recommended Report | Alternative Report |
|---|---|---|
| Processor performing funds transfer for all members | VSS-900 series | VSS-900-P series |
| Processor performing funds transfer for some members and not others (processor included in the settlement hierarchy) | VSS-900 series | VSS-900-P series |
| Processor performing funds transfer for some members and not others (processor not included in the settlement hierarchy) | VSS-900-P series | |
| Processor supporting National Net Settlement Service transactions | VSS-900-P series | |

**NOTE:**  *These reports are illustrated in the* VisaNet Settlement Service (VSS) User's Guide, Volume 2*, Appendix A, VSS Reports—Print-Ready Formats.*

## VSS-900 Series

The VSS-900 series, which includes the Reconciliation Report (VSS-900) and the Summary Reconciliation Report (VSS-900-S), is available for every SRE. Members can use either report to reconcile their totals. A processor must be part of a settlement hierarchy to use the VSS-900 series to reconcile its totals, because a single report does not represent all the processor's work if the processor is not included in a settlement hierarchy. These reports provide totals of transaction counts and clearing amounts for each SRE by clearing currency.

Transactions are summarized by business mode (acquirer, issuer, or other) within clearing currency, and counts are then totaled across all clearing currencies as shown in . Nonfinancial transactions are reported under clearing currency category "NONE." These reports contain data for only

one settlement service because an SRE cannot contain transactions for multiple settlement services. If there are no transactions to report, the business mode is not included for the clearing currency.

**Figure 7–13:  Levels on VSS-900-S Report**

```
Clearing Currency: 1
      Acquirer
      Issuer
      Other
      Total

Clearing Currency: 2
      Acquirer
      Issuer
      Other
      Total

Clearing Currency: NONE
      Acquirer
      Issuer
      Other
      Total

Clearing Currency: All
      Total
```

The totals by business mode (issuer, acquirer, other) can be used to reconcile to SMS reports. The totals by business mode can also be used by SMS and BASE II members to reconcile the VSS-900 series of reports to the Interchange Value Report (VSS-120).

## VSS-900-P Series

The VSS-900-P series, which includes the Processor Reconciliation Report (VSS-900-P) and the Processor Summary Reconciliation Report (VSS-900-PS), is available only to processors. This series of reports provides totals for all work performed by a processor. In addition to the processor section, these reports also contain at least one section for each BIN handled by the processor.

The BINs listed on the VSS-900-PS report are either the 10-digit affiliate BINs displayed on SMS reports and contained in SMS raw data records or the 6-digit BINs used by BASE II for routing and by the Edit Package for reporting.

In the BIN-related sections, transactions are grouped by the combination of BIN and SRE. These sections can be used to reconcile to VSS reports, which are grouped by SRE, such as the Interchange Value Report (VSS-120). In many cases, a BIN has only one SRE, and, therefore, the BIN and SRE

sections represents the totals for the BIN. In other cases, a BIN may have more than one SRE, which would occur if settlement reports at lower levels of detail are required (for example, separate reports by account range) or if a BIN participates in a National Net Settlement Service. In these cases, the totals in the BIN and SRE sections need to be added together to get totals for the BIN.

Within both the processor totals section and the BIN and SRE sections, transactions are summarized by business mode within settlement service and clearing currency, and by settlement service within clearing currency. They are then totaled across all clearing currencies. These summaries are shown in Figure 7–14.

**Figure 7–14:  Levels on the VSS-900-PS Report**

```
Clearing Currency: 1
Settlement Service: 1
    Acquirer/Issuer/Other/Total

Clearing Currency: 1
Settlement Service: 2
    Acquirer/Issuer/Other/Total

Clearing Currency: 1
Settlement Service: All
    Acquirer/Issuer/Other/Total

Clearing Currency: 2
Settlement Service: 1
    Acquirer/Issuer/Other/Total

Clearing Currency: 2
Settlement Service: 2
    Acquirer/Issuer/Other/Total

Clearing Currency: 2
Settlement Service: All
    Acquirer/Issuer/Other/Total

Clearing Currency: NONE
Settlement Service: 1
    Acquirer/Issuer/Other/Total

Clearing Currency: None
Settlement Service: 2
    Acquirer/Issuer/Other/Total

Clearing Currency: NONE
Settlement Service: All
    Acquirer/Issuer/Other/Total

Clearing Currency: All
Settlement Service: All
    Acquirer/Issuer/Other/Total
```

*NOTE:*    *The total Settlement Service pages (Settlement Service: All) are not created when a BIN participates in only one settlement service.*

The totals by business mode can be used to reconcile to SMS reports. The totals by business mode can also be used by SMS- and BASE II-connected members and processors to reconcile the Processor Summary Reconciliation Report (VSS-900-PS) to the Interchange Value Report (VSS-120). BASE II members and processors can use the totals on the VSS-900-P series to reconcile to the Edit Package reports depending on the following:

- Members that participate in only one settlement service or select the settlement service before sending transactions to Visa can use the totals by settlement service within clearing currency.

- Members that do not select the settlement service before sending transactions to Visa and process transactions in only one clearing currency can use the totals by clearing currency.

- Members that do not select the settlement service before sending transactions to Visa and process transactions in multiple clearing currencies can only use the total counts across all settlement services.

## Clearing-Only Transactions

This section applies only to participants in a service that supports clearing-only transactions. This service collects and delivers transactions but does not settle them.

**NOTE:**  *Currently, only specific members are using this service.*

If a reconciliation report has clearing-only transactions, subtotals for these transactions are shown separately on the VSS reconciliation reports under the following headings:

- Clearing-Only Financial Transactions
- Clearing-Only Nonfinancial Transactions

A sample overview of the VSS-900-S report with a hypothetical listing of transactions is shown in Figure 7–15. Total clearing amounts are not shown in this example because the report is for multiple currencies.

**Figure 7–15:  Sample Overview of VSS-900-S Report**

```
REPORT ID:  VSS-900-S                    VISANET SETTLEMENT SERVICE            PAGE:          4
REPORTING FOR: 1022501589 B OF ANTARCT NE INTERNATIONAL SETTLEMENT SERVICE    PROC DATE:       02JUN97
                                SUMMARY RECONCILIATION REPORT                 REPORT DATE:     02JUN97

CLEARING CURRENCY: ALL
                                   COUNT            CLEARING      TOTAL                        TOTAL
                                                    AMOUNT        COUNT                        CLEARING
                                                                                              AMOUNT
 TOTAL 1022501589 B OF ANTARCT NE
     FINANCIAL TRANSACTIONS                                       5,783

     CLEARING ONLY FINANCIAL TRANSACTION                              6

     NONFINANCIAL TRANSACTIONS                                       27

     CLEARING ONLY NONFINANCIAL TRANSACTION                           0

     TOTAL TRANSACTIONS                                          5,816

                              *** END OF VSS-900-S REPORT ***
```

## Transaction Dispositions

The VSS reconciliation reports show the disposition of all transactions submitted to and received from VisaNet. While the reports have been designed to list all possible transaction dispositions, not all dispositions are applicable for all transactions. Possible dispositions are listed in Table 7–2.

*NOTE:  VSS report lines do not print if there is no data to report.*

**Table 7–2:    Disposition of Transactions  (1 of 3)**

| Disposition | Description | BASE II | BASE I CPS/CRS[1] | SMS | SMS CPS/CRS[1] |
|---|---|:---:|:---:|:---:|:---:|
| Sent To Visa | The total number of transactions and total value of interchange sent to VisaNet from the member. Rejected transactions are not included; returned transactions are included. | ✔ | ✔ | ✔ | ✔ |
| To Holdover (-) | Cleared transactions sent to holdover. This includes transactions sent to the Chargeback Reduction Service (CRS) or the warehouse or deferred settlement transactions.[2] | ✔ | ✔ | | ✔ |

**Table 7–2:　　Disposition of Transactions  (2 of 3)**

| Disposition | Description | BASE II | BASE I CPS/CRS[1] | SMS | SMS CPS/CRS[1] |
|---|---|:---:|:---:|:---:|:---:|
| To Warehouse | Transactions sent to the warehouse and not settled due to the unavailability of current currency rates. | ✔ | ✔ | | |
| To CRS | CRS transactions sent to holdover. These transactions are not settled in the current settlement cycle. | | ✔ | | ✔ |
| To Deferred | Deferred settlement transactions.[2] These transactions are not settled in the current settlement cycle. | ✔ | ✔ | | |
| From Holdover (+) | Transactions that were sent from holdover into settlement, including those accepted from CRS or the warehouse for settlement or deferred settlement transactions. Transactions that were returned from CRS or the warehouse are also included. | ✔ | ✔ | | ✔ |
| From Warehouse (Accepted or Returned) | Transactions that were sent to the warehouse in the previous settlement cycle and are being settled in the current settlement cycle. | ✔ | ✔ | | |
| From CRS (Accepted or Returned) | Transactions that have been validated by CRS and are being settled during the current settlement cycle. The date on which the transaction was sent to CRS is shown in the CRS DATE column. | | ✔ | | ✔ |
| From Deferred | Transactions whose settlement was deferred and are being settled during the current settlement cycle.[2] | ✔ | ✔ | | |
| Sent to Visa and Sent to Settlement | The total of transactions SENT TO VISA, minus the transactions TO HOLDOVER (-), plus transactions FROM HOLDOVER (+). | ✔ | ✔ | ✔ | ✔ |
| Received from Visa | The total number of transactions and interchange sent from VisaNet to the member. This does not include returned items. | ✔ | ✔ | ✔ | ✔ |

[1]The CPS/CRS column only applies to members in countries using CPS that have a processing delay for exception items.

[2]Deferred settlement is currently available in Brazil and Japan only.

**Table 7–2:    Disposition of Transactions  (3 of 3)**

| Disposition | Description | BASE II | BASE I CPS/CRS[1] | SMS | SMS CPS/CRS[1] |
|---|---|---|---|---|---|
| Returned Items (+) | Transactions that were returned by VisaNet. The amounts for the returned items listed are the inverse of the original item. This includes current cycle returned, from CRS returned, and from warehouse returned. | ✔ | ✔ | | ✔ |
| Current Cycle Returned | Transactions that were SENT TO VISA in the current settlement cycle and are now being returned by VisaNet. | ✔ | ✔ | | |
| From CRS Returned | Transactions that were returned from CRS as invalid. They were SENT TO VISA/TO CRS in a previous settlement cycle and are being returned in the current settlement cycle. The CRS DATE column shows when the transaction was sent to CRS. | | ✔ | | ✔ |
| From Warehouse Returned | Transactions SENT TO VISA/TO WAREHOUSE in the previous settlement cycle that are being returned in the current settlement cycle. | ✔ | ✔ | | |
| Received from Visa and Sent to Settlement | The total number of transactions and interchange received by VSS for settlement. This is the sum of RECEIVED FROM VISA and RETURNED ITEMS (+). | ✔ | ✔ | ✔ | ✔ |
| Total Sent to Settlement | The total number of transactions and total value of interchange sent to VSS for settlement. This is the sum of SENT TO VISA AND SENT TO SETTLEMENT and RECEIVED FROM VISA AND SENT TO SETTLEMENT. | ✔ | ✔ | ✔ | ✔ |
| From CRS Accepted to Warehouse | Transactions that were sent to the warehouse or CRS in the previous settlement cycle and are being deferred to a future settlement cycle. This section also includes transactions sent to CRS in the previous settlement cycle but not settled in the current cycle because currency rates were not available. | | ✔ | | |

[1]The CPS/CRS column only applies to members in countries using CPS that have a processing delay for exception items.

[2]Deferred settlement is currently available in Brazil and Japan only.

# SMS to VSS Reconciliation

This section describes the reconciliation process for SMS-connected members and processors. SMS-connected members and processors can reconcile their daily activity using the following reports and files:

- **VSS reconciliation reports**—VSS reconciliation reports provide totals for all transactions sent to or received from VisaNet, including nonfinancial transactions. The reports are the Reconciliation Report (VSS-900), Summary Reconciliation Report (VSS-900-S), Processor Reconciliation Report (VSS-900-P), and the Processor Summary Reconciliation Report (VSS-900-PS).

- **VSS settlement reports**—VSS settlement reports provide interchange, reimbursement fee, and charge totals settled by VSS. The reports are the Settlement Summary Report (VSS-110), the Interchange Value Report (VSS-120), the Reimbursement Fees Report (VSS-130), and the Visa Charges Report (VSS-140).

- **SMS transaction detail reports**—SMS transaction detail reports provide an audit trail of all SMS transactions in the day's settlement total. The reports can be used to research differences, if any, between totals reported by VisaNet on the VSS reports and those reported by the member's or processor's system. Samples of these reports are included in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix D, SMS Reports and Raw Data.

- **Raw data files**—Raw data files contain detailed information about the day's transactions and can be used, in conjunction with VSS machine-readable reports, to automate the reconciliation process. Detail record formats are included in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix D, SMS Reports and Raw Data.

In addition, SMS processors can reconcile their online activity using reconciliation (0520) messages.

The reconciliation of SMS transactions to VSS reports is shown in Figure 7–16. Count 1 and Amount 1 represent totals for settled transactions. The settlement flags in online messages indicate whether transactions are settled. The processor's internal totals containing counts and amounts for settled transactions can be reconciled to the Interchange Value Report (VSS-120).

The processor's internal totals, which contain counts and amounts for all transactions sent to and received from VisaNet, can be reconciled to the VSS reconciliation reports. In Figure 7–16, Count 2 and Amount 2 represent totals for all transactions. In turn, the totals on the VSS reports correspond to totals on the SMS detail reports.

**Figure 7–16:  Reconciliation of SMS Transactions to VSS Settlement Reporting**
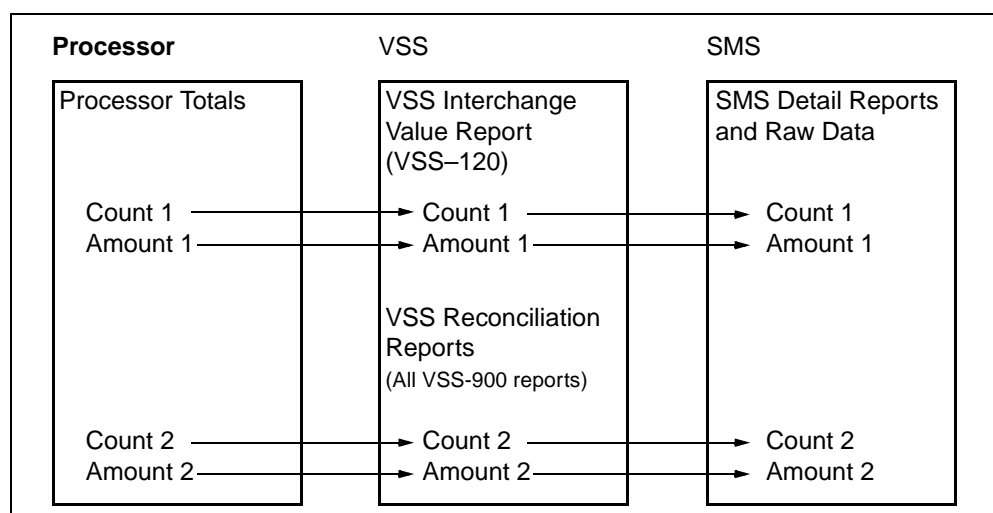


> ***NOTE:***  *Count 1 and Amount 1 represent totals for settled transactions.*
> *Count 2 and Amount 2 represent totals for all transactions.*

## Reconciliation to VSS Reconciliation Reports

Members and processors can use the VSS reconciliation reports to reconcile all activity sent to and received from VisaNet, including nonfinancial transactions. Reconciliation is slightly different depending on whether the processor is part of the settlement hierarchy.

### Processor Included in Settlement Hierarchy

A processor is included in a settlement hierarchy if an SRE is established that represents the total of that processor's work. A processor included in the settlement hierarchy can use the Reconciliation Report (VSS-900) or the Summary Reconciliation Report (VSS-900-S) to reconcile activity by SRE. If the processor's totals do not balance to the totals on the reports, the SMS transaction detail reports can be used to research differences. For examples of the relationship between the VSS-900-S report and SMS transaction detail reports, see Figure 7–20 and Figure 7–21 in the "Examples" section in this chapter.

The VSS-900 and VSS-900-S reports can also be used to reconcile transaction interchange counts and amounts to settlement amounts on the Interchange Value Report (VSS-120). For an example of the relationship between the VSS-900-S report and the VSS-120 report, see Figure 7–22 in the "Examples" section in this chapter. This reconciliation can be done for the processor SRE, funds transfer SREs, or lowest-level SREs.

A processor included in the settlement hierarchy can use the Processor Reconciliation Report (VSS-900-P) or Processor Summary Reconciliation Report (VSS-900-PS) instead of the VSS-900 or VSS-900-S report. The reconciliation process would then be the same as described below for processors not included in the settlement hierarchy.

## Processor Not Included in Settlement Hierarchy

A processor that is not included in the settlement hierarchy does not receive the VSS-900 series because there is no SRE that represents the processor total. These processors can use the Processor Reconciliation Report (VSS-900-P) or Processor Summary Reconciliation Report (VSS-900-PS) instead.

If the processor's totals do not balance to the totals shown on the VSS-900-P or VSS-900-PS report, the SMS transaction detail reports can be used to research differences. For an example of the relationship between the VSS-900-PS report and an SMS transaction detail report, see Figure 7–23 in the "Examples" section in this chapter.

## Fields to Compare

For financial transactions, the count and clearing amount for the TOTAL SENT TO SETTLEMENT rows on the VSS reconciliation reports should match the totals that the processor expected to be settled. The amounts on the reconciliation reports are in clearing currency. SMS members reconciling SMS detail reports to any of the VSS-900 reports need to use the totals expressed in clearing currency on the SMS detail reports rather than settlement currency.

For nonfinancial transactions, counts in the clearing currency "NONE" section of the VSS reconciliation reports should match those totals accumulated by the processor.

The TOTAL SENT TO SETTLEMENT counts and amounts by business mode on the Reconciliation Report (VSS-900) and Summary Reconciliation Report (VSS-900-S) match the COUNT and CLEARING AMOUNT totals for each business mode on the Interchange Value Report (VSS-120) for the same SRE as shown in Table 7–3.

**Table 7–3:    Counts and Amounts by Business Mode**

| Processor | VSS-900 Reports | VSS-120 Report |
|-----------|-----------------|----------------|
| Settled | Sent to settlement | Count and clearing amount |
| Nonfinancial | Clearing currency "NONE" | not applicable |

## Reconciliation to VSS Settlement Reports

Processors and members can use the Interchange Value Report (VSS-120) to reconcile settled transactions. Settlement flags in a transaction message header can be used to determine the settlement action taken by VisaNet. By evaluating settlement flags, processors can update their internal processing totals. Their internal totals for settled transactions should reconcile to those shown on the VSS-120 report.

If differences exist between the processor's totals and those shown on the VSS-120 report, the SMS transaction detail reports can be used to research the differences. For an example of the relationship between the issuer section on a VSS-120 report and an SMS transaction detail report, see [Figure 7–24](#) in the "[Examples](#)" section in this chapter. Total settlement amounts on the SMS transaction detail reports match the net interchange amounts on the VSS-120 report.

Net settlement amount includes interchange value, reimbursement fees, and charges. The Settlement Summary Report (VSS-110), which provides summary totals for interchange value, reimbursement fees, Visa charges, and the net settlement amount, can be used to understand the calculation of net settlement amount. The Interchange Value Report (VSS-120), Reimbursement Fees Report (VSS-130), and Visa Charges Report (VSS-140) provide the supporting detail for the totals shown on the VSS-110 report.

## Relationship Between VSS Reports and SMS Reports

It is essential to understand the relationship between the VSS reports and SMS transaction detail reports to use the SMS transaction detail reports. This understanding will assist members to use the SMS transaction detail reports to reconcile differences between totals on the VSS reports and those accumulated by the member's or processor's system.

### Dates

Both the online settlement date (from field 15 in the online message) and the VSS processing date are shown in the heading of the SMS transaction detail reports. The processing date in the VSS settlement reports is one day later than the online settlement date. The VSS processing date printed on the report can be used to identify the corresponding VSS report. For a day's work, the VSS processing date on SMS transaction detail reports is the same as the processing date (PROC DATE) on the VSS reports.

### Business Mode

Transactions on VSS reports are organized by business mode (issuer, acquirer, and other). Most SMS transaction detail reports contain either issuer or acquirer transactions that reconcile to the issuer and acquirer sections on the

VSS reports. Business mode "Other" transactions on VSS reports include fee collection and funds disbursement transactions. Reconciliation of these transactions is as follows:

Fee collection and funds disbursement transactions are not included on SMS issuer and acquirer transaction detail reports. They are shown separately on the Fee Collection and Funds Disbursement Detail (SMS608) report. This report reconciles to the "Other" section on VSS reports.

### SREs

SMS detail reports are produced at the following levels of detail:

- Funds transfer SRE

- Processor ID

- Affiliate BIN

The combination of these elements identifies one lowest-level SRE. All elements are shown in the SMS report heading.

## Reconciliation of Interchange Reimbursement Fees

SMS members that want to receive Interchange Reimbursement Fee (IRF) information at the transaction level can subscribe to line 5 on the SMS transaction detail reports. That line contains fee information for each transaction. If a member subscribes to the IRF detail line, total IRFs are reported on the transaction detail report.

The IRF total on the SMS detail report should reconcile to total reimbursement fees on the Reimbursement Fees Report (VSS-130) for the same level of detail. For an example of the relationship between the VSS-130 report and an SMS transaction detail report, see Figure 7–25 in the "Examples" section in this chapter.

## Relationship Between VSS Reports and SMS Raw Data

VisaNet provides transaction detail as raw (unformatted) data, which is produced using the same sources as the formatted reports. This optional service is available to all SMS members and processors. Raw data, together with VSS machine-readable reports, can be used to automate the reconciliation process.

The version of raw data available to SMS members is V.I.P. Raw Data Release 2.2. To facilitate using raw data files, the online settlement date from field 15 and the VSS processing date are included in the raw data header. The settlement information record contains the funds transfer SRE, processor ID, affiliate BIN, and lowest-level SRE. This information allows correlation of the SMS and VSS data.

## Reconciliation of CPS and CRS Transactions

For SMS members that participate in the Custom Payment Service (CPS) and Chargeback Reduction Service (CRS), the disposition of exception transactions is shown separately on the VSS reconciliation reports (VSS-900, VSS-900-S, VSS-900-P, and VSS-900-PS).

**NOTE:** *This section applies only to members in countries using CPS with a processing delay for exception items.*

Financial and nonfinancial transactions are reported differently. Financial transactions include chargebacks, chargeback reversals, and representments. Nonfinancial transactions include requests for copies and requests for originals.

### Financial Transactions

Financial transactions submitted during the processing day and held over for CRS validation are reported as follows:

- **SMS detail reports (SMS600 or SMS601)**—Individual transactions are reported on either the Issuer Transaction Detail report (SMS600) or the Acquirer Transaction Detail report (SMS601) depending on whether the transactions are submitted by the issuer or acquirer. These transactions have zeros in the SETTLEMENT AMOUNT field with two asterisks to the right of the zeros. Total count and amount of all transactions sent to CRS is shown in the TO CRS field.

- **VSS-900 reports**—Total count and amount is shown under TO CRS on the report for the member that submits the transaction.

Financial transactions held over from a previous day that successfully passed CRS validation are reported as follows:

- **SMS detail reports (SMS600 and SMS601)**—Individual transactions are reported as batch 100 on the SMS600 and SMS601 reports because both the issuer and acquirer need the information. The value of the transactions appear in the SETTLEMENT AMOUNT field and is included under TOTAL SETTLEMENT AMOUNT. A separate total is not reported.

- **VSS-900 reports**—Total count and amount is reported in the FROM CRS ACCEPTED field on the report for the member that submits the transaction. Total count and amount is reported in the RECEIVED FROM VISA field for the member receiving the transaction. The number and value is included under TOTAL SENT TO SETTLEMENT.

Financial transactions held over that failed CRS validation are reported as follows:

- **SMS detail reports (SMS642 or SMS643)**—The member submitting the transaction can find error information on the Issuer Returned Exception Detail (SMS642) report or the Acquirer Returned Exception Detail (SMS643) report depending on whether the transaction was submitted by the issuer or acquirer. The total count and amount is shown under TOTAL RETURNED.

- **VSS-900 reports**—Counts and amounts are shown in the FROM CRS RETURNED field on the report for the member that submitted the transaction.

### Nonfinancial Transactions

Nonfinancial transactions submitted during the processing day and held over for CRS validation are reported as follows:

- **SMS detail report (SMS628)**—Individual transactions for the member submitting the transactions are reported on the Request for Copy Daily Summary (SMS628) report. These transactions have zeros in the SETTLEMENT AMOUNT field with two asterisks to the right of the zeros. The total count of all transactions sent to CRS is shown under TO CRS.

- **VSS-900 reports**—The total count of transactions sent to CRS is shown under TO CRS in the NON-FINANCIAL TRANSACTIONS sections of the report for the member that submitted the transaction.

Nonfinancial transactions held over from a previous day that successfully passed CRS validation are reported as follows:

- **SMS detail report (SMS628)**—Individual transactions are reported as batch 100 on the SMS628 report for both the member sending the transaction and the member receiving the transaction. These transactions are included in the NONFINANCIAL count at the bottom of the report.

- **VSS-900 reports**—The total count of transactions that successfully passed CRS validation are reported in the FROM CRS ACCEPTED field in the NON-FINANCIAL TRANSACTIONS section of the report for the member sending the transactions. The count is included in the RECEIVED FROM VISA field for the member receiving them.

Nonfinancial transactions held over from a previous day that failed CRS validation are reported as follows:

- **SMS detail reports (SMS642 or SMS643)**—Individual transactions are reported on the SMS642 report or SMS643 report depending on whether the transaction was submitted by the issuer or the acquirer.

- **VSS-900 reports**—Counts are reported in the FROM CRS RETURNED field in the NON-FINANCIAL TRANSACTIONS section of the report for the member that submitted the transaction.

## Reconciliation of Monthly Reports

The processing date in the VSS settlement reports is one day later than the online settlement date. As a result, a transaction that contains an online settlement date (in field 15) of 30 June has a VSS processing date of 1 July and is in the monthly VSS reports for July.

## SMS Reconciliation (0500/0520) Messages

SMS members can optionally receive SMS reconciliation (0500/0520) messages that contain the current or previous day's gross interchange totals (that is, the financial position exclusive of fees and charges) accumulated online. Each message contains the counts and amounts accumulated by VisaNet for approved, settled transactions.

Online totals are accumulated at the processor level. The processor's totals include the totals of each affiliate. These messages can be used by a processor to balance its online totals to the totals accumulated by VisaNet.

An 0520 message is generated for each settlement currency. Totals are accumulated separately for International Settlement Service and National Net Settlement Service transactions. A processor whose International Settlement Service and National Net Settlement Service transactions are in the same settlement currency has the option of getting reconciliation messages that include a combined total.

# BASE II to VSS Reconciliation

This section describes the reconciliation process for BASE II-connected members and processors. BASE II-connected members and processors can reconcile their daily activity using the process described in this section.

- Processor internal reports can be reconciled to Edit Package reports.

- The Edit Package reports can be reconciled to the Reconciliation Report (VSS-900), Summary Reconciliation Report (VSS-900-S), Processor Reconciliation Report (VSS-900-P), and Processor Summary Reconciliation Report (VSS-900-PS), which provide totals for all transactions sent to or received from VisaNet, including nonfinancial transactions. For examples of the relationship between the Release 2 Edit Package reports and the VSS-900 reports, see Figure 7–27, Figure 7–28, and Figure 7–29 in the "Examples" section of this chapter.

- The VSS summary reconciliation reports can be reconciled to the Interchange Value Report (VSS-120). An example of the relationship between the VSS-900-S report and the VSS-120 report is provided in Figure 7–22 in the "Examples" section of this chapter.

The process of reconciling BASE II-cleared transactions to VSS settlement reporting is shown in Figure 7–17.

**Figure 7–17:  Reconciliation of BASE II-Cleared Transactions to VSS Settlement Reporting**
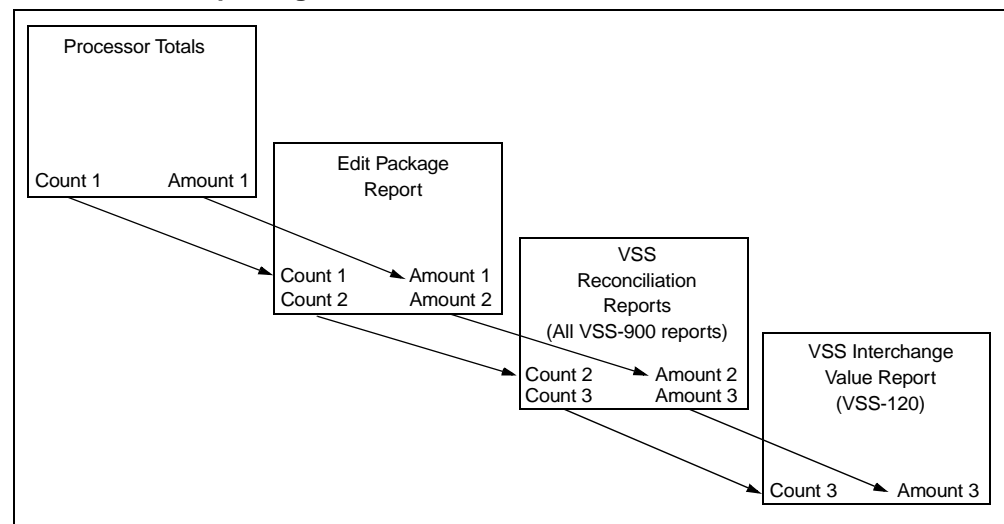


The VSS reconciliation reports provide the bridge for reconciling incoming and outgoing totals on Edit Package reports to business mode totals on other VSS reports.

## Reconciliation Based on Acquirer/Issuer/Other Views

Edit Package reporting is based on the direction of the transaction—whether it is outgoing (from the member to VisaNet) or incoming (from VisaNet to the member). VSS reports are based on business mode. Business modes include the following:

- **Acquirer**—These reports provide data related to the business of acquiring transactions

- **Issuer**—These reports provide data related to the business of issuing cards

- **Other**—These reports provide data on fee collections and funds disbursements (TC 10 and TC 20) and their associated return items. Also included are nonfinancial transactions that are not associated with either the issuing or acquiring business.

These two views are illustrated in Figure 7–18.

**Figure 7–18: BASE II and VSS Settlement Reporting Views**
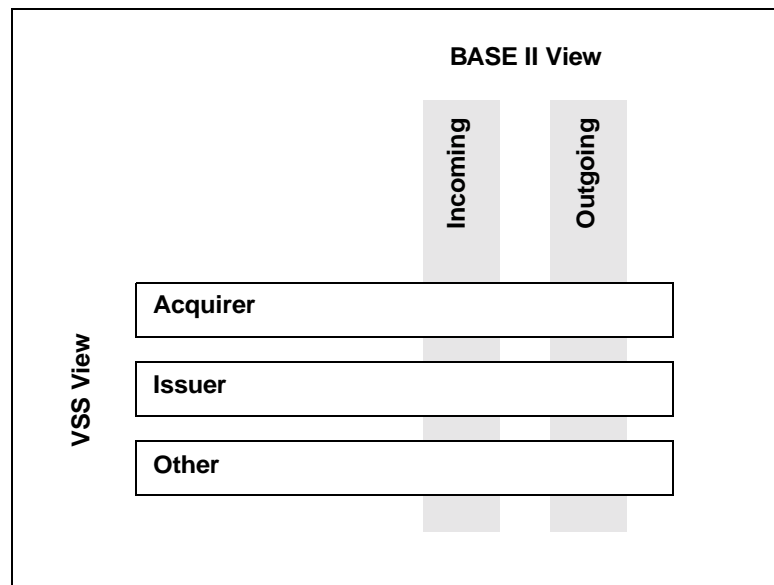


## Reconciliation to VSS Reconciliation Reports

Members and processors can use the VSS reconciliation reports to reconcile all activity sent to and received from VisaNet, including nonfinancial transactions. Reconciliation is slightly different depending on whether the processor is included in the settlement hierarchy.

## Processor Included in Settlement Hierarchy

A processor is included in a settlement hierarchy if an SRE is established that represents the total of that processor's work. A processor included in the settlement hierarchy can use the Reconciliation Report (VSS-900) or Summary Reconciliation Report (VSS-900-S) for the processor's SRE to reconcile to the Edit Package reports. For examples of the relationship between the VSS-900-S report and the Release 2 Edit Package reports, see Figure 7–26 and Figure 7–27 in the "Examples" section of this chapter.

The VSS-900 and VSS-900-S reports can also be used to reconcile counts and amounts on interchange transactions to settlement amounts on the Interchange Value Report (VSS-120). For an example of the relationship between the VSS-900-S report and the VSS-120 report, see Figure 7–22 in the "Examples" section of this chapter. This reconciliation can be done for the processor SRE, funds transfer SREs, or lowest-level SREs.

A processor included in the settlement hierarchy can use the Processor Reconciliation Report (VSS-900-P) or Processor Summary Reconciliation Report (VSS-900-PS) instead of the VSS-900 or VSS-900-S report for reconciliation to the Edit Package reports. The reconciliation process would then be the same as described in the "Processor Not Included in Settlement Hierarchy" section of this chapter.

## Processor Not Included in Settlement Hierarchy

A processor that is not included in the settlement hierarchy does not receive the VSS-900 series because there is no SRE that represents the processor total. These processors can use the Processor Reconciliation Report (VSS-900-P) or Processor Summary Reconciliation Report (VSS-900-PS) instead to reconcile to the Edit Package reports. For an example of the relationship between the VSS-900-PS report and Release 2 Edit Package reports, see Figure 7–29 in the "Examples" section of this chapter.

### Edit Package and VSS Reports

Total count and amount fields on the Edit Package and VSS reports can be compared for reconciling both financial and nonfinancial data as shown in .

**Table 7–4:    Edit Package and VSS Report Comparison**

| Transaction Type | Edit Package Reports | VSS Reports |
|---|---|---|
| Total Outgoing Financial | TOTAL NET—FINANCIAL EP Release 2 (EP-111E) | SENT TO VISA (VSS-900 series and VSS-900-P series) |
| Total Outgoing Nonfinancial | TOTAL NONFINANCIAL EP Release 2 (EP-110E) | NONFINANCIAL SENT TO VISA (VSS-900 series and VSS-900-P series) |
| Total Incoming Financial | TOTAL NET—FINANCIAL EP Release 2 (EP-211E) | RECEIVED FROM VISA (VSS-900 series and VSS-900-P series) |
| Total Incoming Nonfinancial | TOTAL NONFINANCIAL EP Release 2 (EP-210E) | NONFINANCIAL RECEIVED FROM VISA (VSS-900 series and VSS-900-P series) |

> **NOTE:**   *If the totals on the Outgoing Interchange Report (EP-110E and EP-111E) do not match the totals on the Collected Batch Acknowledgments Report (EP-221B), then not all batches processed by the Edit Package were processed by BASE II.*

## Reconciliation to VSS Settlement Reports

The TOTAL SENT TO SETTLEMENT counts and amounts by business mode on the Reconciliation Report (VSS-900) and Summary Reconciliation Report (VSS-900-S) match the COUNT and CLEARING AMOUNT totals for each business mode on the Interchange Value Report (VSS-120) for the same SRE.

## Reconciliation of CPS and CRS Transactions

For BASE II-connected members that participate in the Custom Payment Service (CPS) and Chargeback Reduction Service (CRS), disposition of exception transactions is shown separately on the VSS reconciliation reports.

Transactions submitted during the processing day and held over for CRS validation are reported on the VSS reconciliation reports as follows:

- Total counts and amounts submitted and held over are under TO CRS.

- Total counts and amounts of financial transactions that are held over from a previous day and that successfully passed CRS validation are reported on the VSS reports. Total counts and amounts are reported under FROM CRS ACCEPTED. The number and value are under TOTAL SENT TO SETTLEMENT.

- Total counts and amounts of financial transactions that are held over and that failed CRS validation are reported on the VSS reports. Counts and amounts are shown under FROM CRS RETURNED.

- Total counts and amounts of financial transactions that were sent to CRS in the previous cycle but are not being settled in the current cycle (because currency rates are unavailable) are shown under FROM CRS ACCEPTED TO WAREHOUSE.

- The counts for nonfinancial transactions are shown in the NON-FINANCIAL TRANSACTIONS sections of the VSS reconciliation reports. These counts for transactions sent to and from CRS are totaled under TOTAL SENT TO and RECEIVED FROM VISA. There is a total count under TOTAL NON-FINANCIAL.

**NOTE:** *This subsection applies only to members in countries using CPS that have a processing delay for exception items.*

## VSS Business Transactions

The BASE II to VSS business transactions types table in the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix E, VSS Business Transaction Types Cross-Reference, provides a mapping between the Edit Package (outgoing and incoming) view and the VSS (acquirer, issuer, and other) business mode view. The table lists each BASE II transaction with its description, its BASE II transaction code, the VSS equivalent, and its business mode (mapping the view under which the transaction is reported). A cross-reference between BASE II transactions and VSS business transaction types is also provided.

The BASE II transaction code is further qualified by the fields in the BASE II message. For a further description of VSS business transaction types, refer to the *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix C, VSS Codes.

# VSS to VSS Reconciliation

This section describes the key settlement totals on the VSS settlement reports and in the 0620 SMS funds transfer totals message (SMS members only). It also describes the reconciliation of the VSS monthly reports to the VSS daily reports.

## Settlement Count and Amount Matrix

The matrix in Table 7–5 lists key settlement counts and amounts and indicates which reports and messages contain this information. When reports or messages contain common fields, the fields are the same on the reports and messages. For example, the Total Acquirer Interchange Value can be found on the SMS Funds Transfer Totals (0620) message, the Settlement Summary Report (VSS-110), the SRE Settlement Recap Report (VSS-115), and the Interchange Value Report (VSS-120). The Total Acquirer Interchange Value is the same on the 0620 message and these reports.

The funds transfer totals message (0620) is only sent to SMS-connected members. However, if a funds transfer SRE includes settlement totals for both SMS and BASE II activity, the 0620 message also includes BASE II activity totals.

**Table 7–5:    Key Settlement Counts and Amounts Cross-Reference**

| Field | SMS Message | VSS Reports | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0620 | 110 | 115 | 120 | 130 | 135 | 140 | 300 |
| Total Acquirer Interchange Value | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Acquirer Interchange Count | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Acquirer Reimbursement Fees | ✔ | ✔ | ✔ | | ✔ | ✔ | | |
| Total Acquirer Visa Charges | ✔ | ✔ | ✔ | | | | ✔ | |
| Net Acquirer Settlement Amount | | ✔ | ✔ | | | | | |
| Total Issuer Interchange Value | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Issuer Interchange Count | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Issuer Reimbursement Fees | ✔ | ✔ | ✔ | | ✔ | ✔ | | |
| Total Issuer Visa Charges | ✔ | ✔ | ✔ | | | | ✔ | |
| Net Issuer Settlement Amount | | ✔ | ✔ | | | | | |
| Total Other Interchange Value | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Other Interchange Count | ✔ | ✔ | ✔ | ✔ | | | | |
| Total Other Reimbursement Fees | ✔ | ✔ | ✔ | | ✔ | ✔ | | |
| Total Other Visa Charges | ✔ | ✔ | ✔ | | | | ✔ | |
| Net Other Settlement Amount | | ✔ | ✔ | | | | | |
| Total Interchange Value | | ✔ | | | | | | ✔ |
| Total Interchange Count | | ✔ | | | | | | ✔ |
| Total Reimbursement Fees | | ✔ | | | | | | ✔ |
| Total Visa Charges | | ✔ | | | | | | ✔ |
| Net Settlement Amount | ✔ | ✔ | ✔ | | | | | ✔ |

## Monthly Reports

VSS produces the following monthly reports:

- VSS-110-M—Settlement Summary Report

- VSS-115-M—SRE Settlement Recap Report

- VSS-120-M—Interchange Value Report

- VSS-130-M—Reimbursement Fees Report

- VSS-131-M—Volume Discount Detail Report (U.S. region only)

- VSS-140-M—Visa Charges Report

- VSS-210-M—Currency Conversion Fees Report

- VSS-900-M—Monthly Reconciliation Report

- VSS-900-SM—Monthly Summary Reconciliation Report

- VSS-900-PM—Monthly VSS Processor Report

- VSS-900-XM—Monthly Processor Summary Reconciliation Report

The counts and amounts on the monthly reports can be reconciled to the total of the counts and amounts on the daily reports. As with all VSS reports, the monthly reports are available in both print-ready and machine-readable formats. The machine-readable format can be used to automate the reconciliation of monthly reports to daily reports.

*NOTE:* *The monthly report heading always specifies the full month even if the data is only for part of the month. Data is reported for a partial month if settlement structures changed during that month.*

# Currency Conversion Reporting

VSS provides currency conversion reporting. Currency conversion dates are shown on the Interchange Value Report (VSS-120) where relevant, and the Currency Conversion Fee Report (VSS-210) is available to help issuers reconcile their currency conversion fees. These reporting features are discussed in this section.

## Currency Conversion Dates

Currency conversion dates are shown on the Interchange Value Report (VSS-120) in the following two cases:

- The currency conversion date of the current processing cycle is displayed whenever the clearing currency is different from the settlement currency.

- The currency conversion date of the original transaction is displayed for reversal transactions when the submitted settlement amount is computed using the date of the original transaction.

The conditions under which the currency conversion date is displayed and the date that is shown are provided in for the transaction originator and for the transaction recipient.

**Table 7–6:   Currency Conversion Date—Transaction Originator**

| Transaction Type | Condition | Currency Date Shown |
|---|---|---|
| All Transactions Except Reversals | Clearing currency = Settlement currency | None |
| | Clearing currency ≠ Settlement currency | Current currency Conversion date |
| Reversal Transactions | Source clearing currency = Source settlement currency = Destination settlement currency | None |
| | Source settlement currency ≠ Destination settlement currency | Original currency Conversion date |
| | Clearing currency ≠ Settlement currency | Original currency Conversion date |

**Table 7–7:   Currency Conversion Date—Transaction Recipient**

| Transaction Type | Condition | Currency Date Shown |
|---|---|---|
| All Transactions Except Reversals | Clearing currency = Settlement currency | None |
| | Clearing currency ≠ Settlement currency | Current currency Conversion date |
| Reversal Transactions | Clearing currency = Settlement currency | None |
| | Clearing currency ≠ Settlement currency | Original currency Conversion date |

**EXAMPLE**

Assume that an acquirer submitted two purchase transactions: one on 4 June 1997 for GBP£100 and one on 5 June 1997 for GBP£100. Both the settlement and clearing currencies for these transactions are pounds sterling (noted as GBP on the VSS reports) for the acquirer. The transactions are delivered to an issuer for whom both the settlement and clearing currencies are U.S. dollars (noted as USD on the reports). If the exchange rate for 4 June was GBP£1.00 equal to US$1.50 and for 5 June was GBP£1.00 equal to US$1.55, then the clearing and settlement amounts for the acquirer and issuer would be those in Table 7–8.

**Table 7–8:    Currency Clearing and Settlement Amounts Example**

| Date | Acquirer (Transaction Originator) | | Issuer (Transaction Recipient) | |
|---|---|---|---|---|
| | Clearing Amount | Settlement Amount | Clearing Amount | Settlement Amount |
| 4 Jun 1999 | GBP£100.00CR | GBP£100.00CR | US$150.00DB | US$150.00DB |
| 5 Jun 1999 | GBP£100.00CR | GBP£100.00CR | US$155.00DB | US$155.00DB |

CR = Credit, DB = Debit

Continuing this example, assume that on 10 June 1997, the acquirer submits reversals for these transactions. The exchange rate on that date is GBP£1.00 equals US$1.45.

The original transaction currency conversion rates from 4 June and 5 June are used when determining the clearing and settlement amounts for the issuer. This ensures that the clearing and settlement amounts for the issuer for the reversal transactions are for the same amounts as in the original transactions. In this example, the total clearing and settlement amounts for the issuer are US$305 CR (US$150 plus US$155) for the two reversals. Because the issuer's clearing and settlement currency are the same, no currency conversion date is displayed for these reversals on the issuer's settlement report.

However, to credit the issuer US$305 on 10 June, Visa has to buy at the exchange rate on 10 June. Therefore, Visa has to spend GBP£210.35 (US$305/1.45) to buy the US$305. Visa must then debit the acquirer GBP£210.35 for the reversal transactions even though the clearing amount was GBP£200.

**NOTE:**   *The rates used on different days are published in the VisaNet Currency Rate Delivery Service to which members can subscribe.*

To clarify the discrepancy between the acquirer's clearing and settlement amounts, the currency conversion dates for the original transactions are printed on the acquirer Interchange Value Report (VSS-120). The settlement and clearing currency are both GBP. The acquirer would see the information shown in Figure 7–19 for reversal transactions on 10 June.

**Figure 7–19:  VSS-120 Acquirer Report for 10 June (Same Currency)**

```
REPORT ID: VSS-120                    VISANET SETTLEMENT SERVICE              PAGE                1
REPORTING FOR:                     INTERNATIONAL SETTLEMENT SERVICE          REPORT DATE:    02JUN97
                                 WEEKLY SETTLEMENT REPORTING HIERARCHY LIST
SETTLEMENT CURR:    GBP                                                      PROC DATE:      10JUN97
CLEARING CURR:      GBP

                    CURRENCY        COUNT           CLEARING      INTERCHANGE      INTERCHANGE
                    TABLE                            AMOUNT         VALUE            VALUE
                    DATE                                           CREDITS          DEBITS

PURCHASE
 ORIGINAL RVRSL     04JUN97           1             100.00DB                         103.45
                    05JUN97           1             100.00DB                         106.90

TOTAL ORIGINAL RVRSL                  2             200.00DB                         210.35
```

## Reconciliation of Currency Conversion Fees

The Currency Conversion Fees Report (VSS-210) helps issuers reconcile currency conversion fees. When currency conversion fees are calculated, they are included in the total amount posted to the cardholder's account. This amount, which is in the clearing currency, is contained in DESTINATION AMOUNT (TCR 0) in BASE II transactions and in Field 6—Amount, Cardholder Billing in SMS messages. SMS members not participating in the Multicurrency Service have this amount reported in Field 4—Amount, Transaction.

The amount posted to the cardholder's account is a combination of the following:

- Interchange amount of the transaction

- Currency conversion fee charged by Visa

- Optional issuer fee charged by the issuer. If the issuer does not charge an optional issuer fee, this amount is 0 (zero).

The VSS-210 report shows these three amounts in the cardholder billing currency (clearing currency).

The interchange amount and the currency conversion fee charged by Visa are collected in the issuer's settlement currency so they must also be reported in that settlement currency. This reporting allows balancing between the Visa Charges Report (VSS-140), which includes the currency conversion fee in settlement currency, and the VSS-210 report. The optional issuer fee is not included in the settlement amount.

If a member supports multiple cardholder billing currencies for an SRE, the VSS-210 report provides amounts in settlement currency subtotaled by clearing currency. The VSS-140 does not provide settlement subtotals by clearing currency. The subtotals in settlement currency on the VSS-210 report should be totaled to get the total currency conversion fees shown on the VSS-140 report. For complete descriptions of these reports, refer to *VisaNet Settlement Service (VSS) User's Guide*, *Volume 2*, Appendix A, VSS Reports— Print-Ready Formats.

# Reconciliation of Processing Charges

This section describes reconciliation of processing charges for members that participate in a National Net Settlement Service. It also contains information about reconciling a member's Integrated Billing Statement (IBS) to the Monthly Reconciliation Report (VSS-900-M).

## Members Participating in a National Net Settlement Service

Depending on the rules of the National Net Settlement Service, processing charges for transactions may be settled in the International Settlement Service even if the transaction itself is settled by a National Net Settlement Service. This might occur if a National Net Settlement Service settles in a currency that is not a Visa settlement currency. Charges would then be settled in the International Settlement Service.

The Charges Reconciliation Report (VSS-230) is produced for a National Net Settlement Service. This report lists charges settled through the International Settlement Service for transactions settled in a National Net Settlement

Service. This report is a reconciliation report only. It is not used for settlement. The charges are settled based on the information on the Visa Charges Report (VSS-140) for the International Settlement Service.

## Reconciliation to Integrated Billing Statement

The processing charges for all SMS-connected members and for BASE II-connected members in some regions are billed monthly using the Integrated Billing Statement. Those members that want to reconcile their monthly processing charges to counts on their VSS reports need to develop procedures to map entries on the Integrated Billing Statement to entries on the Monthly Reconciliation Report (VSS-900-M). The descriptions on the member's statement reflect VSS business transaction types and business modes, and the member's SRE is included in the statement.

The correspondence between lines on the monthly Integrated Billing Statement and lines on the VSS-900-M report are shown in Table 7–9, Table 7–10, and Table 7–11. In some cases, the total for the line on the monthly statement equals the sum of the counts on the corresponding line of the VSS-900-M report. In other cases, multiple lines on the monthly statement equal one or more lines on the VSS-900-M report. Some regions do not break down the reporting of multipurpose messages, general delivery reports, and text messages by different types but report them on one line.

**Table 7–9:     Reconciliation of SMS Processing Charges (Excluding Interlink)  (1 of 3)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| **POS** | |
| AUTHORIZATION<br>AUTHORIZATION-STIP<br>AUTH CHECK ACCEPTANCE | POS AUTHORIZATION |
| AUTHORIZATION REVERSAL | POS AUTHORIZATION REVERSAL |
| MANUAL CASH | MANUAL CASH |
| PURCHASE ORIGINAL<br>PURCHASE ORIGINAL-STIP<br>PURCHASE ORIGINAL-DEF CLEARING | PURCHASE ORIGINAL SALE<br>PURCHASE ORIGINAL SALE<br>QUASI-CASH ORIGINAL SALE |
| PURCHASE ORIGINAL REVERSAL<br>PURCHASE ORIG REV-DEF CLEARING | PURCHASE ORIGINAL SALE REVERSAL<br>PURCHASE ORIGINAL SALE REVERSAL<br>QUASI-CASH ORIGINAL REVERSAL |

**Table 7–9:    Reconciliation of SMS Processing Charges (Excluding Interlink)  (2 of 3)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| MERCHANDISE CREDIT ORIGINAL | MERCHANDISE CREDIT ORIGINAL<br>QUASI-CASH CREDIT ORIGINAL |
| CHARGEBACK | PURCHASE CHARGEBACK<br>PURCHASE SECOND CHARGEBACK<br>QUASI-CASH CHARGEBACK<br>QUASI-CASH SECOND CHARGEBACK<br>MERCHANDISE CREDIT CHARGEBACK<br>MERCHANDISE CREDIT SECOND CHARGEBACK<br>QUASI-CASH CREDIT CHARGEBACK<br>QUASI-CASH CREDIT SECOND CHARGEBACK |
| CHARGEBACK REVERSAL | PURCHASE CHARGEBACK REVERSAL<br>PURCHASE SECOND CHARGEBACK REVERSAL<br>QUASI-CASH CHARGEBACK REVERSAL<br>QUASI-CASH SECOND CHARGEBACK REVERSAL<br>MERCHANDISE CREDIT CHARGEBACK REVERSAL<br>MERCHANDISE CREDIT SECOND CHARGEBACK REVERSAL<br>QUASI-CASH CREDIT CHARGEBACK REVERSAL<br>QUASI-CASH SECOND CHARGEBACK REVERSAL |
| REPRESENTMENT | PURCHASE REPRESENTMENT<br>QUASI-CASH REPRESENTMENT<br>MERCHANDISE CREDIT REPRESENTMENT<br>QUASI-CASH CREDIT REPRESENTMENT |
| DEBIT ADJUSTMENT | PURCHASE DEBIT ADJUSTMENT<br>QUASI-CASH DEBIT ADJUSTMENT |
| DEBIT ADJUSTMENT REVERSAL | PURCHASE DEBIT ADJUSTMENT REVERSAL<br>QUASI-CASH DEBIT ADJUSTMENT REVERSAL |
| CREDIT ADJUSTMENT | PURCHASE CREDIT ADJUSTMENT<br>QUASI-CASH CREDIT ADJUSTMENT |
| CREDIT ADJUSTMENT REVERSAL | PURCHASE DEBIT ADJUSTMENT REVERSAL<br>QUASI-CASH DEBIT ADJUSTMENT REVERSAL |

**ATM**

| | |
|---|---|
| AUTHORIZATION<br>AUTHORIZATION-STIP | ATM AUTHORIZATION |
| AUTHORIZATION REVERSAL | ATM AUTHORIZATION REVERSAL |
| TRANSFER | ATM TRANSFER |

**Table 7–9:    Reconciliation of SMS Processing Charges (Excluding Interlink)  (3 of 3)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| BALANCE INQUIRY | ATM BALANCE INQUIRY |
| CHARGEBACK | ATM CASH CHARGEBACK<br>ATM CASH SECOND CHARGEBACK |
| CHARGEBACK REVERSAL | ATM CASH CHARGEBACK REVERSAL<br>ATM CASH SECOND CHARGEBACK REVERSAL |
| REPRESENTMENT | ATM CASH REPRESENTMENT |
| DEBIT ADJUSTMENT | ATM CASH DEBIT ADJUSTMENT |
| DEBIT ADJUSTMENT REVERSAL | ATM CASH DEBIT ADJUSTMENT REVERSAL |
| CREDIT ADJUSTMENT | ATM CASH CREDIT ADJUSTMENT |
| CREDIT ADJUSTMENT REVERSAL | ATM CASH CREDIT ADJUSTMENT REVERSAL |
| DECLINE FEES | ATM DECLINE |
| BALANCE INQUIRY FEES | ATM BALANCE INQUIRY |
| TRANSFER FEES | ATM TRANSFER |
| CASH ORIG WITHDRAWAL<br>CASH ORIG WITHDRAWAL-STIP<br>CASH ORIG WDRL-DEF<br>CLEARING | ATM CASH ORIGINAL WITHDRAWAL |
| CASH ORIG WITHDRAWAL REV<br>CASH ORIG WDRL REV-DEF<br>CLEARING | ATM CASH ORIGINAL WITHDRAWAL REVERSAL |

**Miscellaneous—Issuer/Acquirer**

| | |
|---|---|
| REQUEST FOR COPY | REQUEST FOR ORIGINAL<br>REQUEST FOR PHOTOCOPY |
| RFC FULFILLMENT | RFC FULFILLMENT |

**Miscellaneous—Other**

| | |
|---|---|
| TEXT MESSAGE | TEXT MESSAGE |
| FEE COLLECTION/FUNDS DISBURSEMENTS | Sum of all FEE COLLECTION counts<br>Sum of all FUNDS DISBRSMNT counts |

**Table 7–10:  Reconciliation of Interlink Processing Charges**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| PURCHASE ORIGINAL SALE PREAUTHORIZATION COMPLETION RESUBMISSION SALES DRAFT | PURCHASE ORIGINAL SALE |
| PREAUTHORIZATION | POS PREAUTHORIZATION |
| BALANCE INQUIRY | POS BALANCE INQUIRY |
| REVERSAL/VOID | PURCHASE ORIGINAL SALE REVERSAL MERCHANDISE CREDIT ORIGINAL REVERSAL POS PREAUTHORIZATION REVERSAL |
| CHARGEBACK | PURCHASE CHARGEBACK |
| ADJUSTMENT | PURCHASE CREDIT ADJUSTMENT PURCHASE DEBIT ADJUSTMENT |
| MERCHANDISE CREDIT | MERCHANDISE CREDIT ORIGINAL |
| REPRESENTMENT | PURCHASE REPRESENTMENT |

**Table 7–11:  Reconciliation of BASE II Processing Charges  (1 of 4)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| PURCHASE ORIGINAL | PURCHASE ORIGINAL SALE QUASI-CASH ORIGINAL SALE |
| PURCHASE REPRESENTMENT | PURCHASE REPRESENTMENT QUASI-CASH REPRESENTMENT |
| COLLECTION ONLY | not applicable |
| CREDIT ORIGINAL | MERCHANDISE CREDIT ORIGINAL QUASI-CASH CREDIT ORIGINAL |
| CREDIT REPRESENTMENT | MERCHANDISE CREDIT REPRESENTMENT QUASI-CASH CREDIT REPRESENTMENT |

**Table 7–11:    Reconciliation of BASE II Processing Charges  (2 of 4)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| CASH ORIGINAL | MANUAL CASH ORIGINAL ADVANCE<br>ATM CASH ORIGINAL WITHDRAWAL |
| CASH REPRESENTMENT | MANUAL CASH REPRESENTMENT<br>ATM CASH REPRESENTMENT |
| PURCHASE CHARGEBACK | PURCHASE CHARGEBACK<br>QUASI-CASH CHARGEBACK |
| PURCHASE SECOND CHARGEBACK | PURCHASE SECOND CHARGEBACK<br>QUASI-CASH SECOND CHARGEBACK |
| CREDIT CHARGEBACK | MERCHANDISE CREDIT CHARGEBACK<br>QUASI-CASH CREDIT CHARGEBACK |
| CREDIT SECOND CHARGEBACK | MERCHANDISE CREDIT SECOND CHARGEBACK<br>QUASI-CASH CREDIT SECOND CHARGEBACK |
| CASH CHARGEBACK | MANUAL CASH CHARGEBACK<br>ATM CASH CHARGEBACK |
| CASH SECOND CHARGEBACK | MANUAL CASH SECOND CHARGEBACK<br>ATM CASH SECOND CHARGEBACK |
| PURCHASE ORIGINAL REVERSAL | PURCHASE ORIGINAL SALE REVERSAL<br>QUASI-CASH ORIGINAL SALE REVERSAL |
| RFC FULFILLMENT | RFC FULFILLMENT |
| FRAUD ADVICE | FRAUD ADVICE |
| AUTHORIZATION PROFILE REPORT | In GENERAL DELIVERY RPTS total |
| BASE I SUBSCRIBER REPORT | In GENERAL DELIVERY RPTS total |
| CHARGEBACK REPORT | In GENERAL DELIVERY RPTS total |
| CARD VERIFICATION VALUE REPORT | In GENERAL DELIVERY RPTS total |
| DEBIT REARCHITECTURE | In GENERAL DELIVERY RPTS total |
| DEBIT SETTLEMENT | In GENERAL DELIVERY RPTS total |

**Table 7–11:    Reconciliation of BASE II Processing Charges  (3 of 4)**

| Line on Monthly Statement | Line on VSS-900-M Report |
| --- | --- |
| FRAUD REPORTING | In GENERAL DELIVERY RPTS total |
| ISSUERS CLEARINGHOUSE SERVICE | In GENERAL DELIVERY RPTS total |
| REPS REPORT | In GENERAL DELIVERY RPTS total |
| REQUEST FOR COPY SERVICE | In GENERAL DELIVERY RPTS total |
| RISK IDENTIFICATION SERVICE | In GENERAL DELIVERY RPTS total |
| RISK REPORTING | In GENERAL DELIVERY RPTS total |
| RISK ANALYSIS | In GENERAL DELIVERY RPTS total |
| OTHER (General Delivery Reports) | In GENERAL DELIVERY RPTS total |
| TOTAL GENERAL DELIVERY REPORT | GENERAL DELIVERY RPTS |
| SETT RPTS (MACH READ) | SETT RPTS (MACH READ) |
| SETT RPTS (PRINT IMAG) | SETT RPTS (PRINT IMAG) |
| BASE I ADVICE RECORDS | BASE I ADVICE RECORDS |
| PURCHASING CARD TEXT MESSAGE | In TEXT MESSAGE total |
| VISA ELECTRONIC EXCHANGE SERVICE | In TEXT MESSAGE total |
| OTHER (Text Message) | In TEXT MESSAGE total |
| TOTAL TEXT MESSAGE | TEXT MESSAGE |
| REQUEST FOR ORIGINAL | REQUEST FOR ORIGINAL |
| REQUEST FOR PHOTOCOPY | REQUEST FOR PHOTOCOPY |
| CONFIRMATION REQUEST | CONFIRMATION REQUEST |
| TABLE UPDATES | TABLE UPDATES |

**Table 7–11:    Reconciliation of BASE II Processing Charges  (4 of 4)**

| Line on Monthly Statement | Line on VSS-900-M Report |
|---|---|
| RCRF UPDATES | RCRF UPDATES |
| CURRENCY CONV RATE UPD | CURRENCY CONV RATE UPD |
| DATA CAPTURE ADVICE | In DATA CAPTURE ADVICE total |
| DATA CAPTURE ADVICE—POS | In DATA CAPTURE ADVICE total |
| TOTAL DATA CAPTURE ADVICES | DATA CAPTURE ADVICE |
| INTERFACE ADVICE | INTERFACE ADVICE |

# Examples

The following report samples are examples of how SMS detail reports and BASE II Edit Package reports cross-reference to VSS reports. In each example, the numbered fields on the SMS or BASE II report correspond to the numbered fields on the VSS report. Explanations of the numbered fields are at the end of each example. The types of report examples and the corresponding figure numbers are shown in Table 7–12.

**Table 7–12:   Type of Cross-Reference Report Examples (1 of 2)**

| Example Number | Cross-Reference Reports | Figure Number |
|---|---|---|
| 1 | Issuer Transaction Detail by Cardholder Number (SMS600C) report to Summary Reconciliation Report (VSS-900-S). | Figure 7–20 |
| 2 | Acquirer Transaction Detail by Cardholder Number (SMS601C) report to Summary Reconciliation Report (VSS-900-S). | Figure 7–21 |
| 3 | Interchange Value Report (VSS-120) to Summary Reconciliation Report (VSS-900-S). | Figure 7–22 |
| 4 | Issuer Transaction Detail by Cardholder Number (SMS600C) report to Processor Summary Reconciliation Report (VSS-900-PS). | Figure 7–23 |

**Table 7–12:   Type of Cross-Reference Report Examples (2 of 2)**

| Example Number | Cross-Reference Reports | Figure Number |
|---|---|---|
| 5 | Issuer Transaction Detail by Cardholder Number (SMS600C) report to Interchange Value Report (VSS-120). | Figure 7–24 |
| 6 | Issuer Transaction Detail by Cardholder Number (SMS600C) report to Reimbursement Fees Report (VSS-130). | Figure 7–25 |
| 7 | Outgoing Interchange Run Summary (EP-111E) report to Summary Reconciliation Report (VSS-900-S) for financial transactions. | Figure 7–26 |
| 8 | Outgoing Interchange Run Summary (EP-110E) report to Summary Reconciliation Report (VSS-900-S) for nonfinancial transactions. | Figure 7–27 |
| 9 | Outgoing Interchange Run Summary (EP-111E) report to Processor Summary Reconciliation Report (VSS-900-PS) for financial transactions. | Figure 7–28 |
| 10 | Outgoing Interchange Run Summary (EP-110E) report to Processor Summary Reconciliation Report 0000(VSS-900-PS) for nonfinancial transactions. | Figure 7–29 |

**Figure 7–20: Example 1—Reconciliation of SMS600C Report to VSS-900-S Report (1 of 3)**

```
REPORT ID: SMS600C                      VISANET INTEGRATED PAYMENT SYSTEM                         PAGE NUMBER:            :        1
FUNDS XFR: 9658922110 BANK OF ANTARCTICA            SINGLECONNECT / VISA                          ONLINE SETTLMNT DATE::  25DEC96
PROCESSOR: 4010000002 ANTARCTICA PROCESSING         ISSUER TRANSACTION DETAIL                     RUN DATE                :  26DEC96
AFFILIATE: 4123450002 ANTARCTIC BANK AND TRUST        BY CARDHOLDER NUMBER                        RUN TIME                :  18:03:30
SRE      : 1022501589 B OF ANTARCTICA NE VSS  ▸1                                                  PROCESSING DATE :       26DEC96
                                            ▸8                                      ▸2
----------------------------------------------------------------------------------------------------------------------------------
BAT XMIT(GMT)/LOCL               RETRIEVAL      TRACE   ACQRER ID/ TRAN PROCSS ENT REAS CON/ RSP  ---CARDHOLDER--       SETTLEMENT
NUM DATE  TIME    CARD NUMBER     REF NUMBER    NUMBER  TRMNL/NAME TYPE CODE MOD CODE STIP CD     BILLING AMT CUR       AMOUNT (USD)
----------------------------------------------------------------------------------------------------------------------------------
01 25DEC 23:01:45 4444333322220001  6358237777777 777777 4XXXXXX  0200 004000 901        00   55      100.00 USD    ▾7      0.00
                  CA ID:            12345678901234         MARY'S MUSTANG CORRAL

01 25DEC 23:01:50 4444333322220002  6358231111111 111111 4XXXXXX  0200 004000 901 5202   00        100.00 USD          100.00DR
                  CA ID: 12345678    12345678901234         SHOP N GO

01 25DEC 23:01:50 4444333322220003  6358231234456 123456 4XXXXXX  0200 004000 901 5204   00        100.00 USD          100.00DR
   24DEC 11:11:04 CA ID:            12345678901234         SHOP N GO

01 25DEC 23:01:11 4444333322220004  6358234434456 443456 4XXXXXX  0200 001000 901        02         45.00 USD           45.00DR
                  CA ID:            12345678901234         GAS N GO

04 26DEC 01:11:31 4444333322220006  6319011011234 446666 4XXXXXX  0220 004000 010 2482   13      1,000.00 USD        1,000.00DR
   03DEC 04:04:04 CA ID:            12345678901234 189898      BILL'S BOOKS

04 26DEC 01:01:41 4444333322220007  6359011474747 474747 4XXXXXX  0200 200030 901        00         56.00 USD           56.00CR
   15DEC 00:00    CA ID: 12345678         CAROLINE'S CHOCOLATE SHOP

04 26DEC 01:01:43 4444333322220008  6295232999999 474788 4XXXXXX  0422 004000        2483 00        300.00 USD  ▾6        0.00**
   22OCT 23:44:45 CA ID: 12345678    12345678901234 299999 TRICIA'S SHOE STORE

   AFFILIATE ID: 4123450002 ANTARCTIC BANK AND TRUST    DEBITS         :    4           1,245.00     1,245.00DR
                                                        CREDITS        :    1              56.00        56.00CR
                                                ▾5      TOTAL          :    5           1,189.00     1,189.00DR
                                             ▾4         NON FINANCIAL :    1
                                             ▾3         TO CRS         :    1             300.00
```

**Figure 7–20: Example 1—Reconciliation of SMS600C Report to VSS-900-S Report (2 of 3)**

```
REPORT ID: VSS-900-S                          VISANET SETTLEMENT SERVICE                    PAGE:            1
REPORTING FOR:  1022501589  B OF ANTARCT NE  INTERNATIONAL SETTLEMENT SERVICE               PROC DATE:    26DEC96
                                              SUMMARY RECONCILIATION REPORT                  REPORT DATE:  26DEC96

CLEARING CURRENCY:  USD

                                    CRS                       CLEARING        TOTAL        TOTAL
                                    DATE        COUNT         AMOUNT          COUNT        CLEARING
                                                                                          AMOUNT

TOTAL ISSUER TRANSACTIONS
  FINANCIAL TRANSACTIONS
    SENT TO VISA                                  1           300.00CR
      TO HOLDOVER    (-)
      TO CRS                                      1           300.00CR          0            0.00DB
    SENT TO VISA AND SENT TO SETTLEMENT           5         1,189.00DB
    RECEIVED FROM VISA
    RECEIVED FROM VISA AND SENT TO SETTLEMENT                                   5        1,189.00DB
    TOTAL SENT TO SETTLEMENT                                                    5        1,189.00DB
```

**Figure 7–20: Example 1—Reconciliation of SMS600C Report to VSS-900-S Report (3 of 3)**

```
REPORT ID: VSS-900-S                                 SETTLEMENT SERVICE                      PAGE:            2
REPORTING FOR:  1022501589  B OF ANTARCT NE  INTERNATIONAL SETTLEMENT SERVICE               PROC DATE:    26DEC96
                                              SUMMARY RECONCILIATION REPORT                  REPORT DATE:  26DEC96

CLEARING CURRENCY:  NONE

                                    CRS                       CLEARING        TOTAL        TOTAL
                                    DATE        COUNT         AMOUNT          COUNT        CLEARING
                                                                                          AMOUNT

TOTAL ISSUER TRANSACTIONS
  NON-FINANCIAL TRANSACTIONS
    RECEIVED FROM VISA                            1                            1
    TOTAL NON-FINANCIAL
```

Example 1 shows how fields on the Issuer Transaction Detail by Cardholder Number (SMS600C) report reconcile to the fields on the Summary Reconciliation Report (VSS-900-S). This example shows SMS reconciliation when the processor is included in the settlement hierarchy. It shows reconciliation from the issuer perspective and represents transactions settled in the International Settlement Service. Acquirer reconciliation is shown in Example 2.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. For VSS, the settlement service is printed in the report headings for all settlement services. For SMS, NATIONAL NET is printed in the heading for transactions settled in a National Net Settlement Service. No notation is made in the heading when transactions are settled in the International Settlement Service.

The SMS600C and VSS-900-S reconciliation fields in Example 1 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Name and number of the SRE. |
| **2** | VSS processing date. |
| **3** | Count and clearing amount for the items sent to CRS. |
| **4** | Count of nonfinancial transactions sent to and received from Visa. |
| **5** | Total number of transactions sent to settlement. |
| **6** | Total amount of transactions sent to settlement. |

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **7▶** | Clearing currency. On the VSS reports, clearing currency is "NONE" when reporting nonfinancial transactions. |
| **8▶** | Business mode (designates whether the report is for the issuer, acquirer, or other). |

**Figure 7–21: Example 2—Reconciliation of SMS601C Report to VSS-900-S Report (1 of 3)**

```
REPORT ID: SMS601C                       VISANET INTEGRATED PAYMENT SYSTEM                   PAGE NUMBER          :        1
FUNDS XFR: 9658922110 BANK OF ANTARCTICA            SINGLECONNECT / VISA                     ONLINE SETTLMNT DATE:   25DEC96
PROCESSOR: 4010000002 ANTARCTICA PROCESSING       ACQUIRER TRANSACTION DETAIL   [7]          RUN DATE             :   26DEC96
AFFILIATE: 4123450002 ANTARCTIC BANK AND TRUST           BY CARDHOLDER NUMBER                RUN TIME             :   12:00:59
SRE      : 10225041589 B OF ANTARCTICA NE  [1]                                               VSS PROCESSING DATE  :   26DEC96   [2]

BAT XMIT(GMT)/LOCL                     RETRIEVAL         TRACE    ISSUER ID/   TRAN PROCSS ENT REAS CON/ RSP   --TRANSACTION--   SETTLEMENT
NUM DATE TIME     CARD NUMBER          REF NUMBER        NUMBER   TRMNL/NAME   TYPE CODE   MOD CODE STIP  CD   AMOUNT CUR        AMOUNT (USD)
------------------------------------------------------------------------------------------------------------------------------------------
41 25DEC 02:00:02 4444333322220001     635802345678      345678   4XXXXX       0200 000000 900           00   321.00 USD        321.00CR  [6]
                  CA ID: 00013486      560000134860001                         00/REXBURG MAINFRAME SUPPLY /US

37 25DEC 00:01:45 4444333322220002     6358007777777     777777   4XXXXX       0200 000000 902           51    19.69 USD          0.00
                  CA ID: 00008221      4444443333333210                        00/BANNOCK PHARMACEUTICAL   /US

40 25DEC 01:31:43 4444333322220003     6347232999999     474788   4XXXXX       0422 000000      0030 17  00    50.00 USD         50.00DR
   12DEC 23:44:45 CA ID: 00008221      4444443333333210 299999                 00/BANNOCK PHARMACEUTICAL   /US

100 25DEC 23:11:31 4444333322220004    6346011898898     446666   4XXXXX       0220 000000      0093 13  00   100.50 USD        100.50**
    11DEC 04:04:04 CA ID: 00013486     560000134860001  189898                 00/REXBURG MAINFRAME SUPPLY /US

29 25DEC 20:05:50 4444333322220005     635820123456      123456   4XXXXX       0100 000000 900           00    11.00 USD          0.00
                  CA ID: 000B4334      0001234567B4334                         00/VERNA'S CHAT AND CHEW    /US

29 25DEC 20:15:02 4444333322220006     635820123789      123789   4XXXXX       0220 000000 900           00    12.50 USD         12.50CR
                  CA ID: 000B4334      0001234567B4334                         00/VERNA'S CHAT AND CHEW    /US

35 25DEC 21:01:45 4444333322220007     635823474747      474747   4XXXXX       0400 200000 900 2501 00   00    56.00 USD         56.00DR
                  CA ID: 00013486      560000134860001                         00/REXBURG MAINFRAME SUPPLY /US

01 24DEC 23:00:30 4444333322220008     635705678858      678901   4XXXXX       0200 000000 900           00    33.00 USD         33.00CR
                  CA ID: 000032255     000032255005                            00/RYRIE SALON DU BEAUTE    /US

01 24DEC 23:01:45 4444333322220009     635705678858      678902   4XXXXX       0200 200000 900           00     3.00 USD          3.00DR
                  CA ID: 000032255     000032255005                            00/RYRIE SALON DU BEAUTE    /US


     AFFILIATE ID: 4123450002 POCATELLO COMMUNITY BANK
                                                         DEBITS        :    3           109.00            109.00DR
                                                         CREDITS       :    3           366.50            366.50CR
                                                         TOTAL         :    6           257.50     [5]    257.50CR
                                                         NON FINANCIAL :    2   [4]          [3]
                                                         TO CRS        :    1           100.50
```

**Figure 7–21:  Example 2—Reconciliation of SMS601C Report to VSS-900-S Report (2 of 3)**

```
REPORT ID:   VSS-900-S                    VISANET SETTLEMENT SERVICE             PAGE              1   [2]
REPORTING FOR:  1022501589  B OF ANTARCTICA NE  [1]  INTERNATIONAL SETTLEMENT SERVICE   PROC DATE:     25DEC96
                                         SUMMARY RECONCILIATION REPORT          REPORT DATE:   26DEC96

CLEARING CURRENCY:  USD   [6]

[7]                 CPD
                    SUBMITTED            CLEARING                 TOTAL         TOTAL
                    DATE        COUNT    AMOUNT          COUNT    CLEARING AMOUNT

TOTAL ACQUIRER TRANSACTIONS
 FINANCIAL TRANSACTIONS
   SENT TO VISA                   6     408.00CR
   TO HOLDOVER     (-)
    TO CRS                        1     100.50CR   [3]
   SENT TO VISA AND SENT TO SETTLEMENT               5         307.50CR
   RECEIVED FROM VISA             1      50.00DB               1         50.00DB
   RECEIVED FROM VISA AND SENT TO SETTLEMENT         6         257.50CR   [5]
   TOTAL SENT TO SETTLEMENT
```

**Figure 7–21:  Example 2—Reconciliation of SMS601C Report to VSS-900-S Report (3 of 3)**

```
REPORT ID:   VSS-900-S                    VISANET SETTLEMENT SERVICE             PAGE              2   [2]
REPORTING FOR:  1022501589  B OF ANTARCTICA NE  [1]  INTERNATIONAL SETTLEMENT SERVICE   PROC DATE:     25DEC96
                                         SUMMARY RECONCILIATION REPORT          REPORT DATE:   26DEC96

CLEARING CURRENCY:  NONE

[7]                 CPD
                    SUBMITTED            CLEARING                 TOTAL         TOTAL
                    DATE        COUNT    AMOUNT          COUNT    CLEARING AMOUNT

TOTAL ACQUIRER TRANSACTIONS
 NONFINANCIAL TRANSACTIONS
   SENT TO VISA                   2
   TOTAL SENT TO VISA                                  2
   TOTAL NONFINANCIAL TRANSACTIONS                     2   [4]
```

Example 2 shows how fields on the Acquirer Transaction Detail by Cardholder Number (SMS601C) report reconcile to the fields on the Summary Reconciliation Report (VSS-900-S). This example shows SMS reconciliation when the processor is included in the settlement hierarchy. It shows reconciliation from the acquirer perspective and represents transactions settled in the International Settlement Service. Issuer reconciliation is shown in Example 1.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. For VSS, the settlement service is printed in the report headings for all settlement services. For SMS, NATIONAL NET is printed in the heading for transactions settled in a National Net Settlement Service. No notation is made in the heading when transactions are settled in the International Settlement Service.

The SMS601C and VSS-900-S reconciliation fields in Example 2 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
| --- | --- |
| **1** | Name and number of the SRE. |
| **2** | VSS processing date. |
| **3** | Count and clearing amount for the items sent to CRS. |
| **4** | Count of nonfinancial transactions sent to and received from Visa. |
| **5** | Total number and amount of transactions sent to settlement. |
| **6** | Clearing currency. On the VSS reports, clearing currency is "NONE" when reporting nonfinancial transactions. |

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **7** | Business mode (designates whether the report is for the issuer, acquirer, or other). |

**Figure 7–22: Example 3—Reconciliation of VSS-120 Report to VSS-900-S Report (1 of 2)**

```
REPORT ID: VSS-120                         VISANET SETTLEMENT SERVICE            PAGE          2
REPORTING FOR:    1022501589 B OF ANTARCT NE ◀ 1  INTERNATIONAL SETTLEMENT SERVICE   PROC DATE:    26DEC96
ROLLUP TO:        1234567890 B OF ANTARCT NO      INTERCHANGE VALUE REPORT      2    REPORT DATE:  26DEC96
FUNDS XFER ENTITY: 9658922110 B OF ANTARCTICA

SETTLEMENT CURRENCY: USD
CLEARING CURRENCY:   USD ◀ 3

                       CURRENCY         COUNT      CLEARING        INTERCHANGE      INTERCHANGE
                       TABLE                       AMOUNT          VALUE            VALUE
                       DATE                                        CREDITS          DEBITS

  6  ISSUER TRANSACTIONS

       PURCHASE
         ORIGINAL SALE                     3      245.00DB                             245.00
         REPRESENTMENT                     1    1,000.00DB                           1,000.00

       TOTAL PURCHASE                      4    1,245.00DB                           1,245.00
       NET   PURCHASE                                                                1,245.00

       MERCHANDISE CREDIT
         ORIGINAL                          1       56.00CR           56.00

       TOTAL MERCHANDISE CREDIT            1       56.00CR           56.00
       NET   MERCHANDISE CREDIT                                      56.00

                                   4
       TOTAL ISSUER INTERCHANGE            5    1,189.00DB ◀ 5        56.00           1,245.00
       NET   ISSUER INTERCHANGE                                                      1,189.00
```

**Figure 7–22: Example 3—Reconciliation of VSS-120 Report to VSS-900-S Report (2 of 2)**

```
REPORT ID: VSS-900-S                  VISANET SETTLEMENT SERVICE                    PAGE:           1
REPORTING FOR: 1022501589 B OF ANTARCT NE [1] INTERNATIONAL SETTLEMENT SERVICE [2]  PROC DATE:   26DEC96
                                   SUMMARY RECONCILIATION REPORT                    REPORT DATE: 26DEC96

CLEARING CURRENCY: USD [3]

                               CRS                    CLEARING           TOTAL          TOTAL
                               DATE       COUNT        AMOUNT            COUNT          CLEARING
                                                                                        AMOUNT

TOTAL ISSUER TRANSACTIONS [6]
FINANCIAL TRANSACTIONS
  SENT TO VISA                            1          300.00CR
  TO HOLDOVER     (-)
     TO CRS                               1          300.00CR
  SENT TO VISA AND SENT TO SETTLEMENT     0            0.00DB
  RECEIVED FROM VISA                      5        1,189.00DB
  RECEIVED FROM VISA AND SENT TO SETTLEMENT         [4]  5     [5] 1,189.00DB
  TOTAL SENT TO SETTLEMENT                               5         1,189.00DB
```

Example 3 shows how fields on the Interchange Value Report (VSS-120) reconcile to the fields on the Summary Reconciliation Report (VSS-900-S). This example shows reconciliation of settled amounts between these reports. It shows reconciliation from the issuer perspective and represents transactions settled in the International Settlement Service. Acquirers would use the acquirer section of the reports for reconciliation.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. VSS reports have the name of the settlement service printed in the report headings.

The VSS-120 and VSS-900-S reconciliation fields in Example 3 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Name and number of the SRE. |
| **2** | Settlement service. |
| **3** | Clearing currency. |
| **4** | Total number of transactions sent to settlement. |
| **5** | Total amount (in clearing currency) of transactions sent to settlement. |
| **6** | Business mode (designates whether the report is for the issuer, acquirer, or other). |

**Figure 7–23: Example 4—Reconciliation of SMS600C Report to VSS-900-PS Report (1 of 3)**

```
REPORT ID: SMS600C                      VISANET INTEGRATED PAYMENT SYSTEM                   PAGE NUMBER:                 1
FUNDS XFR: 9658922110 BANK OF ANTARCTICA          SINGLECONNECT / VISA                      ONLINE SETTLMNT DATE:  25DEC96
PROCESSOR: 4010000002 ANTARCTICA PROCESSING        ISSUER TRANSACTION DETAIL                RUN DATE            :  26DEC96
AFFILIATE: 4123450002 ANTARCTIC BANK AND TRUST        BY CARDHOLDER NUMBER                  RUN TIME            :  18:03:30
SRE      : 1022501589 B OF ANTARCTICA NE                                                    VSS PROCESSING DATE :  26DEC96
---------------------------------------------------------------------------------------------------------------------------
BAT XMIT(GMT)/LOCL                     RETRIEVAL      TRACE  ACQRER ID/ TRAN PROCSS ENT REAS CON/ RSP  --CARDHOLDER--    SETTLEMENT
NUM DATE  TIME    CARD NUMBER          REF NUMBER    NUMBER  TRMNL/NAME TYPE CODE   MOD CODE STIP CD   BILLING AMT CUR   AMOUNT (USD)
---------------------------------------------------------------------------------------------------------------------------

01 25DEC 23:01:45 4444333322220001     6358237777777 777777 4XXXXXX    0200 004000 901          00   55    100.00 USD      0.00
                  CA ID: 123456789012345                  MARY'S MUSTANG CORRAL

01 25DEC 23:01:50 4444333322220002     6358231111111 111111 4XXXXXX    0200 004000 901 5202     00        100.00 USD    100.00DR
                  CA ID: 12345678                       SHOP N GO

01 25DEC 23:01:50 4444333322220003     6358231123456 123456 4XXXXXX    0200 004000 901 5204     00        100.00 USD    100.00DR
   24DEC 11:11:04 CA ID: 123456789012345                SHOP N GO

01 25DEC 23:01:11 4444333322220004     6358234443456 443456 4XXXXXX    0200 001000 901          02         45.00 USD     45.00DR
                  CA ID: 123456789012345                  GAS N GO

04 26DEC 01:11:31 4444333322220006     6319011101234 446666 4XXXXXX    0220 004000 010 2482     13      1,000.00 USD  1,000.00DR
   03DEC 04:04:04 CA ID: 123456789012345 189898         BILL'S BOOKS

04 26DEC 01:01:41 4444333322220007     6359014747477 474747 4XXXXXX    0200 200030 901          00         56.00 USD     56.00CR
   15DEC 00:00    CA ID: 12345678                    CAROLINE'S CHOCOLATE SHOP

04 26DEC 01:01:43 4444333322220008     6295232999999 474788 4XXXXXX    0422 004000          2483          300.00 USD      0.00**
   22OCT 23:44:45 CA ID: 123456789012345 299999        TRICIA'S SHOE STORE


          AFFILIATE ID: 4123450002 ANTARCTIC BANK AND TRUST   DEBITS        :   4         1,245.50      1,245.00DR
                                                               CREDITS       :   1            56.00         56.00CR
                                                               TOTAL         :   5         1,189.00      1,189.00DR
                                                               NON FINANCIAL :   1
                                                               TO CRS        :   1           300.00
```

**Figure 7–23: Example 4—Reconciliation of SMS600C Report to VSS-900-PS Report (2 of 3)**

```
REPORT ID: VSS-900-PS                   VISANET SETTLEMENT SERVICE              PAGE:            1
PROCESSOR: 4010000002 ANTARCTICA PROCESSING  PROCESSOR SUMMARY RECONCILIATION REPORT  PROC DATE:   26DEC96
BIN:       4123450002 ANTARCTIC BANK AND TRUST                                   REPORT DATE: 26DEC96
SRE:       1022501589 B OF ANTARCT NE

CLEARING CURRENCY: USD
SETTLEMENT SERVICE: INTERNATIONAL SETTLEMENT SERVICE

                             CPD                      CLEARING        TOTAL        TOTAL
                         SUBMITTED     COUNT            AMOUNT        COUNT        AMOUNT
                             DATE

TOTAL ISSUER TRANSACTIONS
   FINANCIAL TRANSACTIONS
      SENT TO VISA                        1
         TO HOLDOVER     (-)
         TO CRS                           1          300.00CR
      RECEIVED FROM VISA                  5          300.00CR
      RECEIVED FROM VISA AND SENT TO SETTLEMENT                      1,189.00DB
      TOTAL SENT TO SETTLEMENT                       1,189.00DB         5        1,189.00DB
```

**Figure 7–23: Example 4—Reconciliation of SMS600C Report to VSS-900-PS Report (3 of 3)**

```
REPORT ID: VSS-900-PS                   VISANET SETTLEMENT SERVICE              PAGE:            3
PROCESSOR: 4010000002 ANTARCTICA PROCESSING  PROCESSOR SUMMARY RECONCILIATION REPORT  PROC DATE:   26DEC96
BIN:       4123450002 ANTARCTIC BANK AND TRUST                                   REPORT DATE: 26DEC96
SRE:       1022501589 B OF ANTARCT NE

CLEARING CURRENCY: NONE
SETTLEMENT SERVICE: INTERNATIONAL SETTLEMENT SERVICE

                             CRS                      CLEARING        TOTAL        TOTAL
                            DATE      COUNT            AMOUNT        COUNT        AMOUNT

TOTAL ISSUER TRANSACTIONS
   NON-FINANCIAL TRANSACTIONS
      RECEIVED FROM VISA                  1
      TOTAL NON-FINANCIAL                                               1
```

Example 4 shows how fields on the Issuer Transaction Detail (SMS600C) report reconcile to the fields on the Processor Summary Reconciliation Report (VSS-900-PS). This example shows SMS reconciliation when the processor is not included in the settlement hierarchy. It shows reconciliation from the issuer perspective and represents transactions settled in the International Settlement Service. Acquirers would use the acquirer section of the VSS-900-PS report and the Acquirer Transaction Detail (SMS601C) report for reconciliation.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. For VSS, the settlement service is printed in the report headings for all settlement services. For SMS, NATIONAL NET is printed in the heading for transactions settled in a National Net Settlement Service. No notation is made in the heading when transactions are settled in the International Settlement Service.

The SMS600C and VSS-900-PS reconciliation fields in Example 4 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
| --- | --- |
| **1** | Name and number of the processor, affiliate, and SRE for whom information is being reported. On VSS reports, the affiliate BIN is shown in BIN. |
| **2** | VSS processing date. |
| **3** | Count and clearing amount for the transactions sent to CRS. |
| **4** | Count for the nonfinancial transactions sent to and received from Visa. |
| **5** | Total number of transactions sent to settlement. |
| **6** | Total amount of transactions sent to settlement. |

| Report<br>Field<br>Number | Report Field Heading<br>or Field Description |
|:---:|---|
| **7** | Clearing currency. On the VSS reports, clearing currency is "NONE" when reporting nonfinancial transactions. |
| **8** | Business mode (designates whether the report is for the issuer, acquirer, or other). |

**Figure 7–24: Example 5—Reconciliation of SMS600C Report to VSS-120 Report (1 of 2)**

```
REPORT ID : SMS600C            VISANET INTEGRATED PAYMENT SYSTEM            PAGE NUMBER:              1
FUNDS XFR : 9658922110 BANK OF ANTARCTICA    SINGLECONNECT / VISA          ONLINE SETTLMNT DATE:  25DEC96
PROCESSOR : 4010000002 ANTARCTICA PROCESSING  ISSUER TRANSACTION DETAIL    RUN DATE               26DEC96
AFFILIATE : 4123450002 ANTARCTIC BANK AND TRUST    BY CARDHOLDER NUMBER    RUN TIME              18:03:30
SRE       : 1022501589 B OF ANTARCTICA NE                                  VSS PROCESSING DATE :  26DEC96
---------------------------------------------------------------------------------------------------------
BAT XMIT(GMT)/LOCL                  RETRIEVAL      TRACE  ACQRER ID/ TRAN PROCSS ENT REAS CON/ RSP  --CARDHOLDER--    SETTLEMENT
NUM DATE TIME    CARD NUMBER        REF NUMBER    NUMBER  TRMNL/NAME TYPE CODE  MOD CODE STIP CD   BILLING AMT CUR   AMOUNT (USD)
---------------------------------------------------------------------------------------------------------
01  25DEC 23:01:45 4444333322220001 635823777777 777777  412345     0200 004000 901       00  55   100.00 USD         0.00
                   CA ID:           12345678901234 5       MARY'S MUSTANG CORRAL

01  25DEC 23:01:50 4444333322220002 635823111111 111111  4XXXXX     0200 004000 901 5202  00  00   100.00 USD       100.00DR
                   CA ID: 12345678  12345678901234 5         SHOP N GO

01  25DEC 23:01:50 4444333322220003 635823123456 123456  4XXXXX     0200 004000 901 5204  00  00   100.00 USD       100.00DR
    24DEC 11:11:04 CA ID:           123456789012345          SHOP N GO

01  25DEC 23:01:11 4444333322220004 635823443456 443456  4XXXXX     0200 001000 901       02  00    45.00 USD        45.00DR
                   CA ID:           12345678901234 5         GAS N GO

04  26DEC 01:11:31 4444333322220006 631901101234 446666  4XXXXX     0220 004000 010 2482  13  00  1,000.00 USD     1,000.00DR
    03DEC 04:04:04 CA ID:           12345678901234 5         BILL'S BOOKS

04  26DEC 01:01:41 4444333322220007 635901474747 474747  4XXXXX     0200 200030 901       00  00    56.00 USD        56.00CR
    15DEC 00:00    CA ID: 12345678                 CAROLINE'S CHOCOLATE SHOP

04  26DEC 01:01:43 4444333322220008 629523299999 474788  4XXXXX     0422 004000 2483      00      300.00 USD         0.00**
    22OCT 23:44:45 CA ID: 12345678  12345678901234 299999    TRICIA'S SHOE STORE


          AFFILIATE ID: 4123450002 ANTARCTIC BANK AND TRUST   DEBITS        :  4    1,245.00      1,245.00DR
                                                              CREDITS       :  1       56.00         56.00CR
                                                              TOTAL         :  5    1,189.00      1,189.00DR
                                                              NON FINANCIAL :  1
                                                              TO CRS        :  1      300.00
```

**Figure 7–24: Example 5—Reconciliation of SMS600C Report to VSS-120 Report (2 of 2)**

```
REPORT ID: VSS-120                    VISANET SETTLEMENT SERVICE                    PAGE:            1
REPORTING FOR:   1022501589  B OF ANTARCT NE   INTERNATIONAL SETTLEMENT SERVICE    PROC DATE:    26DEC96
ROLLUP TO:       1234567890  B OF ANTARCT NO   INTERCHANGE VALUE REPORT            REPORT DATE:  26DEC96
FUNDS XFER ENTITY: 9658922110 B OF ANTARCTICA

SETTLEMENT CURRENCY: USD
CLEARING CURRENCY:   USD

                         CURRENCY                       CLEARING      INTERCHANGE    INTERCHANGE
                         TABLE                                           VALUE          VALUE
                         DATE         COUNT              AMOUNT          CREDITS        DEBITS

ISSUER TRANSACTIONS

PURCHASE
    ORIGINAL SALE                       3            245.00DB                           245.00
    REPRESENTMENT                       1          1,000.00DB                         1,000.00

TOTAL PURCHASE                          4          1,245.00DB                         1,245.00
NET   PURCHASE                                                                        1,245.00

MERCHANDISE CREDIT
    ORIGINAL                            1             56.00CR           56.00

TOTAL MERCHANDISE CREDIT                1             56.00CR           56.00
NET MERCHANDISE CREDIT                                                 56.00

TOTAL ISSUER INTERCHANGE                5          1,189.00DB           56.00         1,245.00
NET   ISSUER INTERCHANGE                                                              1,189.00
```

Example 5 shows how fields on the Issuer Transaction Detail (SMS600C) report reconcile to the fields on the Interchange Value Report (VSS-120). These reports can be used to reconcile settlement amounts on SMS detail reports to VSS settled amounts. This example shows reconciliation from the issuer perspective and represents transactions settled in the International Settlement Service. Acquirers would use the acquirer section of the VSS-120 report and the Acquirer Transaction Detail (SMS601C) report for reconciliation.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. For VSS, the settlement service is printed in the report headings for all settlement services. For SMS, NATIONAL NET is printed in the heading for transactions settled in a National Net Settlement Service. No notation is made in the heading when transactions are settled in the International Settlement Service.

The SMS600C and VSS-120 reconciliation fields in Example 5 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Name and number of the Settlement Reporting Entity (SRE) that represents the level of detail of the SMS report |
| **2** | VSS processing date. |
| **3** | Name and number of the funds transfer SRE. |
| **4** | Total Clearing Amount on the VSS-120 report, which is the same as the Total Cardholder Billing Amount on the SMS600C report. |
| **5** | Total Interchange Credit on the VSS-120 report, which is the same as the Credits Settlement Amount on the SMS600C report. |
| **6** | Total Debit Amount on the VSS-120 report, which is the same as the Debit Settlement Amount on the SMS600C report. |
| **7** | Total Interchange Amount on the VSS-120 report, which is the same as the Total Settlement Amount on the SMS600C report. |

| Report<br>Field<br>Number | Report Field Heading<br>or Field Description |
|---|---|
| **8** | Business mode (designates whether the report is for the issuer, acquirer, or other.) |
| **9** | Clearing currency. |
| **10** | Settlement currency. |

**Figure 7–25: Example 6—Reconciliation of SMS600C Report to VSS-130 Report (1 of 2)**

```
REPORT ID: SMS600C              VISANET INTEGRATED PAYMENT SYSTEM              PAGE NUMBER:        :        1
FUNDS XFR: 9658922110 B OF ANTARCTICA          SINGLECONNECT / VISA          ONLINE SETTLMNT DATE:  25DEC96
PROCESSOR: 4010000002 ANTARCTICA PROCESSING    ISSUER TRANSACTION DETAIL     RUN DATE            :  26DEC96
AFFILIATE: 4123450002 ANTARCTIC BANK AND TRUST      BY CARDHOLDER NUMBER ▶2  RUN TIME            : 18:03:30
SRE      : 1022501589 B OF ANTARCTICA NE                                     VSS PROCESSING DATE :  26DEC96 ▶5

---------------------------------------------------------------------------------------------------------
BAT XMIT(GMT)/LOCL               RETRIEVAL     TRACE  ACQRER ID/ TRAN PROCS ENT REAS CON/ RSP  --CARDHOLDER--    SETTLEMENT
NUM DATE TIME    CARD NUMBER     REF NUMBER    NUMBER TRMNL/NAME TYPE CODE  MOD CODE STIP CD   BILLING AMT CUR   AMOUNT (NOK)
---------------------------------------------------------------------------------------------------------
01 25DEC 23:01:50 4444333322220002   6358231111111 1111111 4XXXXXX  0200 001000 901  00  00      100.00 NOK      100.00DR
FEE JURIS: VISA INTERNATIONAL        ROUTING: CANADA - L.A.C.              FEE LEVEL: STANDARD                      1.2 0CR

01 25DEC 23:01:50 4444333322220003   6358231234556 123456  4XXXXXX  0200 001000 901  00  00      100.00 NOK      100.00DR
FEE JURIS: VISA INTERNATIONAL        ROUTING: U.S.A. - L.A.C.              FEE LEVEL: STANDARD                      1.20CR

01 25DEC 23:01:11 4444333322220004   6358234343456 443456  4XXXXXX  0200 001000 901  00  00      200.00 NOK      200.00DR
FEE JURIS: VISA INTERNATIONAL        ROUTING: CANADA - L.A.C.              FEE LEVEL: STANDARD                      2.40CR

04 26DEC 01:11:31 4444333322220006   6319011101234 446666  4XXXXXX  0220 001000 010 2482 13  00  100.00 NOK      100.00DR
FEE JURIS: VISA INTERNATIONAL        ROUTING: E.U. - L.A.C.               FEE LEVEL: STANDARD                      1.20CR

04 26DEC 01:01:41 4444333322220007   6359014747477 474747  4XXXXXX  0200 201000 901  00  00      200.00 NOK      200.00DR
FEE JURIS: VISA L.A.C.               ROUTING: PERU - ANTARCT              FEE LEVEL: STANDARD                      2.40CR

04 26DEC 01:01:43 4444333322220008   6295232999999 474788  4XXXXXX  0422 001000      2483 17  00  150.00 NOK      150.00CR
FEE JURIS: VISA INTERNATIONAL        ROUTING: L.A.C. - U.S.A.             FEE LEVEL: STANDARD  ▶4                    1.80DR


AFFILIATE ID: 4123450002 ANTARCTIC BANK AND TRUST       DEBITS         :   5         700.00      700.00DR
                                                        CREDITS        :   1         150.00      150.00CR
                                                        TOTAL          :   6         550.00      550.00DR
                                                        NON FINANCIAL  :
                                                        TOTAL FEES     :                           6.60CR
```

Arrows: ▶1 (at CARD NUMBER column), ▶3 (at B OF ANTARCTICA)

**Figure 7–25:  Example 6—Reconciliation of SMS600C Report to VSS-130 Report (2 of 2)**

```
REPORT ID:VSS-130                                              PAGE:              3
REPORTING FOR:      1022501589  B OF ANTARCT NE               PROC DATE:      26DEC96
ROLLUP TO:          1234567890  B OF ANTARCT NO               REPORT DATE:    26DEC96
FUNDS XFER ENTITY:  9658922110  B OF ANTARCTICA

                           VISANET SETTLEMENT SERVICE
                      INTERNATIONAL SETTLEMENT SERVICE
                        REIMBURSEMENT FEE REPORT

SETTLEMENT CURRENCY: NOK

                                                        REIMBURSEMENT              REIMBURSEMENT
                          COUNT    INTERCHANGE               FEE                        FEE
                                    AMOUNT
                                              CREDITS                      DEBITS

ISSUER TRANSACTIONS
 PURCHASE
   ORIGINAL SALE
     VISA INTERNATIONAL
       CANADA - L.A.C.
         STANDARD          2      300.00DB                   3.60
       U.S.A - L.A.C.
         STANDARD          1      100.00DB                   1.20
       TOTAL VISA INTERNATIONAL                              4.80

     VISA L.A.C.
       PERU - ANTARCT
         STANDARD          1      200.00DB                   2.40

     TOTAL ORIGINAL SALE                                     7.20

   REPRESENTMENT
     VISA INTERNATIONAL
       E.U. - L.A.C.
         STANDARD          1      100.00DB                   1.20

   CHARGEBACK
     VISA INTERNATIONAL
       L.A.C. - U.S.A
         STANDARD          1      150.00CR                                    1.80

 TOTAL PURCHASE            6      550.00DB                   8.40             1.80
 NET    PURCHASE                                             6.60

TOTAL ISSUER REIMB FEES                                      8.40             1.80
NET   ISSUER REIMB FEES                                      6.60
```

Example 6 shows how fields on the Issuer Transaction Detail (SMS600C) report reconcile to the fields on the Reimbursement Fees Report (VSS-130). This example shows the reconciliation of Interchange Reimbursement Fees between the SMS and VSS reports. Members wishing to accomplish this reconciliation will need to subscribe to the fee information line on the SMS detail reports.

This example shows reconciliation from the issuer perspective and represents transactions settled in the International Settlement Service. Acquirers would use the acquirer section of the VSS-130 report and the Acquirer Transaction Detail (SMS601C) report for reconciliation.

Members in a National Net Settlement Service would use the same reports as those in the International Settlement Service but they would need to subscribe to the National Net Settlement Service version of the reports. For VSS, the settlement service is printed in the report headings for all settlement services. For SMS, NATIONAL NET is printed in the heading for transactions settled in a National Net Settlement Service. No notation is made in the heading when transactions are settled in the International Settlement Service.

The SMS600C, VSS-120, and VSS-130 reconciliation fields in Example 6 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Name and number of the SRE that represents the level of detail of the SMS report |
| **2** | VSS processing date. |
| **3** | Name and number of the funds transfer SRE. |
| **4** | Total reimbursement fees on the SMS600C report and the VSS-130 report. |
| **5** | Settlement currency. |

**Figure 7–26:  Example 7—Reconciliation of EP-111E Report to VSS-900-S Report (1 of 2)**

```
REPORT EP-111E OUTGOING INTERCHANGE                                    PAGE              1
96/06/01 RELEASE 2.00                                                  E/P PROC. DATE  96/06/01
B OF ANTARCT NE 1                                                      RUN NO             001

                               VISANET EDIT PACKAGE
                          RUN SUMMARY BY CURRENCY CODE
                              CENTER 400552

TOTAL FILES    2
BATCH    1 TO  3           USD/0  INTERNATIONAL SETTLEMENT SERVICE
                                  3                    2
                                  ACCEPTED                    REJECTED                  TOTAL
                             AMOUNT      COUNT          AMOUNT      COUNT          AMOUNT      COUNT
FINANCIAL TRANSACTIONS
  SALES DRAFTS
  ORIGINALS/REPRESENTMENTS (05)    101,800.00     502        2,000.00      1     103,800.00     503
  CHARGEBACKS (15)                     575.00       4            0.00      0         575.00       4
  REVERSAL (25)                        575.00 DB    4            0.00      0         575.00 DB    4

  CREDIT VOUCHERS
  ORIGINALS/REPRESENTMENTS (06)        400.00 DB    5            0.00      0         400.00 DB    5

  CASH DISBURSEMENTS
  ORIGINALS/REPRESENTMENTS (07)      1,100.00      31            0.00      0       1,100.00      31
  CHARGEBACKS (17)                     375.00       2            0.00      0         375.00       2

  FEE COLLECTION (10)                  866.66       3            0.00      0         866.66       3

  FUNDS DISBURSEMENT (20)              233.33 DB     1            0.00      0         233.33 DB     1

  MONEY TRANSFER CREDIT (19)           116.67       4            0.00      0         116.67       4
  TOTAL NET - FINANCIAL             103,625.00 5   556 4      2,000.00      1     105,625.00     557


TOTALS    TRANSACTIONS        556    TCRS    1,100    GROSS AMOUNT      106,041.66
```

**Figure 7–26: Example 7—Reconciliation of EP-111E Report to VSS-900-S Report (2 of 2)**

```
REPORT ID:VSS-900-S                                                   PAGE:          2
REPORTING FOR:  1022501589  B  OF ANTARCT NE  [1]                     PROC DATE:  01JUN96
                                                                      REPORT DATE: 01JUN96
                      VISANET SETTLEMENT SERVICE
                  INTERNATIONAL SETTLEMENT SERVICE  [2]
                      SUMMARY RECONCILIATION REPORT

CLEARING CURRENCY:  USD  [3]

                                                                                   TOTAL
                       CRS                   CLEARING          TOTAL              CLEARING
                       DATE      COUNT         AMOUNT          COUNT               AMOUNT

TOTAL CLEARING CURRENCY:  USD
FINANCIAL TRANSACTIONS
  SENT TO VISA                [4] 556 [5]  103,625.00CR
  TO HOLDOVER    (-)
    TO WAREHOUSE                  8          50.00CR
    TO CRS                        6         950.00CR
  FROM HOLDOVER   (+)
    FROM WAREHOUSE ACCEPTED       6         620.00DB
    FROM CRS ACCEPTED            18       4,500.00CR

SENT TO VISA AND SENT TO SETTLEMENT 5215   1,022,480.00DB        556          106,505.00CR
RECEIVED FROM VISA
  RETURNED ITEMS   (+)
    CURRENT CYCLE RETURNED   29MAY96 1         20.00DB
    FROM CRS RETURNED              1         400.00DB
RECEIVED FROM VISA AND SENT TO SETTLEMENT               5,217          1,022,900.00DB
TOTAL SENT TO SETTLEMENT                                5,783            916,395.00DB
```

*NOTE: There is a direct correlation between the processor SRE and the Center BIN. The correlation must be tracked by the processor and Visa recommends that the processor's clearing BIN be part of the processor name in VSS.*

Example 7 shows how fields on the VSS-900-S report reconcile to the fields on the EP-111E report. It shows outgoing interchange from the Edit Package and represents transactions settled in the International Settlement Service and cleared in U.S. Dollars. To research details from the Edit Package report, you must use the VSS-900 report.

The EP-111E and VSS-900-S reconciliation fields shown in Example 7 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Member name.<br><br>***Note:*** *On Edit Package reports, this comes from Run Control Option CENTRNAME. It might not match the value on the VSS report, which comes from VSS.* |
| **2** | Settlement service. |
| **3** | Clearing currency. |
| **4** | Total number of financial transactions sent to Visa. |
| **5** | Total amount of financial transactions sent to Visa. |

**Figure 7–27:  Example 8—Reconciliation of EP-110E Report to VSS-900-S Report (1 of 2)**

```
REPORT EP-110E OUTGOING INTERCHANGE           VISANET EDIT PACKAGE                          PAGE                   1
SYSTEM DATE 96/06/01 RELEASE 2.00          RUN SUMMARY BY CURRENCY CODE                  E/P PROC. DATE  96/06/01
B OF ANTARCT NE  [1]                              CENTER 400552                          RUN NO               001

FILE    1 TO   2
BATCH   1 TO   8
```

| | CURRENCY CODE / SETTLEMENT | ACCEPTED | | REJECTED | | TOTAL | |
|---|---|---|---|---|---|---|---|
| | | AMOUNT | COUNT | AMOUNT | COUNT | AMOUNT | COUNT |
| FINANCIAL TRANSACTIONS | | | | | | | |
| SALES DRAFTS | | | | | | | |
| ORIGINALS/REPRESENTMENTS (05) | USD/0 | 101,800.00 | 502 | 2,000.00 | 1 | 103,800.00 | 503 |
| CHARGEBACKS (15) | USD/0 | 575.00 | 4 | 0.00 | 0 | 575.00 | 4 |
| REVERSAL (25) | USD/0 | 575.00 DB | 4 | 0.00 | 0 | 575.00 DB | 4 |
| CREDIT VOUCHERS | | | | | | | |
| ORIGINALS/REPRESENTMENTS (06) | USD/0 | 400.00 DB | 5 | 0.00 | 0 | 400.00 DB | 5 |
| CASH DISBURSEMENTS | | | | | | | |
| ORIGINALS/REPRESENTMENTS (07) | USD/0 | 1,100.00 | 31 | 0.00 | 0 | 1,100.00 | 31 |
| CHARGEBACKS (17) | USD/0 | 375.00 | 2 | 0.00 | 0 | 375.00 | 2 |
| FEE COLLECTION (10) | USD/0 | 866.66 | 3 | 0.00 | 0 | 866.66 | 3 |
| FUNDS DISBURSEMENT (20) | USD/0 | 233.33 DB | 1 | 0.00 | 0 | 233.33 DB | 1 |
| MONEY TRANSFER CREDIT (19) | USD/0 | 116.67 | 4 | 0.00 | 0 | 116.67 | 4 |
| TOTAL NET – FINANCIAL | USD/0 | 103,625.00 | 556 [2] | 2,000.00 | 1 | 105,625.00 | 557 |
| NON-FINANCIAL TRANSACTIONS | | | | | | | |
| REQUEST FOR COPY (52) | | | 5 | | 0 | | 5 |
| TOTAL NON-FINANCIAL | | | 5 | | 0 | | 5 |

```
TOTALS   TRANSACTIONS   556   TCRS   1,100   GROSS AMOUNT USD/0   106,041.66
```

**Figure 7–27: Example 8—Reconciliation of EP-110E Report to VSS-900-S Report (2 of 2)**

```
REPORT ID:VSS-900-S                        VISANET SETTLEMENT SERVICE              PAGE:                    3
REPORTING FOR:1022501589 B OF ANTARCT NE ▼1  INTERNATIONAL SETTLEMENT SERVICE      PROC DATE:        01JUN96
                                          SUMMARY RECONCILIATION REPORT            REPORT DATE:      01JUN96

CLEARING CURRENCY: NONE

                              CRS                            CLEARING      TOTAL              TOTAL
                              DATE          COUNT            AMOUNT        COUNT              CLEARING
                                                                                             AMOUNT

TOTAL ISSUER TRANSACTIONS
  NON-FINANCIAL TRANSACTIONS
    SENT TO VISA                              1
      TO HOLDOVER      (-)
         TO CRS
      FROM HOLDOVER    (-)
         FROM CRS
    TOTAL SENT TO VISA                                                      1
    RECEIVED FROM VISA
    TOTAL NON-FINANCIAL                                                     1

TOTAL CLEARING CURRENCY: NONE
  NON-FINANCIAL TRANSACTIONS
    SENT TO VISA                              5
      TO HOLDOVER      (-)
         TO CRS
      FROM HOLDOVER    (-)
         FROM CRS
    TOTAL SENT TO VISA
    RECEIVED FROM VISA
    TOTAL NON-FINANCIAL                                                     5 ▼2
```

*NOTE: The clearing currency "NONE" combines all nonfinancial transactions.*

Example 8 shows how fields on the VSS-900-S report reconcile to the fields on the EP-110E report. It shows outgoing interchange from the Edit Package and represents issuer and total nonfinancial transactions. The clearing currency "NONE" combines all nonfinancial transactions.

The EP-110E and VSS-900-S reconciliation fields shown in Example 8 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Member name.<br><br>***Note:*** *On Edit Package reports, this comes from Run Control Option CENTRNAME. It might not match the value on the VSS report, which comes from VSS.* |
| **2** | Total number of financial transactions sent to Visa. |

**Figure 7–28:  Example 9—Reconciliation of EP-111E Report to VSS-900-PS Report (1 of 2)**

```
REPORT EP-111E OUTGOING INTERCHANGE                    VISANET EDIT PACKAGE                                   PAGE              1
SYSTEM DATE 96/06/01 RELEASE 2.00               OUTGOING INTERCHANGE RUN SUMMARY                      E/P PROC. DATE  96/06/01
ANTARCT PROCESSING  (1)                                CENTER 456789  (2)                             RUN NO            001

FILE     1 TO     2
BATCH    1 TO     8
            ACCEPTED                REJECTED

                              USD/0 INTERNATIONAL SETTLEMENT SERVICE  (4)
                                (3)                          TOTAL
                              AMOUNT          COUNT           COUNT        AMOUNT              AMOUNT       COUNT
                                                            (5)
FINANCIAL TRANSACTIONS
SALES DRAFTS
  ORIGINALS/REPRESENTMENTS (05)    101,800.00      502                 2,000.00       1      103,800.00      503
  CHARGEBACKS (15)                     575.00        4                     0.00       0         575.00        4
  REVERSAL (25)                        575.00 DB     4           0.00                            575.00 DB     4

CREDIT VOUCHERS
  ORIGINALS/REPRESENTMENTS (06)        400.00 DB     5           0.00                  0        400.00 DB      5

CASH DISBURSEMENTS
  ORIGINALS/REPRESENTMENTS (07)  1,100.00    31      2           0.00       1,100.00   0         31            2
  CHARGEBACKS (17)                     375.00        3           0.00                  0        375.00         3
FEE COLLECTION (10)                    866.66        1           0.00                  0        866.66         1
FUNDS DISBURSEMENT (20)                233.33 DB     4           0.00                  0        233.33 DB       4
MONEY TRANSFER CREDIT (19)  (6)        116.67      556           0.00                  1        116.67
TOTAL NET - FINANCIAL              103,625.00                 2,000.00                         105,625.00     557

TOTALS    TRANSACTIONS  556   TCRS  1,100   GROSS AMOUNT   106,041.66  (5)
```

**Figure 7–28: Example 9—Reconciliation of EP-111E Report to VSS-900-PS Report (2 of 2)**

```
REPORT ID:VSS-900-PS                    VISANET SETTLEMENT SERVICE                PAGE:                     2
PROCE  [2] 4567890000 ANTARCT PROCESSING [1] PROCESSOR SUMMARY RECONCILIATION REPORT   PROC DATE:      01JUN96
BIN:       4015890000 B OF ANTARCT NE                                             REPORT DATE:    01JUN96
SRE:       1022501589 B OF ANTARCT NE

CLEARING CURRENCY:  USD  [3]
SETTLEMENT SERVICE: INTERNATIONAL SETTLEMENT SERVICE  [4]

                              CRS                                                 TOTAL          TOTAL
                              DATE          COUNT       CLEARING                  COUNT          CLEARING
                                                        AMOUNT                                   AMOUNT

TOTAL INTERNATIONAL SETTLEMENT SERVICE
  FINANCIAL TRANSACTIONS
    SENT TO VISA                      556 [5]   [6] 103,625.00CR
    TO HOLDOVER   (-)
      TO WAREHOUSE                      8              50.00CR
      TO CRS                            6             950.00CR
    FROM HOLDOVER  (+)
      FROM WAREHOUSE ACCEPTED           6             620.00DB
      FROM CRS ACCEPTED                18           4,500.00CR
                                                                                  566           106,505.00CR

  SENT TO VISA AND SENT TO SETTLEMENT 5215        1,022,480.00DB
  RECEIVED FROM VISA
  RETURNED ITEMS  (+)
    CURRENT CYCLE RETURNED              1              20.00DB
    FROM CRS RETURNED                   1             400.00DB
  RECEIVED FROM VISA AND SENT TO SETTLEMENT                                       5,217       1,022,900.00DB
  TOTAL SENT TO SETTLEMENT                                                        5,783         916,395.00DB

  TOTAL TRANSACTIONS                                                              5,798
```

Example 9 shows how fields on the VSS-900-PS report reconcile to the fields on the EP-111E report. It shows outgoing interchange from the Edit Package and represents transactions settled in the International Settlement Service and cleared in U.S. Dollars. Note that only the totals can be reconciled using these reports. To research details from the Edit Package report, you must use the VSS-900 report.

The VSS-900-PS and EP-111E reconciliation fields shown in Example 9 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Processor name.<br>***Note:*** *On Edit Package reports this comes from Run Control Option CENTRNAME. It might not match the value on the VSS report, which comes from VSS.* |
| **2** | Processor Number |
| **3** | Clearing currency. |
| **4** | Settlement service. |
| **5** | Total number of financial transactions sent to Visa. |
| **6** | Total amount of financial transactions sent to Visa. |

**Figure 7–29: Example 10—Reconciliation of EP-110E Report to VSS-900-PS Report (1 of 2)**

```
REPORT EP-110E OUTGOING INTERCHANGE            VISANET EDIT PACKAGE                    PAGE              1
SYSTEM DATE 96/06/01 RELEASE 2.00        OUTGOING INTERCHANGE RUN SUMMARY             E/P PROC. DATE  96/12/26
ANTARCT PROCESSING [1]                        CENTER 456789 [2]                       RUN NO           001

FILE    1 TO    2
BATCH   1 TO    8

                                CURRENCY CODE        ACCEPTED              REJECTED               TOTAL
                                / SETTLEMENT     AMOUNT      COUNT     AMOUNT      COUNT      AMOUNT      COUNT
FINANCIAL TRANSACTIONS
 SALES DRAFTS
  ORIGINALS/REPRESENTMENTS (05)   USD/0      101,800.00     502     2,000.00       1     103,800.00      503
  CHARGEBACKS (15)                USD/0          575.00       4         0.00       0         575.00        4
  REVERSAL (25)                   USD/0          575.00 DB    4         0.00       0         575.00 DB      4

 CREDIT VOUCHERS
  ORIGINALS/REPRESENTMENTS (06)   USD/0          400.00 DB    5         0.00       0         400.00 DB      5

 CASH DISBURSEMENTS
  ORIGINALS/REPRESENTMENTS (07)   USD/0        1,100.00      31         0.00       0       1,100.00       31
  CHARGEBACKS (17)                USD/0          375.00       2         0.00       0         375.00        2

 FEE COLLECTION (10)              USD/0          866.66       3         0.00       0         866.66        3

 FUNDS DISBURSEMENT (20)          USD/0          233.33 DB    1         0.00       0         233.33 DB      1

 MONEY TRANSFER CREDIT (19)       USD/0          116.67       4         0.00       0         116.67        4
 TOTAL NET - FINANCIAL            USD/0      103,625.00     556     2,000.00       1     105,625.00      557

NON-FINANCIAL TRANSACTIONS
 REQUEST FOR COPY (52)                                       5 [3]                 0                       5
 TOTAL NON-FINANCIAL                                         5                     0                       5

TOTALS   TRANSACTIONS     556   TCRS    1,100   GROSS AMOUNT USD/0    106,041.66
```

**Figure 7–29:  Example 10—Reconciliation of EP-110E Report to VSS-900-PS Report (2 of 2)**

```
REPORT ID:VSS-900-PS                    VISANET SETTLEMENT SERVICE            PAGE:              5
PROCE▼ 2 :4567890000 ANTARCT PROCESSING ▼ 1  PROCESSOR SUMMARY RECONCILIATION REPORT    PROC DATE:    01JUN96
BIN:    4015890000 B OF ANTARCT NE                                           REPORT DATE:  01JUN96
SRE:    1022501589 B OF ANTARCT NE

CLEARING CURRENCY: NONE
SETTLEMENT SERVICE : ALL

                        CRS                      CLEARING            TOTAL             TOTAL
                        DATE        COUNT          AMOUNT            COUNT           CLEARING
                                                                                     AMOUNT

NON-FINANCIAL TRANSACTIONS
  SENT TO VISA                       5
  TO HOLDOVER      (-)
     TO CRS
  FROM HOLDOVER    (-)
     FROM CRS
  SENT TO VISA
  RECEIVED FROM VISA
TOTAL NON-FINANCIAL                                                    5  ▼ 3
```

Example 10 shows how fields on the VSS-900-S report reconcile to the fields on the EP-110E report. It shows outgoing interchange from the Edit Package and represents total nonfinancial transactions. The clearing currency "NONE" combines all nonfinancial transactions.

The VSS-900-PS and EP-110E reconciliation fields shown in Example 10 are described in the following table.

| Report Field Number | Report Field Heading or Field Description |
|---|---|
| **1** | Processor name.<br>***Note:*** *On Edit Package reports, this comes from Run Control Option CENTRNAME. It might not match the value on the VSS report, which comes from VSS.* |
| **2** | Processor Number |
| **3** | Total number of nonfinancial transactions sent to Visa. |

# Member Testing 8

This chapter describes VisaNet Settlement Service (VSS) testing and test planning. VSS testing is available for members that are BASE II- and Single Message System (SMS)-connected through the VisaNet Certification Management System (VCMS).

VCMS can generate VSS reports and files from controlled sets of test data. VCMS can also be used to test and certify SMS messages.

This chapter includes the following sections:

- **Overview**—This section describes the testing process.

- **Test Planning**—This section describes the areas that members should consider when developing a VSS test plan.

- **Testing**—This section describes what BASE II- and SMS-connected members need to know to participate in VSS testing.

- **Test Output**—This section contains suggestions for using the output from the test.

## Overview

VSS testing is available for members preparing for a VSS implementation or modifying their existing VSS hierarchies or report subscriptions. Testing enables members to receive files and reports that can be used to test their internal systems and procedures. Testing also supports BASE II- and SMS-clearing services.

During VSS testing with VisaNet, the member is responsible for validating test results and ensuring that the VSS reports and files can be processed correctly.

During member certification with VisaNet, a Visa representative will ensure that Visa conducts checks for selective output results from a specifically defined member test.

Certification covers the evaluation of online message formats, including the 0520 reconciliation message and the 0620 funds transfer totals message, and does not imply that Visa has certified a member's overall system or processes.

## Testing Objectives

VSS testing enables members to do the following:

- Review the VSS reports and files prior to implementation or change of settlement hierarchies or reporting options

- Ensure that internal systems and procedures have been appropriately developed

- Use the reports and output from internal systems as a basis for staff training

- Review the impact of the SMS reports and VisaNet Integrated Payment (V.I.P.) System raw data on internal systems such as space allocation and transmission times (SMS members only)

Members can also use the VSS test output to verify software upgrades for the following VSS features:

- VSS reports as print-ready (TC 47) format, machine-readable (TC 46) format, or both formats

- V.I.P. raw data (SMS only)

- SMS reports (SMS only)

- Automated reconciliation

**NOTE:**  *Members can combine VSS testing with any other product or service testing.*

## Test Report and File Delivery

All test output is delivered using production report delivery methods.

Existing members are responsible for keeping test output separate from production output.

### VAP File Delivery

Members using BASE II- and SMS-clearing can have all test output delivered to a VisaNet Access Point (VAP). Report and test files are identified by the word TEST in the header record (TC 90). Members can receive VSS report data in machine-readable (TC 46) format, print-ready (TC 47) format, or both formats.

SMS detail reports are received in general delivery reports (TC 45) format or raw data multipurpose message (TC 33) format.

### Other

Members in the U.S. region using SMS clearing can use a non-VAP delivery method to receive test output. However, a non-VAP delivery of test output requires a manual process. A Visa representative will coordinate non-VAP deliveries with Visa operations and the member.

## Test Planning

When developing a test plan, members should consider several factors:

*   Before testing begins, members should complete the following tasks:

    –   Determine the VSS hierarchy and VSS report options.

    –   Determine the SMS report options and V.I.P. raw data options (SMS only).

    –   Determine funds transfer point.

    –   Determine testing schedule with a Visa representative.

    –   Develop all internal processes (manual and automated) that use settlement reports.

    –   Develop processes that will use V.I.P. raw data (optional, SMS only).

    –   Develop or modify systems as required to accommodate machine-readable (TC 46) formats (optional).

    –   Develop systems as required to process 0520 reconciliation and 0620 funds transfer totals messages (optional, SMS only).

        ***NOTE:*** *Members receiving the 0520 reconciliation message or the 0620 funds transfer totals message for the first time must certify.*

– Plan training to familiarize staff with the layouts and terminology used in the settlement reports.

– Plan training of staff to use the VSS and SMS reports for reconciliation and other downstream processes.

• Members who want to test a customized VSS hierarchy may need additional testing setup lead time. Custom hierarchies can require three weeks to set up. Members should contact their Visa representative for assistance in determining the exact amount of time required.

• Members should allow sufficient time to review reports and incorporate the test results as part of their planned reconciliation and training processes.

• Each settlement service (National Net Settlement Service or International) requires a separate settlement hierarchy. Members can elect to schedule a test for each settlement hierarchy separately.

• Members should plan for sufficient disk space to receive the test files and reports.

# Testing

Member testing is performed using VCMS. Members can submit and receive controlled sets of test data and reports through VCMS. VSS and SMS reports and files are generated according to the VSS configuration defined for the test.

VCMS testing is available to both new and existing members. Existing members can test changes to their settlement hierarchy and reporting options.

## Benefits

VCMS testing provides the following benefits to members by enabling them to:

• Conduct tests on a daily basis during the week and, in some regions, also on Saturday.

• Confirm VSS report balances using controlled test data.

• Develop internal reconciliation procedures using the test output.

• Confirm hierarchies, established by initial setups or changes to existing setups, using controlled test data and selected test account numbers.

• Conduct certification of 0520 reconciliation messages and 0620 funds transfer totals messages.

## Schedule

VCMS testing is available Monday through Friday in all regions and on Saturday in some regions. One set of VSS reports is generated daily.

A start and end date must be specified for the test. The VSS test configuration will be set up in VCMS for the dates specified. The test configuration will not be maintained after the end date specified unless a request to change the date is submitted. Null VSS reports are generated on days when no test data is submitted. No SMS reports are produced on those days.

Members preparing to test using the VCMS service must indicate the test start and end date to their Visa representative.

Because of the lead time required for setup, members requiring custom hierarchies should contact their Visa representative well in advance of the requested test dates. A test with a custom hierarchy can require up to three weeks setup time. Your Visa representative will assist in determining the amount of lead time required for a test with a custom hierarchy.

**NOTE:** *Requested changes to the test VSS hierarchy or report delivery options (such as adding a BIN or adding a report) are effective on the second Monday after the request.*

## Testing for Members Using BASE II Clearing

This section describes testing for members using BASE II clearing.

### Testing Setup

Members using BASE II clearing can perform testing using VCMS. Data for a test is set up by a Visa representative. Members can submit and receive test transactions and select test account numbers. BASE II-connected acquirers can generate a maximum of 3,000 test transactions per day. BASE II-connected issuers can receive data for any or all of the services that are currently supported in the VCMS environment.

One settlement cycle will be run each day. Test output includes interchange files, VSS reports, and Edit Package reports.

Testing is available on central processing dates (CPDs) Monday through Friday and, in some regions, on Saturday.

Custom implementations and changes to existing hierarchies and reporting options may require more setup lead time depending on the complexity of the customization. Members should contact their Visa representative for assistance in determining lead time requirements for setting up their test. Members must request testing three weeks prior to the Monday of the week they want testing to begin.

Members must provide their Visa representative the following information to schedule a VCMS test:

• VSS report selection and choice of formats: machine-readable (TC 46), print-ready (TC 47), or both formats.

• Each processor (CIB) and its corresponding member name.

• The Monday date of the week testing is to start.

  Testing is available on the Monday of the start week, but members can begin testing any day of the week. Members will receive VSS null reports on days when no tests are performed.

• Report and file delivery information.

• The date testing is to end.

• Any hierarchy or reporting option changes to existing VSS hierarchies.

### Report and File Delivery

The VSS reports are delivered to the VAP as test files between 0330 and 0430 Greenwich mean time (GMT) every day a test is scheduled. The VSS reports and files are delivered to the member's VAP with TEST displayed in the header. Members can differentiate test reports and files from production reports and files by checking for TEST in the header.

## Testing for Members Using SMS Clearing

Members using SMS clearing can test using VCMS, and they begin testing by executing an online test. The test data is used in conjunction with the test VSS hierarchy to create VSS reports, SMS reports, and raw data. Visa can provide SMS certification scripts to members for testing. Testing is available Monday through Friday and, in some regions, on Saturday.

SMS-connected members run controlled sets of test data and should review the results in the next day's reporting cycle using the following outputs: VSS settlement reports, SMS reports, and V.I.P. raw data.

### SMS Certification

SMS-connected members must certify when first implementing SMS processing. In addition, members who elect to receive the 0520 reconciliation message or the 0620 funds transfer totals message for the first time must certify. Members can certify for the 0520 reconciliation and 0620 funds transfer totals messages as part of their online certification.

The certification process for the 0620 funds transfer totals message takes two days. On the first day, members conduct an online test to generate transactions that are processed by the settlement and offline cycles performed when the processing day ends. On the next day, members conduct another online test to receive the 0620 funds transfer totals message.

The certification of 0520 reconciliation messages occur in a single online test day.

## Testing Setup

Test data for SMS-connected members is set up by the Visa representative with VCMS. Members can submit and receive test transactions and select test account numbers. One settlement cycle is run each day.

Members can receive data for any or all of the services that are currently supported in the VCMS environment.

Custom implementations and significant changes to existing settlement hierarchies and reporting options may require more setup lead time depending on the complexity of the customization. Members should contact their Visa representative for assistance in determining lead time requirements for setting up their test environment. Members must request testing a minimum of three weeks prior to the Monday of the week testing begins.

Members must provide their Visa representative the following information to schedule a test:

- VSS report selection and choice of VSS report formats: machine-readable (TC 46), print-ready (TC 47), or both formats.

- Identification of hierarchy structure summary levels and funds transfer points.

- SMS report selection, SMS report sort order, and SMS report lines.

- Selection of V.I.P. raw data records.

- Choice of 0520 reconciliation and 0620 funds transfer totals messages.

- Each affiliate BIN and processor to be tested.

- The Monday date the testing is to start.

  Testing becomes available on the Monday of the start week, but members can begin testing any day of the week. Members will receive VSS null reports on days when no tests are performed.

- The date testing is to end.

- Report and file delivery information.

For any questions regarding this procedure, members should contact their Visa representative.

**NOTE:** *If additional testing time is required after an established end date, members should contact their Visa representative to ensure successful results.*

### Report and File Delivery

For members using VAP delivery, reports and raw data are delivered to the member's VAP within 24 to 32 hours after a test. The VSS reports and files are delivered to the member's VAP with `TEST` displayed in the header. Members can differentiate test reports and files from production reports and files by checking for `TEST` in the header.

Members in the U.S. region using a non-VAP delivery method should have their Visa representative coordinate the test output delivery.

Test output can only be generated once each day that a test is scheduled.

# Test Output

This section contains suggestions for using the test output. This is not a comprehensive list. Members are responsible for determining which steps are necessary to ensure that their systems and procedures are ready for implementing VSS or changing their current setup.

The following list suggests ways to use test output:

- Use VSS output to familiarize staff with the layouts and terminology used in the settlement reports.

- Test internal procedures.

- Confirm VSS report balances using controlled quantities of selected test data.

- Verify VSS and SMS report selections.

- Confirm BIN selection, hierarchy, and other VSS options for reporting and funds transfer.

- Determine whether business objectives were achieved and data is being reported as needed.

The VSS test output can also be used to test members' internal systems:

- Receipt and use of machine-readable (TC 46) report format (optional).

- Receipt and use of V.I.P. raw data (optional, SMS only).

- Automated reconciliation procedures.

- Receipt of SMS 0520 reconciliation messages. Receipt of these messages is optional. Members receiving these messages for the first time must certify (SMS only).

- Receipt of SMS 0620 funds transfer totals message. Receipt of this message is optional. SMS members receiving the 0620 funds transfer totals message for the first time must certify (SMS only).

# Implementation 9

This chapter describes the internal considerations necessary for processors and members who plan to implement the VisaNet Settlement Service (VSS). It also provides information to assist members in defining their VSS requirements. Members should refer to [Chapter 1, VSS Overview](#), through [Chapter 6, SMS Reports and Raw Data](#), for a general understanding of VSS concepts, features, and benefits before reading this chapter.

This chapter includes the following sections:

- [VSS Implementations](#)—This section defines the two types of VSS implementations.

- [Internal Planning](#)—This section provides guidelines for assessing the impact that the implementation of VSS may have on members' internal processes.

- [Hierarchy Considerations](#)—This section provides a series of considerations related to VSS settlement hierarchies, regardless of the type of implementation planned.

- [Funds Transfer Paperwork](#)—This section describes the paperwork required to set up funds transfer points.

- [VSS Reporting Options](#)—This section describes the VSS reporting options, which are relevant to all members and all implementation types.

- [SMS Options](#)—This section describes the Single Message Service (SMS) options for reports, raw data, and online messages, which are relevant to all SMS members regardless of implementation type.

- [SMS Options](#)—This section briefly describes the implementation steps related to VSS testing. For complete information, see [Chapter 8, Member Testing](#).

- Scheduling Implementation—This section describes when reports and files are received based on the implementation date.

- Changing a Hierarchy—This section provides information for changing an existing hierarchy.

- VSS Implementation Plans—Worksheets—This section provides members with a tool for recording their implementation plans.

Throughout this chapter, sections are included called "Decisions and Actions." These sections provide specific actions and information that should be included on the VSS Implementation Plans Worksheet.

## VSS Implementations

To simplify the VSS member implementation, two methods of implementing VSS have been developed. Members must determine their strategy for implementation.

- **Standard**—This implementation type creates a two-level hierarchy with one top settlement reporting entity (SRE) that includes parameters that define the entire hierarchy, such as the settlement currency code. The top SRE also represents a summary of all the other SREs. In a standard hierarchy, the top SRE represents all activity cleared (processed) by the processor. The lowest-level SREs are either BINs (acquirers and issuers) or account ranges (issuers). Funds transfer can occur at the top-level or at the lowest-level (member level settlement).

  Reporting options for a standard hierarchy can be defined by groups of BINs or can apply to all SREs within the hierarchy. Multiple report delivery destinations must be requested as a custom implementation.

- **Custom**—Customizing a standard hierarchy may be needed for many reasons including the following:

  – Using mid-level summary reporting

  – Establishing additional funds transfer points

  – Sending reports to additional endpoints

  – Creating a VSS hierarchy that involves BINs clearing through multiple processors

➤ **Decisions and Actions**

1. Review the remainder of this chapter.

2. Determine the implementation type.

3. Record the information in the worksheet in Table 9–4.

## Standard Hierarchies

The VSS standard settlement hierarchy is determined by identifying every clearing BIN associated with a processor and establishing a two-level hierarchy setup. Standard hierarchies are constructed based on how transactions are cleared in BASE II or SMS.

Lowest-level SREs are defined by BINs or account ranges for BASE II or affiliate BINs in SMS. Reporting and optionally funds transfer for the lowest-level SRE is consolidated to one top-level SRE, at the processor level.

A standard implementation of members with only one BIN results in a standard hierarchy that consists of two SREs—a highest-level funds transfer SRE and a lowest-level SRE that represents the BIN. Totals on the reports for both SREs are the same. To eliminate the duplicate reports for the two SREs, a request can be made to suppress reporting for the lowest-level SRE.

### Funds Transfer

In a standard hierarchy, funds transfer can take place at the highest-level SRE. The funds transfer point must have a settlement account established at the settlement bank of the member's choice. The settlement account must be open and funded by the implementation date. National Net Settlement hierarchies can also have the funds transfer points at the top-level or lowest-level.

For a description of the funds transfer process, see [Chapter 4, Funds Transfer](#) VSS Reporting Options

VSS members can choose the following VSS reporting options with a standard implementation of VSS. Reporting options can be defined by groups of BINs or can apply to all SREs within the hierarchy. (Multiple report delivery destinations must be requested as a custom implementation.)

- VSS settlement report selection
- Report format
- BIN identification in report data records

These options are fully described in [Chapter 5, VSS Reporting and Messages](#)

### Settlement Currency

All SREs in a hierarchy must have the same settlement currency. Because National Net Settlement hierarchies are separate from International Settlement hierarchies, a National Net Settlement currency may be a different currency from the one used for International Settlement.

## Custom Implementation

Members can customize their settlement structures by defining more than one funds transfer point, establishing more than two reporting levels, or choosing different reporting options for each SRE.

### Customizing Hierarchies

A custom implementation is required when a standard implementation does not meet the member's settlement or reporting needs. For example, a custom implementation would be necessary to support business needs, such as the following:

- Providing additional funds transfers

- Providing business-related settlement hierarchies instead of a processing-defined hierarchy (see Chapter 2, VSS Settlement Concepts)

- Selecting different VSS reporting options for each SRE in a hierarchy

- Delivering reports to multiple locations

- Receiving additional summary reporting levels

For examples on customized hierarchies based on specific business needs, see Chapter 2, VSS Settlement Concepts.

### Funds Transfer

Members have the option of establishing multiple funds transfer points at multiple levels within a single VSS hierarchy. Multiple funds transfers can be included to support the member business as defined by the hierarchy.

Each funds transfer point must have a funded settlement account established at the settlement bank of the member's choice by the implementation date. For a description of the funds transfer process, see Chapter 4, Funds Transfer For a description of funds transfer paperwork, see the "Funds Transfer Paperwork" section in this chapter.

### VSS Reporting Options

VSS members can customize the way the following VSS reporting options are implemented. Reporting options can be different for each SRE or group of SREs in a hierarchy. The following reporting options can be customized:

- VSS settlement report selection

- Report format

- Report delivery to specified processor or member endpoint

- Report delivery to multiple endpoints

- BIN identification in report data records

- BASE II clearing charges assessed at processor level

These options are fully described in <u>Chapter 5, VSS Reporting and Messages</u>.

# Internal Planning

This section describes the areas of a member's environment that should be evaluated when planning an implementation of VSS. The following tasks should be completed to determine the impact of VSS on the member's internal processes to evaluate the following:

- All BINs, including identification of BINs participating in a National Net Settlement Service (NNSS) and BINs using SMS routing options or BASE II split routing

- The capacity to determine processing requirements to support the delivery of files, including machine-readable format and V.I.P. raw data files

- Automated reconciliation processing

- Staff familiarization with the report layouts and terminology used in the VSS settlement reports

- Business and financial reporting requirements

In addition, members should evaluate their testing needs to ensure their systems are capable of receiving and processing the reports, report formats, and, when applicable, VisaNet Integrated Payment (V.I.P.) System raw data and SMS online messages.

## VSS Implementation Project Staffing

Various support areas may need to be included to ensure a smooth implementation of VSS and to ensure that current business processes are not interrupted. Although a formal project team may not be dedicated to the implementation tasks, the following support areas should be considered for participation in the VSS implementation:

- Financial reporting

    – Evaluate options on how VisaNet activity should be reported considering the VSS options.

    – Create written procedures.

- Reconciliation

    – Create written procedures.

    – Train the appropriate staff to use the new procedures.

- Technical/Systems

  – Determine the impacts on how the VSS and SMS print-ready reports are to be produced and stored and the impacts of implementing machine-readable formats and V.I.P. raw data.

  – Determine the impacts to possible downstream environments.

  – Determine the impacts to automated file processing.

  – Determine capacity requirements for system environments.

- Treasury

  – Evaluate funds transfer requirements.

  – Complete the treasury-related paperwork as provided by the Visa representative.

➤ **Decisions and Actions**

1. Determine which internal areas will support the VSS implementation.

2. Contact each internal area.

3. Record the information in the worksheet in Table 9–4.

## Evaluating the Processing Environment

The impact of VSS on a member's internal processes depends on the member's processing environment. The following subsections provide examples of a member's settlement environment by business functions. The questions in each subsection are provided to help members plan the tasks needed to complete a successful implementation.

### Processing Relationships

Generally, members will have a settlement structure that is based on their processing structure. Under VSS, members have the option of establishing settlement relationships independent of their processing relationships. This option must be coordinated with their processor. Members should consider the following when evaluating their processing relationships:

- Is more than one processor used?

- If more than one processor is used, how is activity split among processors?

### Identification of BINs

At the time a hierarchy is set up, members should provide identification of all clearing BINs to their Visa representative.

Clearing BINs include:

- BASE II BINs

- SMS affiliate BINs, including network IDs

If SMS affiliate BINs use routing options or BOAS, members should identify all BINs separately.

If the BINs will be participating in a National Net Settlement Service, members should identify which BINs will be excluded, if any.

➤ **Decisions and Actions**

1. Identify all BINs.

2. Determine if more than one processor is used.

3. If Yes, determine how activity is split among processors.

4. Determine if transactions are cleared through BASE II, SMS, or both,

5. If transactions are to be cleared through BASE II, determine if BASE II exception activity is split to another processor.

6. If transactions are to be cleared through SMS, determine what SMS routing options are used. Determine if this activity is included in the new hierarchy. For example:

   - Original routing

   - Alternate routing

   - Account type routing

   - ATM/POS routing

   - PIN/No PIN routing

7. Determine if BOAS is used.

8. Record the information in the worksheet in Table 9–4.

## Settlement Arrangements

Members should determine what type of settlement arrangements are required. The following questions address members' settlement arrangements.

➤ **Decisions and Actions**

1. Does the processor serve as the settlement agent, or is another business entity to be involved?

2. Will one or more National Net Settlement Services be used? One VSS hierarchy will be established for each settlement service.

3. For a National Net Settlement Service, does the settlement occur at the processor or BIN level?

4. What settlement currencies are used? All SREs in a VSS hierarchy must use the same settlement currency. Therefore, if multiple settlement currencies are used, a separate hierarchy is required for each settlement currency.

5. Record the information in the worksheet in Table 9–4.

## Reconciliation Procedures

The reconciliation process and the level of automation of reconciliation procedures are two of the most significant planning decisions of implementing VSS. Members should consider using the following:

• Print-ready (TC 47) VSS settlement reports. For nonautomated reconciliation procedures, refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports,* Appendix A, VSS Reports—Print-Ready Formats, for samples of these reports

• SMS transaction detail reports. For samples of these reports, refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports,* Appendix D, SMS Reports and Raw Data.

• Machine-readable (TC 46) VSS settlement information for automated downloading of settlement information and other automated reconciliation procedures. Refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports,* Appendix B, VSS Reports—Machine-Readable Formats.

• V.I.P. raw data by SMS members to reconcile against transaction data stored in internal log files or download information to history files. For the record format for V.I.P. raw data, refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports,* Appendix D, SMS Reports and Raw Data.

For the information needed to develop reconciliation systems and procedures, see Chapter 7, Reconciliation.

Members should answer the following questions regarding reconciliation procedures and implementation requirements:

- Is reconciliation to be performed manually or automatically?

- What will be done with reports from Visa?

    – Loaded to an online system

    – Archived

    – Stored on microfiche or other report viewing system

- What internal departments will use Visa reports, and what information is important to each?

➤ **Decisions and Actions**

1. Develop your reconciliation procedures.

2. Identify the procedures that are automated?

3. Determine what is done with Visa reports?

4. Record the information in the worksheet in Table 9–4.

## Capacity

Members should be aware that the volume of settlement report data can increase with VSS. Volume depends on the complexity of the settlement hierarchy and the type and number of reports selected. Increased volume can affect both the amount of time required for transmitting and printing files and the amount of space needed for data storage.

The size and complexity of the member's hierarchy can contribute to the reporting volume. VSS reports are created by SRE; therefore, the more SREs in the hierarchy, the more report lines.

Other factors that can influence capacity needs include the following:

- Size of hierarchy indicated by the number of SREs.

- Number of VSS reporting levels.

- Number of VSS reports selected for each SRE.

- Delivery of VSS reports in both print-ready and machine-readable formats.

- SMS report size depends on volume of activity and numbers of report lines selected for each report or sort option of report.

- Null daily VSS reports are generated and sent for all SREs when there is no activity (International settlement only). When members do not run the Edit Package on Sunday, the files on Monday might be large because they also include Sunday's reports.

- Receipt of V.I.P. Raw Data Release 2.2. The size of this file depends on the transaction volume and the selected record types.

➤ **Decisions and Actions**

1. Identify what the effect of the various options might have on your processing and the capacity of the processing location.

2. Record the information in the worksheet in Table 9–4.

# Hierarchy Considerations

This section describes the following considerations when planning a VSS hierarchy:

- National Net Settlement Service

- Deferred Settlement Service

- Routing Options

## National Net Settlement Service

Members implementing a National Net Settlement Service need a separate settlement hierarchy for each settlement service. Separate hierarchies are required to reflect different settlement currencies and regulations that govern funds transfer within a country participating in a National Net Settlement Service.

➤ **Decisions and Actions**

1. If you will be participating in a NNSS, identify the particular NNSS.

2. Review BIN list to identify if any BINs are to be excluded from the NNSS.

3. Record information in the worksheet in Table 9–4.

## Deferred Settlement Service

Members that participate in the Deferred Settlement Service will receive VSS reports for their National Net Settlement Service.

VSS reports that support National Net Deferred Settlement should be included as part of the VSS report selection.

➤ **Decisions and Actions**

1. Determine if you will participate in the Deferred Settlement Service.

2. Determine if you want the VSS-600 report (Pending Settlement Report).

3. Record the information in the worksheet in <u>Table 9–6</u>.

## Routing Options

Various routing options are available to BASE II- and SMS-connected members.

### BASE II

BASE II-connected members can select split-routing for specific transactions. The specific transactions are processed through an alternate processor. These transactions can be settled either with or separate from the activity routed to the original BIN.

➤ **Decisions and Actions**

1. Review BIN list to identify BINs with activity cleared through two processors and to identify which are to be settled in the same hierarchy.

2. Record the information in the worksheet in <u>Table 9–6</u>.

### SMS

Various types of transaction routing are available to SMS-connected members, such as alternate routing of exceptions and account type routing.

In a standard hierarchy, an SRE is established for each alternate processor. As a result, settlement for transactions that are alternately routed is reported separately. Reporting of these transactions can be consolidated at a summary-level SRE as part of a custom implementation.

SMS-connected members taking advantage of any of the routing options should keep in mind the implications of having a unique SRE assigned:

• Transactions are reported separately on VSS reports.

• Transactions are grouped separately in V.I.P. Raw Data.

• Transactions are reported separately on SMS transaction detail reports.

➤ **Decisions and Actions**

1. Review BIN list to ensure SMS BINs using SMS routing options are defined uniquely.

2. Record the information in the worksheet in <u>Table 9–6</u>.

## Customized Hierarchy Planning

Members that choose to customize their settlement structure can follow the steps shown in this section. Information can be saved in a hierarchy spreadsheet.

➤ **To create a customized hierarchy:**

1.  Identify the highest level of reporting required and the subordinate reporting levels. Create a name for each SRE to be created. The name must not exceed 15 characters and can include the BIN. The following examples show one possible way to customize a hierarchy. For easier identification, members may want to include a BIN number or SMS BIN network number in the SRE name.

```
Highest Level Summary
        Summary 1 423456 BASE II
        Summary 2 423456 SMS
```

```
Bank of XYZ
        BASE II Activity or Member Summary
        SMS Activity or Member Summary
```

2.  Add the next levels until all the clearing BINs are accounted. If the BIN represents an SMS BIN, identify the network. Each SRE requires a name. The name is not to exceed 15 characters.

```
Bank of XYZ                          BIN  NETWORK
        BASE II Member Summary
            Bank xxx412121
            Bank yyy412222
        SMS Member Summary
            Bank xxx SMS
                Bank xxx-Net24121210002
                Bank xxx-Net44121210004
            Bank yyy SMS
                Bank yyy-Net24122220002
                Bank yyy-Net44122220004
            Bank zzz SMS4211110004
```

3. Indicate the processor for each lowest-level SRE.

```
Bank of XYZ                          BIN  NETWORK PROCESSOR
        BASE II Member Summary
            Bank xxx 412121    412121
            Bank yyy 412222    412121
        SMS Member Summary
            Bank xxx SMS
                Bank xxx-Net241212100024121210002
                Bank xxx-Net441212100044121210002
            Bank yyy SMS
                Bank yyy-Net241222200024121210002
                Bank yyy-Net241222200044121210002
            Bank zzz SMS4211110004412121210002
```

4. Identify all entries that will represent funds transfer points by circling the name or adding an FT on the same line. Each SRE under a highest-level SRE can only be associated with one funds transfer point.

```
⬭Bank of XYZ⬭                        BIN  NETWORK PROCESSOR
        BASE II Member Summary
            Bank xxx                 412121         412121
            Bank yyy 412222    412121
        SMS Member Summary
            Bank xxx SMS
                Bank xxx-Net241212100024121210002
                Bank xxx-Net441212100044121210002
            Bank yyy SMS
                Bank yyy-Net241222200024121210002
                Bank yyy-Net241222200044121210002
            Bank zzz SMS4211110004412121210002
```

5. Identify affiliates with alternately-routed activity. Members should contact their Visa representative if the processor value is unknown. Ensure affiliates using BOAS are identified with a unique SRE.

```
⬭Bank of XYZ⬭                        BIN  NETWORK PROCESSOR
        BASE II Member Summary
            Bank xxx 412121412121
            Bank yyy 412222412121
        SMS Member Summary
            Bank xxx SMS
                Bank xxx-Net241212100024121210002
                Bank xxx-Net441212100044121210002
                Bank xxx-Net241212100027621210002BOAS PROCESSOR ◄—
                Bank xxx-Net441212100047621210002BOAS PROCESSOR ◄—
            Bank yyy SMS
                Bank yyy-Net241222200024121210002
                Bank yyy-Net241222200044121210002
```

6.   Number each line to uniquely identify each as an SRE.

```
1  Bank of XYZ
2          BASE II Member Summary
3               Bank xxx 412121   412121
4               Bank yyy 412222   412121
5          SMS Member Summary
6              Bank xxx SMS
7                   Bank xxx-Net24121210002412121210002
8                   Bank xxx-Net44121210004412121210002
9              Bank yyy SMS
10                  Bank yyy-Net24122220002412121210002
11                  Bank yyy-Net24122220004412121210002
12             Bank zzz SMS42111100044121210002
```

7.   Verify the result against the hierarchy checklist in Table 9–1.

**Table 9–1:     Customized Hierarchy Checklist**

| Hierarchy Structure | Complete ✔ |
|---|---|
| A funds transfer SRE has no other funds transfer SRE under it. | |
| A funds transfer SRE is associated with every lowest-level SRE. | |
| Every SRE has a unique identifier for reference such as the number assigned in Step 6. | |
| Every SRE has a unique 15-character name. | |
| Clearing information (BIN, processor, and if appropriate, SMS network). | |
| There is only one SRE at the highest level. | |
| There is only one settlement currency for each hierarchy. | |
| A specific clearing entity is defined by only one SRE. | |

➤  **Decisions and Actions**

1.   If using a customized hierarchy, determine if a hierarchy spreadsheet was created.

2.   Determine if the checklist was used to evaluate the spreadsheet.

3.   Record the information in the worksheet in <u>Table 9–6</u>.

# Funds Transfer Paperwork

All funds transfer points within a VSS settlement hierarchy need to be identified. For each new funds transfer point, the member must complete a set of Settlement Funds Transfer (SFT) forms, which include the necessary authorization letters.

When a member uses another financial institution to perform settlement, the member must ensure that drawdown authority has been granted to Visa, the settlement bank, and the correspondent bank, if a correspondent bank is being used. The member should provide each with a copy of the authorization letter, and complete any additional paperwork required by the settlement or correspondent bank. The SFT forms include instructions to assist the member in completing the information and the required authorization signatures. The settlement account must be opened and funded before the funds transfer is established.

The SFT forms process can take several weeks to complete. Visa recommends that members begin this process early so that the settlement account is open and has the required drawdown authority by the implementation date.

➤  **Decisions and Actions**

1.   Determine where funds transfers will be within the VSS settlement hierarchy.

2.   For each funds transfer point, complete the forms received from Visa.

3.   Return the forms to Visa.

4.   Record the information in the worksheet in <u>Table 9–5</u>.

# VSS Reporting Options

BASE II- and SMS-connected members can choose the following reporting options when implementing VSS:

•   VSS settlement report selection

•   Report format

•   Report delivery (custom implementations only)

•   BIN identification in report data records

The type of implementation determines the VSS reporting options that are available:

- For standard implementations, reporting options can be defined by groups of BINs or can apply to all SREs within the hierarchy. (Multiple report delivery destinations must be requested as a custom implementation.)

- For custom implementations, the choices can differ among the SREs within a hierarchy.

## VSS Settlement Report Selection

When VSS is implemented for a member, the member must select the reports to which they will subscribe. Except for the VSS 110 report, which is mandatory for Funds Transfer SREs, all VSS reports are optional. Optional reports are only generated by Visa when a member subscribes to that report for an SRE.

A complete list of the VSS reports is included in Chapter 5, VSS Reporting and Messages, together with a list of the recommended reports. The list of VSS reports is included in Table 9–8 and in Table 9–9. Recommended reports are in bold. If a hierarchy includes both BASE II- and SMS-connected members, use either Table 9–8 or Table 9–9.

### Consolidated File Delivery (SMS Members)

Consolidated File Delivery enables members with VAP delivery to receive a single file that contains all of their VSS settlement reports, SMS reports, and V.I.P. raw data.

If members do not choose to have their files consolidated, they will receive two or more VAP files.

Members cannot choose Consolidated File Delivery and simultaneously use the Customized File Delivery described in the "Customized File Delivery (SMS Members)" section.

### Customized File Delivery (SMS Members)

Customized File Delivery enables VAP-connected members to receive individual files for selected types of data and reports. Each file is delivered to their VAP as soon as the file is available. The following file types are used to select the files:

**Table 9–2:    File Types for Customized File Delivery**

| Type | TC Number | Format |
|------|-----------|--------|
| DBRAW | TC 33 | V.I.P. Raw Data |

**Table 9–2:     File Types for Customized File Delivery**

| Type | TC Number | Format |
|------|-----------|--------|
| DBRPT | TC 45 | SMS Reports |
| SETLM | TC 46 | VSS Reports—Machine-Readable |
| SETLP | TC 47 | VSS Reports—Print-Ready |
| SETLR | TC 46<br>TC 47 | VSS Reports—Machine-Readable<br>VSS Reports—Print-Ready |

**EXAMPLE**

> Members that request both TC 46 (SETLM) and TC 47
> (SETLP) file types for their VSS reports can elect to have
> either file or both set up for Customized File Delivery. The
> setup depends on a member's processing requirements and
> time frames.

Members cannot choose Customized File Delivery and Consolidated File
Delivery simultaneously.

➤ **Decisions and Actions**

1. Identify which VSS settlement reports are required.

2. Determine if Consolidated or Customized File Delivery will be used.

3. For BASE II-connected members, record the information in the
   worksheets in Table 9–7 and Table 9–8.

4. For SMS-connected members, record the information in the worksheets in
   Table 9–7 and Table 9–9.

5. For customized hierarchies that involve both BASE II and SMS members,
   use the worksheets in Table 9–7 and either Table 9–8 or Table 9–9.

## VSS Report Format

After deciding which VSS reports are needed, members should decide the
report format. All VSS reports are available in machine-readable (TC 46),
print-ready (TC 47), or both formats.

Members should review the decisions regarding their reconciliation procedures as this may determine if the machine-readable (TC 46) format is required.

If machine-readable (TC 46) format is to be requested, members should test the receipt of the data.

➤ **Decisions and Actions**

1.  Identify the report format needed.

2.  For a custom implementation, identify which report format is required for which reports and for which SREs in the hierarchy.

3.  For BASE II-connected members, record the information in the worksheets in Table 9–7 and Table 9–8.

4.  For SMS-connected members, record the information in the worksheets in Table 9–7 and Table 9–9.

5.  For customized hierarchies that involve both BASE II- and SMS-connected members, use the worksheets in Table 9–7 and either Table 9–8 or Table 9–9.

## Report Delivery

The following VSS report delivery options are available:

- Delivery to the endpoint associated with the BIN

- Delivery to any other specified Visa endpoint

- Delivery to multiple Visa endpoints (custom implementation only)

Delivery can be to any member with a BASE II VAP. Non-VAP delivery is available to U.S. SMS members only.

➤ **Decisions and Actions**

1.  Determine the delivery endpoint to be used.

2.  If reports are to be delivered to another location, determine the following:

–   Where the reports are to be sent.

–   Identify which reports for which SREs in the hierarchy are to be sent
to which endpoints. For example:

■   Send VSS-110 for SREs 7 and 8 to endpoint A.

■   Send VSS-110 for SRE 7 to endpoint B.

3.  For U.S. SMS members, determine whether reports are to be delivered to a
VAP. If Yes, identify the endpoint. If No, work with your Visa
representative regarding delivery options.

4.  Record the information in the worksheet in Table 9–7.

## BIN Identification in VSS Report Records

Processors need to determine if they want to distribute VSS settlement
reports directly to members. To simplify this process, a BIN can be placed in
the Destination BIN field of the machine-readable (TC 46) and print-ready
(TC 47) report records for the lowest-level SRE. This BIN ties the report
records to a member. This option is available if the processor is also
responsible for clearing the transactions for members.

BIN identification can also be used to affect the sequence that report records
are received. If the BIN is placed in the Destination BIN field, the report
records are received in BIN sequence.

➤  **Decisions and Actions**

1.  Identify whether the BIN is to be identified in report data records for
lowest-level SREs. If this option is requested, members should notify their
Visa representative.

2.  Processors requesting this option should test their processing logic for use
of this field.

3.  Record the information in the worksheet in Table 9–7.

# SMS Options

All SMS-connected members can choose the following SMS options when implementing VSS:

- SMS report selection

- V.I.P. Raw Data Release 2.2

- SMS online messages

  – 0500/0520 reconciliation messages

  – 0620 funds transfer totals message

- Delivery endpoints

## SMS Report Selection

In addition to the VSS settlement reports, SMS-connected members can subscribe to SMS reports that detail a member's transaction activity and support other types of SMS processing.

Members should ensure that procedures are in place to receive the SMS reports.

SMS-connected members can select any of the SMS reports. In addition, members can subscribe to the following:

- Specific lines of some transaction detail reports. Refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports*, Appendix D, SMS Reports and Raw Data, for a list of reports with this option. Line subscription is by processor, not by affiliate BIN.

- Multiple sorts of the same report. Refer to *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports,* Appendix D, SMS Reports and Raw Data, for the available sort options.

➤ **Decisions and Actions**

1. Identify which SMS reports are needed.

2. Identify how each SMS report is to be sorted.

3. Identify which lines of the SMS transaction detail reports are to be received.

4. Determine where reports should be delivered.

5. Record the information in the worksheets in <u>Table 9–10</u> and <u>Table 9–11</u>.

### V.I.P. Raw Data

Members can subscribe to V.I.P. Raw Data Release 2.2.

Members that subscribe to raw data must chose what record types to receive. The optional settlement information (V22120) record separates the transaction activity by SRE. Activity for members using SMS routing options, such as alternate routing to a BackOffice Adjustment System (BOAS) terminal, is grouped by corresponding SRE. The settlement information record precedes all the financial records processed under this SRE. It is recommended that members receive this record to help differentiate the activity among SREs.

### Combining Reports and Raw Data

SMS members with VAP delivery can receive their report data (DBRPT) separate from their raw data (DBRAW). Or, both report and raw data can be combined and distributed through DBRAW.

➤ **Decisions and Actions**

1. Determine whether V.I.P. Raw Data Release 2.2 is needed. Identify which records are to be received.

2. Determine impacts on VAP delivery options.

3. Record the information in the worksheet in Table 9–10.

## SMS Online Messages

The following online messages are optionally available to SMS members:

- 0500 and 0520 reconciliation messages

- 0620 funds transfer totals message (one for each funds transfer SRE)

### SMS Reconciliation (0500/0520) Messages

An SMS-connected member can receive SMS 0500 and 0520 reconciliation messages that contain interchange totals accumulated online for each VSS processor. The messages may be provided as follows:

- On request by member for previous day's totals or cumulatively for the current day (from start of processing to the time of the request)

- At the end of day

➤ **Decisions and Actions**

1. Determine whether 0500 and 0520 reconciliation messages are needed (certification is required).

2. If BOAS is used, determine if the 0500 and 0520 reconciliation messages are to be used. Prepare to receive these messages on the BOAS terminal.

3. Record the information in the worksheet in Table 9–10.

### SMS Funds Transfer Totals (0620) Message

SMS-connected members can receive an 0620 funds transfer totals message that is delivered to the member on completion of settlement. This message is produced for the funds transfer SRE and reflects settlement information for all lower level SREs. The processing endpoint that is to receive this message must be specified.

➤ **Decisions and Actions**

1. Determine if the message is needed and how it will be used (certification is required for first-time recipients only).

2. Identify the BIN associated with the delivery endpoint for the 0620 funds transfer message.

3. Record the information in the worksheet in Table 9–10.

## VSS Testing

VSS testing is available for BASE II- and SMS-connected members. The purpose of VSS testing is to provide VSS reports and files that enable members to test their internal systems and procedures. SMS members will also receive SMS reports and, if requested, V.I.P. raw data, 0520 messages, and 0620 messages.

For a full description of the testing including setup procedures and lead times, see Chapter 8, Member Testing.

➤ **Decisions and Actions**

1. Read Chapter 8, Member Testing.

2. Determine the start and end test dates.

3. Record the information in the worksheet in Table 9–12.

4. Provide regional representative with information to set up testing dates and options.

5.  Perform test.

6.  Prepare reconciliation staff to use new VSS reports.

7.  Reconcile test reports and files.

## Scheduling Implementation

Members should consider the time required to complete the following and make any changes to the hierarchy structure or report selection when determining an implementation date:

•   Make all internal processing changes

•   Train staff to work with the VSS reports and files

•   Review test results

Members can elect a midweek or weekend implementation date. The date selected is dependent on when members want to implement VSS.

New processors will receive null VSS reports one day before activity will be processed and settled.

Members must contact their Visa representative to request a new implementation of VSS or to schedule changes. Members should contact their Visa representative to verify the advance notice required.

Guidelines for the advance notice requests are provided in <u>Table 9–3</u>.

**Table 9–3:      Advance Notice Guidelines**

| Member Request | Advance Notice |
|---|---|
| Original implementation | Three months |
| New funds transfer | Two months |
| Changes to reports options | Three weeks |
| Addition or deletion of BINs or BASE II account ranges in a hierarchy | Three weeks |
| Customizations of hierarchy | Three weeks[1] |

[1]Changes involving more than 50 BINs or complex hierarchy setups may take longer.

➤ **Decisions and Actions**

1.  Determine the implementation date.

2.  Record the information in the worksheet in <u>Table 9–4</u>.

## Midweek Implementations

Midweek implementation events are the same for both BASE II- and SMS-cleared transactions.

### Reports and V.I.P. Raw Data

VSS settlement reports, SMS reports, and V.I.P. raw data are delivered the first time with the Wednesday VSS processing date delivery and will reflect null activity.

- BASE II-cleared transactions are collected on Wednesday for Thursday CPD reporting.

- SMS reports and V.I.P. raw data reflect the Wednesday online settlement date.

### SMS Online Messages

The 0500, 0520, and 0620 messages are sent as follows:

- 0500/0520 Reconciliation Messages

  Members that subscribe to 0500 and 0520 reconciliation messages must plan on receiving the first 0500 and 0520 messages as part of the Wednesday online settlement day.

- 0620 Funds Transfer Totals Message

  If a member requests an 0620 funds transfer totals message, the first time VisaNet sends the message is during the Thursday online settlement day. It will contain the settlement totals for Wednesday's online settlement date.

### Funds Transfer

The funds transfer points defined in the settlement hierarchy are effective on Thursday.

Funding follows the principles described in Chapter 4, Funds Transfer.

For U.S. Dollar and non-U.S. Dollar currency settlement, funds transfer differs:

- U.S. Dollar Settlement

  When the settlement currency is U.S. dollars, the first funds transfer occurs on Thursday. If Thursday is a Federal Reserve Bank holiday, the funds transfer is on the next business day.

- Non-U.S. Dollar Settlement

When the settlement currency is not U.S. dollars, funds transfers occur two business days after the processing date unless that date is a central bank holiday in the country of the settlement currency.

For a midweek implementation, the first VSS funds transfer carries a "for settlement of" date corresponding to a Thursday. The wire transfer is submitted to the member on Thursday with a value date of Monday. This means that settlement accounts are adjusted on Monday.

## Weekend Implementations

Weekend implementation events differ for BASE II- and SMS-cleared activity:

- SMS activity with an online settlement date of Saturday is reported on VSS settlement reports, SMS reports, and V.I.P. raw data delivered on Sunday.

- SMS reports with a Saturday online processing date and a Sunday processing date are delivered on a Monday.

- V.I.P. raw data with a Saturday online settlement date and Sunday VSS processing date is delivered on Monday.

### Reports and V.I.P. Raw Data

BASE II-cleared transactions are collected on the weekend for Monday Central Processing Day (CPD) reporting.

SMS-cleared transactions, VSS settlement reports, SMS reports, and V.I.P. raw data are delivered the first time with the Sunday delivery for U.S. members using non-VAP delivery. For non-U.S. members, delivery is on Monday. SMS reports and V.I.P. raw data reflect a Saturday online settlement date. New processors receive null reports for the first time with a Saturday delivery.

### SMS Online Messages

The 0500, 0520, and 0620 messages are sent as follows:

- 0500/0520 Reconciliation Messages

  Members that subscribe to 0500 and 0520 reconciliation messages must plan on receiving the first 0500 and 0520 messages as part of the Saturday online settlement day.

- 0620 Funds Transfer Totals Message

  If a member requests the 0620 funds transfer totals message, the first time VisaNet sends the new VSS format is during the Sunday settlement day.

### Funds Transfer

VisaNet determines funds transfer positions six days a week for BASE II-cleared activity and seven days a week for SMS-cleared activity. BASE II activity submitted to VisaNet during the weekend is processed and settled on Monday.

For U.S. Dollar and non-U.S. Dollar currency settlement, funds transfer differs:

- U.S. Dollar Settlement

  Because Saturday and Sunday are not business days, when the settlement currency is U.S. dollars, funds transfers for weekend activity occur on Monday. If Monday is a Federal Reserve Bank holiday, the funds transfers occur on the next business day.

- Non-U.S. Dollar Settlement

  When the funds transfer is not in U.S. dollars, funds transfer occurs two business days after the processing date unless the date is a central bank holiday in the country of the settlement currency. Then funds transfer is the next business day after the holiday. For weekend implementations, the funds transfer is Wednesday or the next business day after the bank's holiday.

## Changing a Hierarchy

After the completion of the original VSS implementation, additional planning is needed to add BINs to an existing hierarchy. Planning involves the following factors:

- Where each new clearing BIN is to be established in the hierarchy

- If the new clearing BINs are to be included in both International and National Net Settlement Service hierarchies

- Which reports are to be requested and in what format

- Where the reports are to be delivered

- Whether there is an impact to any funds transfer points

- Which BINs will use another processor for its activity

## VSS Implementation Plans—Worksheets

The worksheets in this section are provided to assist members with recording their VSS implementation plans. Worksheets are helpful for communicating member VSS implementation requirements to a Visa representative.

Each worksheet is associated with information found in the "Decisions and Actions" subsections throughout this chapter.

**Table 9–4:    Internal Plans—All Members Worksheet (1 of 3)**

| Page | Internal Plans | | | ✔ |
|------|----------------|---|---|---|
| 9–2 | • Determine implementation type | Standard<br>Custom | ❑<br>❑ | |
| 9–5 | • Contact support areas for VSS implementation. | | | |
| 9–7 | • Identify all BINs to be implemented, or attach a list. | | | |
| | • Is more than one processor used?<br>  If YES, how is the activity split among processors? | Y<br>N | ❑<br>❑ | |
| | • For BASE II-connected members, identify the application processor.<br>  _____ | | | |
| | • For SMS-connected members, identify the processor and network.<br>  _____ | | | |
| 9–6 | • How are transactions cleared? | BASE II<br>SMS<br>Both | ❑<br>❑<br>❑ | |
| | • Is BASE II activity split to another processor? | Y<br>N | ❑<br>❑ | |
| | • What SMS routing options are used? | Original<br>Alternate<br>Acct.Type<br>PIN/No PIN | ❑<br>❑<br>❑<br>❑ | |
| | • Is BOAS used? | Y<br>N | ❑<br>❑ | |
| 9–8 | • Will the processor serve as the settlement agent? | Y<br>N | ❑<br>❑ | |
| | • Is another business entity involved? | Y<br>N | ❑<br>❑ | |

**Table 9–4:**     **Internal Plans—All Members Worksheet (2 of 3)**

| Page | Internal Plans | | | ✔ |
|------|----------------|---|---|---|
| | • Will you participate in International Settlement Service only? <br> If No, list each National Net Settlement Service (NNSS) and settlement currency. | Y <br> N | ❏ <br> ❏ | |
| | • For National Net Settlement, will settlement occur at the BIN or processor level? | BIN <br> Processor | ❏ <br> ❏ | |
| | • Which settlement currencies are to be used? <br><br> International_____ <br> NNSS_____ | | | |
| 9–8 | • What effect might the reconciliation procedures have on your implementation requirements? | | | |
| | • What procedures will be automated? | | | |
| | • What will be done with Visa reports? | | | |
| | Loaded to an online system | Y <br> N | ❏ <br> ❏ | |
| | Archived | Y <br> N | ❏ <br> ❏ | |
| | Stored on microfiche | Y <br> N | ❏ <br> ❏ | |
| 9–9 | • What internal departments will use the reports? What information is needed by each? | | | |

**Table 9–4:     Internal Plans—All Members Worksheet (3 of 3)**

| Page | Internal Plans | ✔ |
|------|----------------|---|
| 9–10 | What effect might the various options have on capacity planning at your processing center? | |
| 9–23 | Determine proposed implementation date: _____ | |

**Table 9–5:     Funds Transfer Worksheet**

| Page | Funds Transfer | ✔ |
|------|----------------|---|
| 9–15 | • Determine funds transfer points.<br>• Complete Settlement Funds Transfer (SFT) form<br>• When was the paperwork returned to Visa? _____ | |

**Table 9–6:     Hierarchy Considerations (1 of 2)**

| Page | Funds Transfer | | | ✔ |
|------|----------------|---|---|---|
| 9–10 | • Will you be participating in NNSS? | Y<br>N | ❑<br>❑ | |
| | • Identify the NNSS? _____ | | | |
| | Will any BINs be excluded from participation? | Y<br>N | ❑<br>❑ | |
| | If Yes, identify the excluded BINs. | | | |

**Table 9–6:     Hierarchy Considerations (2 of 2)**

| Page | Funds Transfer | | | ✔ |
|------|----------------|---|---|---|
| 9–10 | • Will you participate in Deferred Settlement Service? (Brazil and Japan only) | Y<br>N | ❏<br>❏ | |
| 9–11 | • Review BIN list to identify BINs with activity cleared through two processors and to identify which are to be settled in the same hierarchy. | | | |
| 9–11 | • Review BIN list to ensure SMS BINs using SMS routing options are defined uniquely. | | | |
| 9–14 | • For a custom implementation, has the hierarchy been planned by creating a hierarchy spreadsheet? | Y<br>N | ❏<br>❏ | |
|      | • Has the checklist been used to evaluate the spreadsheet? | Y<br>N | ❏<br>❏ | |

**Table 9–7:     VSS Reporting Options Worksheet (1 of 2)**

| Page | VSS Reporting Options | | | ✔ |
|------|----------------------|---|---|---|
| 9–17 | • Do you want the recommended set of reports?<br><br>If No, check the report format for each report needed in the worksheet in Table 9–8 (BASE II) or Table 9–9 (SMS).<br>If both BASE II and SMS are included in the hierarchy, use the worksheet in either Table 9–8 or Table 9–9. | Y<br>N | ❏<br>❏ | |
|      | • Will Customized or Consolidated File Delivery be used?<br><br>If Yes, how? | Y<br>N | ❏<br>❏ | |

**Table 9–7:    VSS Reporting Options Worksheet (2 of 2)**

| Page | VSS Reporting Options | | | ✔ |
|---|---|---|---|---|
| 9–17 | • If you are using the recommended set of reports, is the format to be the same for all reports? | Y<br>N | ❏<br>❏ | |
| | • If Yes, check one of the following: | | | |
| | Machine-readable (TC46) | | ❏ | |
| | Print-ready (TC 47) | | ❏ | |
| | Both | | ❏ | |
| | • If No, check the format for each report needed in the worksheet in Table 9–8 (BASE II) orTable 9–9 (SMS). If both BASE II and SMS are included in the hierarchy, use the worksheet in either Table 9–8 or Table 9–9. | | | |
| 9–18 | • Identify the endpoint where reports are to be sent.<br>If reports are to be sent to multiple locations, complete additional versions of the worksheets in Table 9–7 and Table 9–8. | | | |
| 9–19 | • Is the BIN to be identified in VSS report data records? | Y<br>N | ❏<br>❏ | |

If the following list of reports is applicable to all SREs in the hierarchy, check the reports needed and the format, if different, by report. If individual SREs or groups of SREs will have different reports, attach a hierarchy diagram that indicates the BINs, account ranges, and summary levels to which the information is applicable and prepare a separate checklist for each group.

**Table 9–8:    VSS Reports—BASE II-Connected Worksheet (1 of 3)**

| Report Name and Number<br>(Recommended reports are bolded) | Report Format:<br>Machine-readable (TC 46)<br>Print-ready (TC 47) | | |
|---|---|---|---|
| | TC 46 | TC 47 | Both |
| **Revised Settlement Reporting Hierarchy List**          **VSS-100-R** | | | |

**Table 9–8:    VSS Reports—BASE II-Connected Worksheet (2 of 3)**

| Report Name and Number<br>(Recommended reports are bolded) | | Report Format:<br>Machine-readable (TC 46)<br>Print-ready (TC 47) | | |
| --- | --- | --- | --- | --- |
| | | TC 46 | TC 47 | Both |
| Weekly Settlement Reporting Hierarchy List | VSS-100-W | | | |
| **Settlement Summary Report** | **VSS-110** | | | |
| Monthly Settlement Summary Report | VSS-110-M | | | |
| SRE Settlement Recap Report | VSS-115 | | | |
| Monthly Settlement Recap Report | VSS-115-M | | | |
| **Interchange Value Report** | **VSS-120** | | | |
| Monthly Interchange Value Report | VSS-120-M | | | |
| **Reimbursement Fees Report** | **VSS-130** | | | |
| Monthly Reimbursement Fees Report | VSS-130-M | | | |
| Volume Discount Detail Report (U.S. only) | VSS-131-M | | | |
| Monthly Volume Discount Detail Report (U.S. only) | VSS-131-M | | | |
| Month-to-Date Reimbursement Fees Report | VSS-135 | | | |
| Month-to-Date Volume Discount Detail Report (U.S. only) | VSS-136 | | | |
| **Visa Charges Report** | **VSS-140** | | | |
| Monthly Visa Charges Report | VSS-140-M | | | |
| Currency Conversion Fees Report | VSS-210 | | | |
| Monthly Currency Conversion Fees Report | VSS-210-M | | | |

**Table 9–8:    VSS Reports—BASE II-Connected Worksheet (3 of 3)**

| Report Name and Number<br>(Recommended reports are bolded) | | Report Format:<br>Machine-readable (TC 46)<br>Print-ready (TC 47) | | |
| --- | --- | --- | --- | --- |
| | | TC 46 | TC 47 | Both |
| Visa Charges Reconciliation Report | VSS-230 | | | |
| SRE Financial Recap Report | VSS-300 | | | |
| Pending Settlement Report—Deferred Settlement only | VSS-600 | | | |
| Reconciliation Report | VSS-900 | | | |
| Monthly Reconciliation Report | VSS-900-M | | | |
| **Summary Reconciliation Report** | **VSS-900-S** | | | |
| Monthly Summary Reconciliation Report | VSS-900-SM | | | |
| Processor Reconciliation Report | VSS-900-P | | | |
| Monthly Processor Reconciliation Report | VSS-900-PM | | | |
| Processor Summary Reconciliation Report | VSS-900-PS | | | |
| Monthly Processor Summary Reconciliation Report | VSS-900-XM | | | |

If the following list of reports is applicable to all SREs in the hierarchy, check the reports needed and the format, if different, by report. If individual SREs or groups of SREs will have different reports, attach a hierarchy diagram that indicates the BINs, account ranges, and summary levels to which the information is applicable and prepare a separate checklist for each group.

**Table 9–9:　VSS Reports—SMS-Connected Worksheet (1 of 2)**

| **Report Name and Number**<br>(Recommended reports are bold) | | Report Format:<br>Machine-readable (TC 46)<br>Print-ready (TC 47) | | |
| --- | --- | --- | --- | --- |
| | | TC 46 | TC 47 | Both |
| **Revised Settlement Reporting Hierarchy List** | **VSS-100-R** | | | |
| Weekly Settlement Reporting Hierarchy List | VSS-100-W | | | |
| **Settlement Summary Report** | **VSS-110** | | | |
| Monthly Settlement Summary Report | VSS-110-M | | | |
| **SRE Settlement Recap Report** | **VSS-115** | | | |
| Monthly Settlement Recap Report | VSS-115-M | | | |
| Interchange Value Report | VSS-120 | | | |
| Monthly Interchange Value Report | VSS-120-M | | | |
| Reimbursement Fees Report | VSS-130 | | | |
| **Monthly Reimbursement Fees Report** | **VSS-130-M** | | | |
| Volume Discount Detail Report (U.S. only) | VSS-131-M | | | |
| Monthly Volume Discount Detail Report (U.S. only) | VSS-131-M | | | |
| Month-to-Date Reimbursement Fees Report | VSS-135 | | | |
| Month-to-Date Volume Discount Detail Report (U.S. only) | VSS-136 | | | |
| Visa Charges Report | VSS-140 | | | |

**Table 9–9:  VSS Reports—SMS-Connected Worksheet (2 of 2)**

| Report Name and Number (Recommended reports are bold) | | Report Format: Machine-readable (TC 46) Print-ready (TC 47) | | |
|---|---|---|---|---|
| | | TC 46 | TC 47 | Both |
| Monthly Visa Charges Report | VSS-140-M | | | |
| Currency Conversion Fees Report | VSS-210 | | | |
| Monthly Currency Conversion Fees Report | VSS-210-M | | | |
| Visa Charges Reconciliation Report | VSS-230 | | | |
| **SRE Financial Recap Report** | **VSS-300** | | | |
| **Reconciliation Report** | **VSS-900** | | | |
| Monthly Reconciliation Report | VSS-900-M | | | |
| Summary Reconciliation Report | VSS-900-S | | | |
| Monthly Summary Reconciliation Report | VSS-900-SM | | | |
| Processor Reconciliation Report | VSS-900-P | | | |
| Monthly Processor Reconciliation Report | VSS-900-PM | | | |
| Processor Summary Reconciliation Report | VSS-900-PS | | | |
| Monthly Processor Summary Reconciliation Report | VSS-900-XM | | | |

**Table 9–10:   SMS Options Worksheet (1 of 2)**

| Page | SMS Options | | | ✔ |
|------|-------------|---|---|---|
| 9–20 | • Is the same report selection information applicable to all affiliate BINs for the processor? | Y<br>N | ❏<br>❏ | |
| | • If Yes, check the reports needed and circle the sort order and lines for each selected report.<br><br>Sort Order Key: A=Acquirer Id<br>C=Card Number<br>I=Issuer ID<br>R=Retrieval Reference Number<br>T=Transmission Date/Time | | | |
| | • If No, attach a list of the affiliate BINs that the information is applicable to and prepare a separate worksheet (Table 9–11) for each group of affiliate BINs. | | | |
| 9–18 | • Indicate where reports should be delivered.<br><br>_____<br>_____ | | | |
| | • Is subscription to V.I.P. Raw Data Release 2.2 needed?<br>• Which records are needed? | Y<br>N | ❏<br>❏ | |
| | Settlement information (V22120) | Y<br>N | ❏<br>❏ | |
| | Financial transaction (V22200–V22282) | Y<br>N | ❏<br>❏ | |
| | File maintenance (V22300–V22310) | Y<br>N | ❏<br>❏ | |
| | Administrative message | Y<br>N | ❏<br>❏ | |
| | Reconciliation message | Y<br>N | ❏<br>❏ | |
| | Advice notification transaction | Y<br>N | ❏<br>❏ | |
| | • If VAP delivery is used, are reports and raw data to be separate or combined? _____ | | | |

**Table 9–10:   SMS Options Worksheet (2 of 2)**

| 9–21 | • Is subscription to reconciliation (0500/0520) messages needed? | Y<br>N | ❑<br>❑ | |
|---|---|---|---|---|
| 9–22 | • Is subscription to the funds transfer (0620) message needed?<br>• If Yes, what is the advice destination address?<br>_____<br>\_\_\_\_\_ | Y<br>N | ❑<br>❑ | |

**Table 9–11:   SMS-Connected Reports Worksheet (1 of 4)**

| ✔ | SMS Transaction Detail Reports Number and Name | | Sort[1] | Lines | |
|---|---|---|---|---|---|
| | SMS600 | Issuer Transaction Detail | A | ALL | |
| | | | C | 1 | |
| | | | R | 2 | 3 |
| | | | T | 4 | 5 |
| | SMS601 | Acquirer Transaction Detail | C | ALL | |
| | | | I | 1 | |
| | | | R | 2 | 3 |
| | | | T | 4 | 5 |
| | SMS610 | Issuer Chargeback Detail | A | ALL | |
| | | | C | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |

**Table 9–11:    SMS-Connected Reports Worksheet (2 of 4)**

| ✔ | **SMS Transaction Detail Reports Number and Name** | | **Sort**[1] | **Lines** | |
|---|---|---|---|---|---|
| | SMS611 | Acquirer Chargeback Detail | C | ALL | |
| | | | I | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |
| | SMS612 | Issuer Representment Detail | A | ALL | |
| | | | C | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |
| | SMS613 | Acquirer Representment Detail | C | ALL | |
| | | | I | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |
| | SMS614 | Issuer Adjustment and Merchandise Credit Detail | A | ALL | |
| | | | C | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |
| | SMS615 | Acquirer Adjustment and Merchandise Credit Detail | C | ALL | |
| | | | I | 1 | |
| | | | R | 2 | 3 |
| | | | | 4 | 5 |

**Table 9–11:   SMS-Connected Reports Worksheet (3 of 4)**

| ✔ | SMS Transaction Detail Reports Number and Name | | Sort[1] | Lines |
|---|---|---|---|---|
| | SMS616 | Issuer Cancellation and Reversal Detail | C | ALL |
| | | | R | 1 |
| | | | | 2        3 |
| | | | | 4        5 |
| | SMS617 | Acquirer Cancellation and Reversal Detail | C | ALL |
| | | | R | 1 |
| | | | | 2        3 |
| | | | | 4        5 |
| | SMS620 | Issuer File Maintenance Daily Summary | T | not applicable |
| | SMS622 | Issuer SMS Cardholder Database Monthly Summary | C | not applicable |
| | SMS640 | Issuer Error Detail | T | not applicable |
| | SMS642 | Issuer CRS Returned Exception Detail | C | not applicable |
| | SMS624 | Routing Table Update Weekly Summary | C | not applicable |
| | SMS641 | Acquirer Error Detail | T | not applicable |
| | SMS643 | Acquirer CRS Returned Exception Detail | R | not applicable |
| | SMS608 | Fee Collection & Funds Disbursement Detail | C | ALL |
| | | | | 1 |
| | | | | 2        3 |
| | | | | 4        5 |
| | SM626 | Administrative Message Daily Summary | R | ALL |
| | | | | 1 |

**Table 9–11:   SMS-Connected Reports Worksheet (4 of 4)**

| ✔ | SMS Transaction Detail Reports Number and Name | | Sort[1] | Lines | |
|---|---|---|---|---|---|
| | | | | 2 | 3 |
| | | | | 4 | 5 |
| | SMS630 | Batch Total Reconciliation Summary | not applicable | ALL | |
| | | | | 1 | |
| | | | | 2 | 3 |
| | | | | 4 | 5 |

[1]<u>Sort Order Key</u>
A = Acquirer ID
C = Card Number
I = Issuer ID
R = Retrieval Reference Number
T = Transmission Date/Time

**Table 9–12:   Testing Worksheet**

| Page | Testing | ✔ |
|---|---|---|
| 9–22 | • Testing should begin on ___/___/___ and complete on ___/___/___ | |

# Glossary

**account type**

The source of cardholder funds used to pay for transactions, either credit or debit.

**acquirer**

A member financial institution that has agreements with merchants to accept card transactions or to offer cash disbursement services to cardholders, or both.

**banking details**

Banking instructions, such as the settlement bank and account information, that provide Visa with information required to pay to, or collect funds from, a member.

**brand**

Identifies the organization that establishes the rules about the card as a whole. The services defined by the individual marks on a card may be governed by other organizations.

**business mode**

Designates whether the amounts on VisaNet Settlement System (VSS) reports are for issuer, acquirer, or other.

**business transaction cycle**

Identifies which presentment is being reported. The cycle descriptions used are based on the business transaction type.

**business transaction type**

Classifies transactions according to their business purpose.

**cardholder type**

> Allows members to distinguish between consumer and commercial usage. Members may need to make this distinction because different services are often provided to consumer cardholders than to commercial cardholders.

**charge type**

> Classifies charges on VSS reports.

**clearing**

> The process of collecting an individual transaction from one member or processor and delivering it to another.

**clearing currency**

> The currency used in the clearing process (for acquirers, it is the transaction currency; for issuers, it is the cardholder billing currency).

**clearing entity**

> The entity used by the clearing systems to determine processing rules. In BASE II clearing, a clearing entity is a 6-digit Visa-assigned BIN or an ISO-assigned card range. In the Single Message System (SMS), a clearing entity is the 6-digit Visa-assigned BIN that is contained in the affiliate BIN. The clearing entity is always included in the definition of a lowest-level settlement reporting entity (SRE).

**cobranding relationships/entities**

> Cobranded cards are those cards that are issued by financial institutions in partnership with another corporation. These cards feature value-added benefits such as airline mileage, reduced telephone rates, automobile purchase rebates, or other free or discounted products.

**correspondent bank**

> A bank located in the country of the settlement currency that acts as a settlement bank when the settlement bank is located outside the country of the designated settlement currency.

**currency conversion fee**

> A fee assessed on original, representment, and reversal transactions, and paid to Visa. This fee is included in the cardholder billing amount. Currency conversion fees are paid by the issuer when the transaction currency is different from the issuer's billing currency.

**currency conversion fee allocations**

> Amount paid by Visa to the members. The regional Board of Directors may elect to allocate to the members part of the currency conversion fees received. The fees may be allocated to the issuer, the acquirer, or both.

**Drawdown (Debit) Authority**

Written authority provided by a member to both its settlement bank and Visa. This authorization directs the member's settlement bank to act for the member to accept funds from, and transfer funds to, Visa.

**Edit Package**

Visa-supplied software that validates incoming and outgoing interchange data and produces summary and error reports for BASE II endpoints.

**endpoint**

The physical, computer connection of a member, merchant, or third-party processor to VisaNet. (The term endpoint is also used to refer to the institution itself; for example, a particular member may be considered a VisaNet endpoint.)

**fee level**

Indicates the type of fee assessed.

**FTSRE**

Abbreviation for Funds Transfer settlement reporting entity (SRE).

**funds transfer**

The payment or collection of funds between Visa and its members.

**funds transfer point**

A settlement point designated to handle funds transfer.

**funds transfer SRE**

The level at which funds transfer takes place.

**Greenwich mean time (GMT)**

Mean solar time for the meridian at Greenwich, England, used for calculating time internationally.

**interchange**

Transaction data sent from one member to another.

**Interchange Reimbursement Fee (IRF)**

A fee paid by issuers and acquirers to each other for transactions entered into interchange (and their reversals).

**International Outgoing Interchange (IOI) fee**

> An optional regional fee paid by the acquirer when a transaction occurs outside the issuer's country. It may be assessed for Sales Draft (TC05) original and representment, Cash Disbursement (TC07) original and representment, TC05 & TC07 reversals and their SMS Visa or Plus Network equivalent transactions.

**International Settlement Service**

> The settlement service used for all international and domestic activity unless a specific national settlement service is named.

**IOI fee**

> *See* International Outgoing Interchange (IOI) fee.

**IRF**

> *See* Interchange Reimbursement Fee (IRF).

**issuer**

> A member that issues Visa card products. For a given transaction, the institution that issued the card used for that transaction.

**jurisdiction**

> Identifies the operating regulations governing the reimbursement fees and charges imposed on a transaction. Examples of jurisdiction are Visa International, Visa Canada, Plus System Inc. U.S.A., and Interlink International.

**lowest-level SRE**

> The lowest-level at which VSS produces settlement reports.

**member level settlement**

> A business practice where a member uses a processor, but handles its own funds transfer.

**National Net Settlement Service (NNSS)**

> The settlement service for a single country that summarizes domestic transactions for settlement.

**net settlement amount**

> The amount due to or from the funds transfer point for a settlement day's activity.

**network**

The identifier sent with a transaction or determined by Visa that specifies the rules by which the transaction is accepted and processed. For SMS, network activity is identified by the last four digits of the affiliate BIN and is included in the definition of a lowest-level SRE. Network is not used when defining SREs for BASE II-connected members. (The mark on a Visa card that is associated with a transaction is called the active mark for that transaction. An allowed mark is a network to which a member belongs. Some examples of marks are Visa, Interlink, and Plus. Marks usually appear on the card.)

**Operating Regulations**

The regulations that govern all activities relating to the operation and use of Visa systems, services, and products. There are regional and international editions of the Operating Regulations.

**optional issuer fee**

A fee that issuers may charge cardholders for cross currency transactions. It is expressed as a positive or negative percentage.

**processing charges**

Charges paid by members to Visa for processing services. These charges vary depending on transaction type and volume.

**processor**

A member or a Visa-approved nonmember that provides authorization, clearing, or settlement services for merchants and members.

**reimbursement fee**

An amount paid by one member to another for transactions entered into interchange.

**returned item charge**

A charge assessed to the member for a returned item.

**Routing and Transit Number (U.S. Dollar)**

An American Bank Association (ABA) number assigned to American banks by the Federal Reserve System. This number is used to advise of funds movement through the Federal Reserve FEDWIRE system.

**settlement**

The process of calculating and determining the net financial position of each member for all transactions that are cleared. *See also* net settlement amount.

**settlement bank**

A bank located in the country of the settlement currency where a member's funds can be deposited or withdrawn.

**settlement currency**

> The denomination of currency used for funds transfer.

**Settlement Funds Transfer (SFT) Forms**

> A set of forms that is completed by a member and provides Visa with the member's banking details.

**settlement hierarchy**

> A group of related SREs that have financial responsibility for the settlement of a given group of payment transactions. (The financial responsibility of each superior entity in a given hierarchy is the total of the subordinate entities.)

**settlement reporting entity (SRE)**

> Any business entity for which Visa performs settlement, provides settlement reporting, or does both.

**settlement service**

> A service provided by Visa to report net settlement amounts for members. (The types of settlement services are International Settlement Service and National Net Settlement Service.) Settlement service is always included in the definition of a lowest-level SRE.

**special airline fee (SAF)**

> A fee charged on transactions from international airlines whenever the issuer, acquirer, and transaction countries are not all the same. This fee is collected instead of the IOI fee and is paid to the transaction region.

**SRE**

> *See* settlement reporting entity (SRE).

**summary-level SRE**

> A consolidation of lowest-level SREs. In addition to reporting, a summary-level SRE can be established as a fund transfer point.

**S.W.I.F.T. Address (Non-U.S. Dollar)**

> An identification code provided by the Society for Worldwide Interbank Financial Telecommunications (S.W.I.F.T.). The code is used to advise of funds movement outside the Federal Reserve FEDWIRE system, primarily outside the U.S.A.

**top-SRE**

> The highest-level SRE that contains the parameters that define the entire hierarchy. A top SRE can function as a summary-level SRE.

**transaction routing**

Describes the source and destination of the transaction.

**VAP**

*See* VisaNet Access Point (VAP).

**VCMS**

*See* VisaNet Certification Management Service.

**Visa charges**

All amount assessed by Visa and paid by the member or the member processor to Visa. Also includes amounts paid by Visa to the member or member processor.

**VisaNet Access Point (VAP)**

Visa equipment and software that a member uses to access the VisaNet systems.

**VisaNet Certification Management Service**

A dedicated, on-demand testing and certification service that allows members to test with Visa. It provides software tools, licensed by Visa, that allow members to test communications, data transmissions, software applications, and transaction formats.

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