FRC B2B Process Flows

For the SA and WA Gas Retail Markets

Version: 3.4
Last Update: 1 July 2014

Preamble:

This document has been modified to comply as closely as possible with the jurisdictional conditions of both the South Australian and Western Australian gas retail markets in place since 1 October 2009. The reader needs to be aware of the following changes.

(a) Several terms have been changed to a general term where possible with a market specific definition; and

(b) in the interests of keeping new terms and acronyms to a minimum, the original word has been italicised where possible to indicate that its definition again depends on its location.

This approach is to promote interchange-ability in these documents for the benefit of stakeholders from both states.

The terms and there relevant definitions are as follows:

Term:	**South Australian Market Definition:**	**Western Australian Market Definition:**
Market Operator	AEMO	REMCo
Retail Market Rules	Retail Market Procedures	Retail Market Rules

For more information please contact the Market Operator in your state:

	AEMO	REMCo
Website:	http://www.aemo.com.au	http://www.remco.net.au

Version Release History

Version	Date	Author(s)	Changes and Comments
0.1	30/9/03	C.Madden	Initial release
0.2	16/10/03	C.Madden	Working copy for Workshop
0.3	22/10/03	C.Madden	Update from Workshop 17/10/03
0.4	30/10/03	C.Madden	Update from Workshop 27/10/03
1.0			Minor updates
2.0	31/10/03	C.Madden	Updates as per Envestra and Alinta feedback
2.1	26/11/03	C.Madden	Updates from Workshop 21/11/03. Pending the addition of a further three flows when approved.
2.2/9	19/01/04	B.Eaves	Corrections to introduction and addition of REQ6B and REQ8
3.0	1/3/04	B. Eaves	Addition of MIRN 1.1 – New Connection – I&C Service Connection SA Part 1 and Part 2. Modifications to Service Order flows in relation to interval meters.
3.1	27/4/04	B. Eaves	MR9A – GIP transaction number corrected. Details of Meter Data Notification corrected and separated for SA and WA. MR9B – Service Order Completion Response from Step 4 removed. Note added to indicate that notification to the user is via MDN. MR11A – Meter Date Notification Read Reason Code corrected. REQ7 – Additional decision point of 'Able to cancel Service Order added together with steps 2 and 3. REQ8 – Wording changed from 'deemed' to 'implied' MR7A – New flow added.
3.2	1/6/05	REMCo	Update to reflect changes incorporated in V5.0 of *RMR*.
3.3	15/08/11	Z. Gemmell	Generic documentation changes, including the addition of a preamble for the document to be applicable in the SA and WA gas retail markets.
3.4	1/07/14	T. Sheridan	Updated to reflect the out workings of IN017/13 - Amended relevant Service Order sections. SA only changes.

TABLE OF CONTENTS

INTRODUCTION 5

2. DATABASES 7

PROCESS FLOW: DB1: REQUESTED DB UPDATES 8
PROCESS FLOW: DB2: STREET SUBURB TABLE UPDATE 9

3. MIRN 10

PROCESS FLOW: MIRN1: NEW CONNECTION - SERVICE CONNECTION (SA - PART 1) 11
PROCESS FLOW: MIRN1.1: CONNECTION REQUEST/SHIPPER – NO RETAILER (SA - PART 1) 12
PROCESS FLOW: MIRN1.1: CONNECTION REQUEST/SHIPPER – RETAILER ASSIGNED (SA - PART 2) 13
PROCESS FLOW: MIRN3: NEW CONNECTION (WA) 14
PROCESS FLOW: MIRN 4A: STANDING DATA REQUEST/MIRN DISCOVERY BY MIRN 15
PROCESS FLOW: MIRN 4B: MIRN DISCOVERY BY ADDRESS 16

4. METER READ 17

PROCESS FLOW: MR1: METER READS - FAILURE OF A COMPLETE ROUTE 18
PROCESS FLOW: MR2: REQUEST FOR CHANGE TO METER READING SCHEDULE 19
PROCESS FLOW: MR3: REQUEST FOR HISTORICAL DATA 20
PROCESS FLOW: MR4A: SPECIAL METER READING RESPONSE (BASIC METERS ONLY) 21
PROCESS FLOW: MR4B: DEEMED METER READING (BASIC METERS ONLY) 22
PROCESS FLOW: MR5: ACCOUNT CREATION 23
PROCESS FLOW: MR6: ANNUAL METER READING SCHEDULE 24
PROCESS FLOW: MR7: METER SITE ACCESS/ADDRESS CHANGE FROM USER (SA) 25
PROCESS FLOW: MR8: METER SITE ACCESS CHANGE FROM NO 27
PROCESS FLOW: MR10: SERVICE RECOMMISSIONING BY REQUEST (WA ONLY) 28
PROCESS FLOW: MR11C: DEREGISTRATION BY REQUEST (WA) 29
PROCESS FLOW: MR12: UPGRADE FROM BASIC TO INTERVAL METER (SA) 30
PROCESS FLOW: MR12: UPGRADE FROM BASIC TO INTERVAL METER (WA) 31
PROCESS FLOW: MR13: GENERIC ENERGY FLOW 32
PROCESS FLOW: MR14: DOWNGRADE FROM INTERVAL TO BASIC FOR TARIFF D (SA) 33

5. REQUESTS AND SERVICE ORDERS 34

PROCESS FLOW: REQ1: METER DATA VERIFICATION 35
PROCESS FLOW: REQ2: MISSING DATA READS 36
PROCESS FLOW: REQ3: NOTIFICATION OF MAINS/SERVICE 37
PROCESS FLOW: REQ4: NOTIFICATION OF DATA CHANGE 38
PROCESS FLOW: REQ5A: SERVICE ORDERS GENERAL (DETAILED) WA ONLY 39
PROCESS FLOW: REQ5B: SERVICE ORDERS GENERAL (SA - SIMPLIFIED) 40
PROCESS FLOW: REQ5B: SERVICE ORDERS GENERAL (WA - SIMPLIFIED) 41
REQ5B: DET: SERVICE ORDERS TRANSACTION TABLE (SA ONLY) 42
PROCESS FLOW: REQ6: DB INITIATED SERVICE ORDERS (SA) 43
PROCESS FLOW: REQ6B: DB VARIED SERVICE ORDERS WA ONLY 45
PROCESS FLOW: REQ7: RETAILER INITIAL REQUIRED SERVICE ORDERS CANCELLATION (SA) 46
PROCESS FLOW: REQ7: SERVICE ORDERS CANCELLATION (WA) 47
PROCESS FLOW: REQ8: IMPLIED SERVICE RECOMMISSIONING AND (FOLLOWING TRANSFER WITHDRAWAL) AN IMPLIED SERVICE DE-COMMISSIONING (SA) 48
PROCESS FLOW: REQ8: IMPLIED SERVICE RE-COMMISSIONING AND (FOLLOWING TRANSFER WITHDRAWAL) AN IMPLIED SERVICE DE-COMMISSIONING (WA) 49

1. Introduction

The Business-to-Business (B2B) process flow charts contained in this document have been developed and updated as a working aid to assist the implementation of the South Australia and Western Australia Gas Retail Markets (SA/WA markets). These diagrams use the 'swimming lane' style and show the business process flows between market participants. Whilst the Market Operator will maintain this document on an on going basis participants are requested to refer to the Specification Pack and relevant *RMR* for a detailed description of processes. Please advise the Market Operator should you find any inconsistencies in this document.

When reading and using this document, please note the following:

1. The process flow charts are designed to complement, but not replace, the following source documents:

    - *Retail Market Rules*,
    - FRC B2B System Interface Definitions.

    While reasonable effort has been made to ensure that these process flow charts are consistent with the *RMR* and the FRC B2B System Interface Definitions, there may be differences between the process flow charts and the source reference documents. If there is a difference, the *RMR* and the FRC B2B System Interface Definitions take precedence.

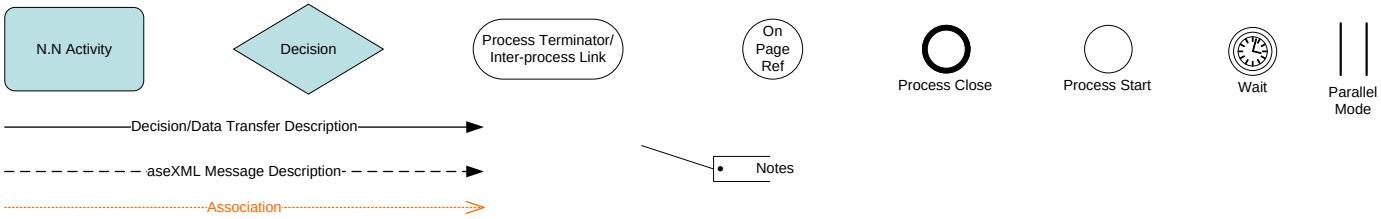
2. The process flow charts are not designed to aid the development of the B2M requirements for the SA/WA markets. The B2M process flows are provided separately.

3. The process flow charts are designed to aid, where possible, the identification of the necessary transactions between market participants. The following information is provided, where known:

    - Victorian Gas Market physical transaction name;
    - Victorian Gas Market logical transaction name (GIP)
    - Medium type eg aseXML, manual notice;
    - *RMR*.

4. The process steps within individual businesses are indicative only and do not necessarily identify all required process steps nor do they mandate the use of a particular process.

5. The drawing conventions used for these diagrams are as follows:



6. Flow arrows that cross "swim lanes" to connect to a start or end identifier are used to ease diagram production and do not indicate a transaction.

7. The document has been divided into logical components reflecting the *RMR* and System Interface Definition structures:

    - Data Base and MIRN
    - Meter Reading
    - Requests and service orders

8. Related Documents. This document is provided as part of the Information Pack. This document should be read in conjunction with the documents contained within the Specification Pack as follows:

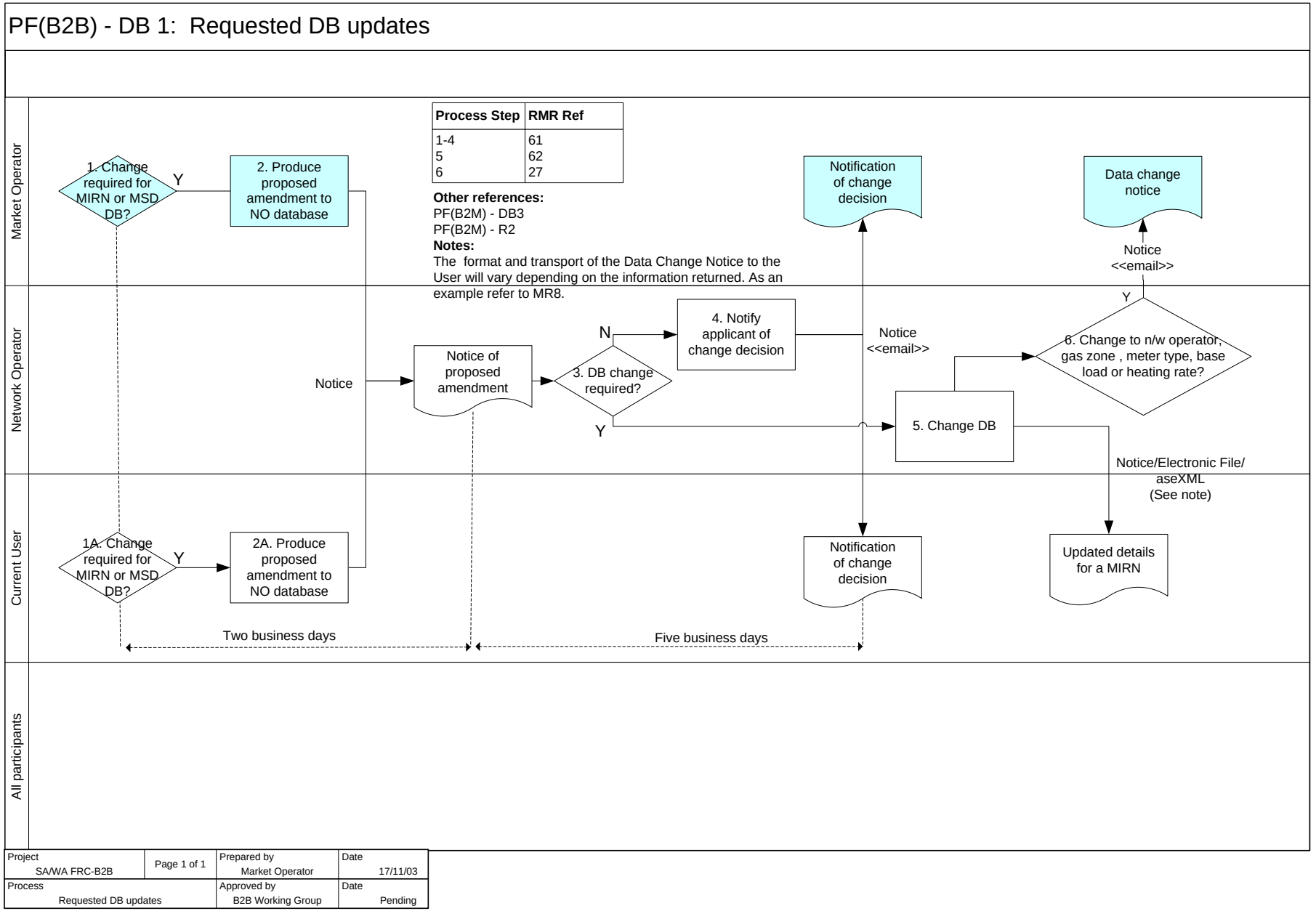
    - Interface Control Document
    - FRC B2B System Interface Definitions
    - FRC B2M-B2B System Architecture
    - FRC B2M-B2B System Specifications
    - CSV Data Format Specification

Further detailed documents are provided for assistance and clarification in the Information Pack as follows:

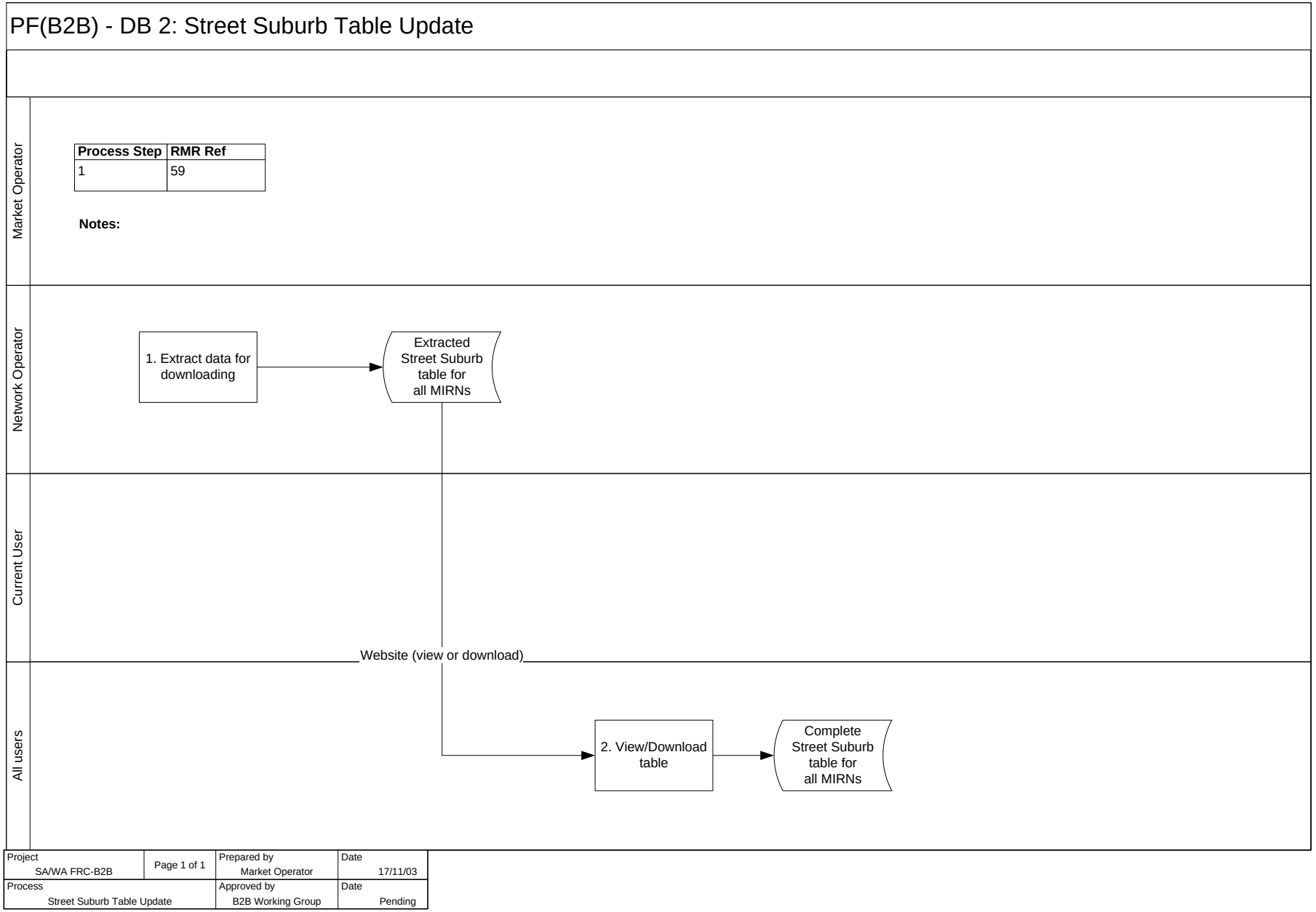
- Business Specification
- Consolidated Transaction List
- B2M Process Flow and Sequence Diagrams
- Glossary of Terms

Databases

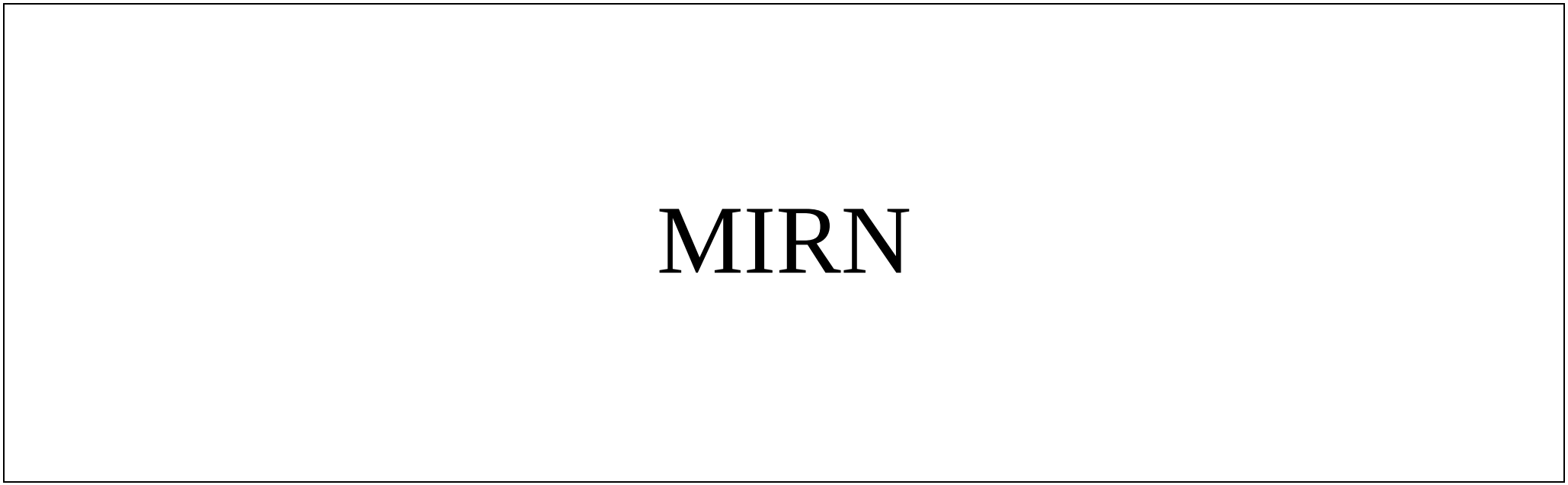
Process Flow: DB1: Requested DB updates



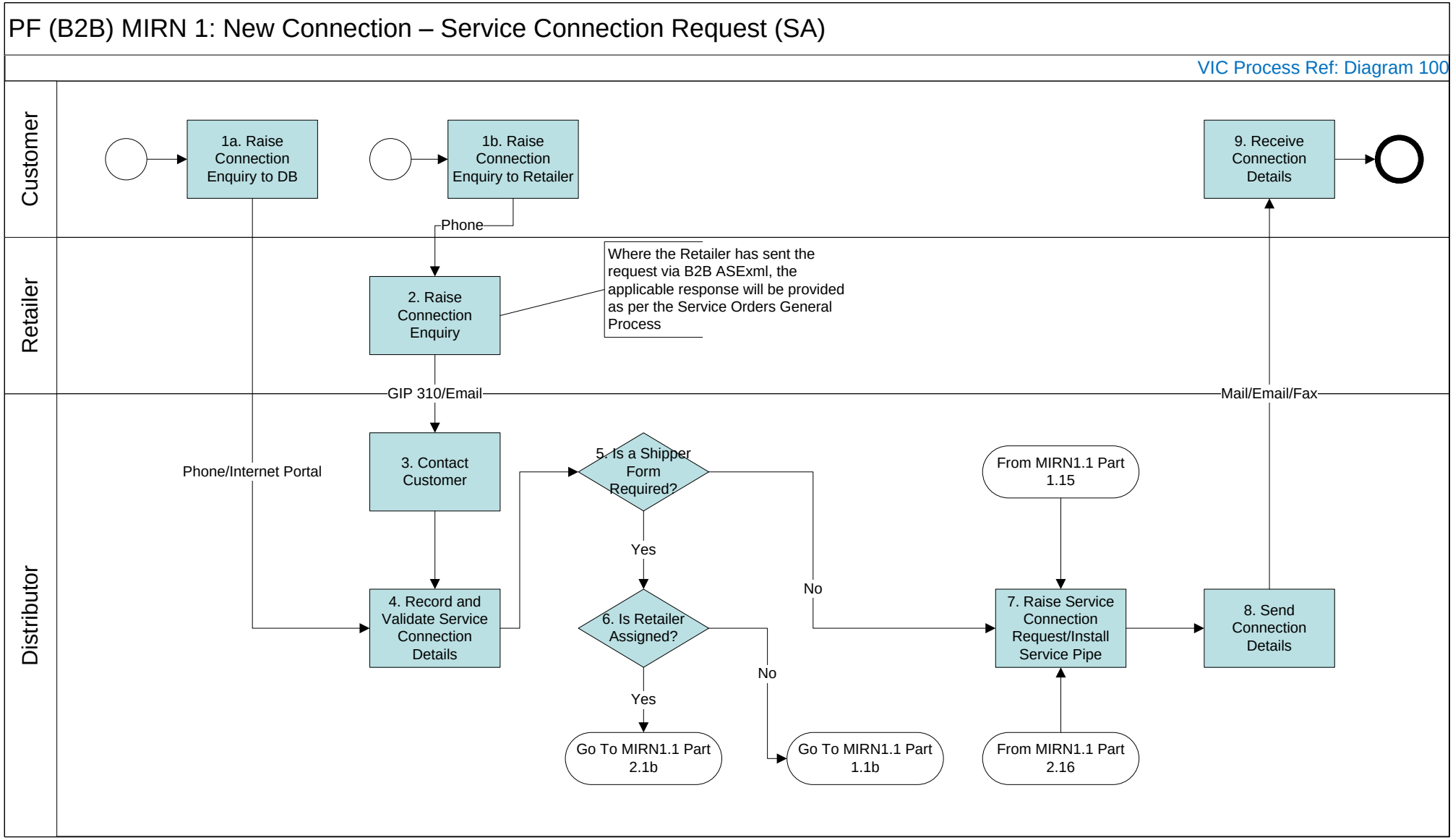
Process Flow: DB2: Street Suburb Table Update



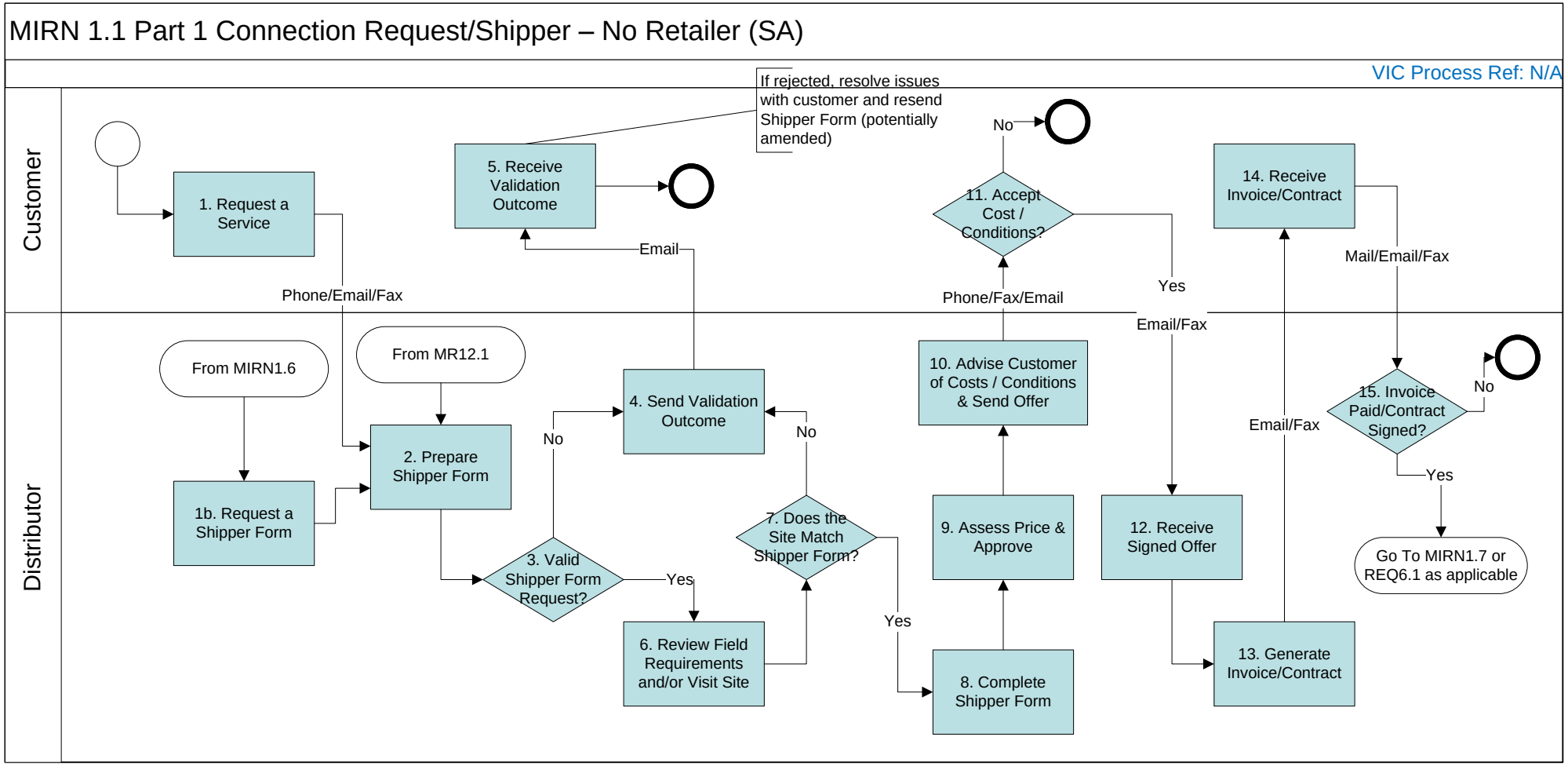
3. MIRN



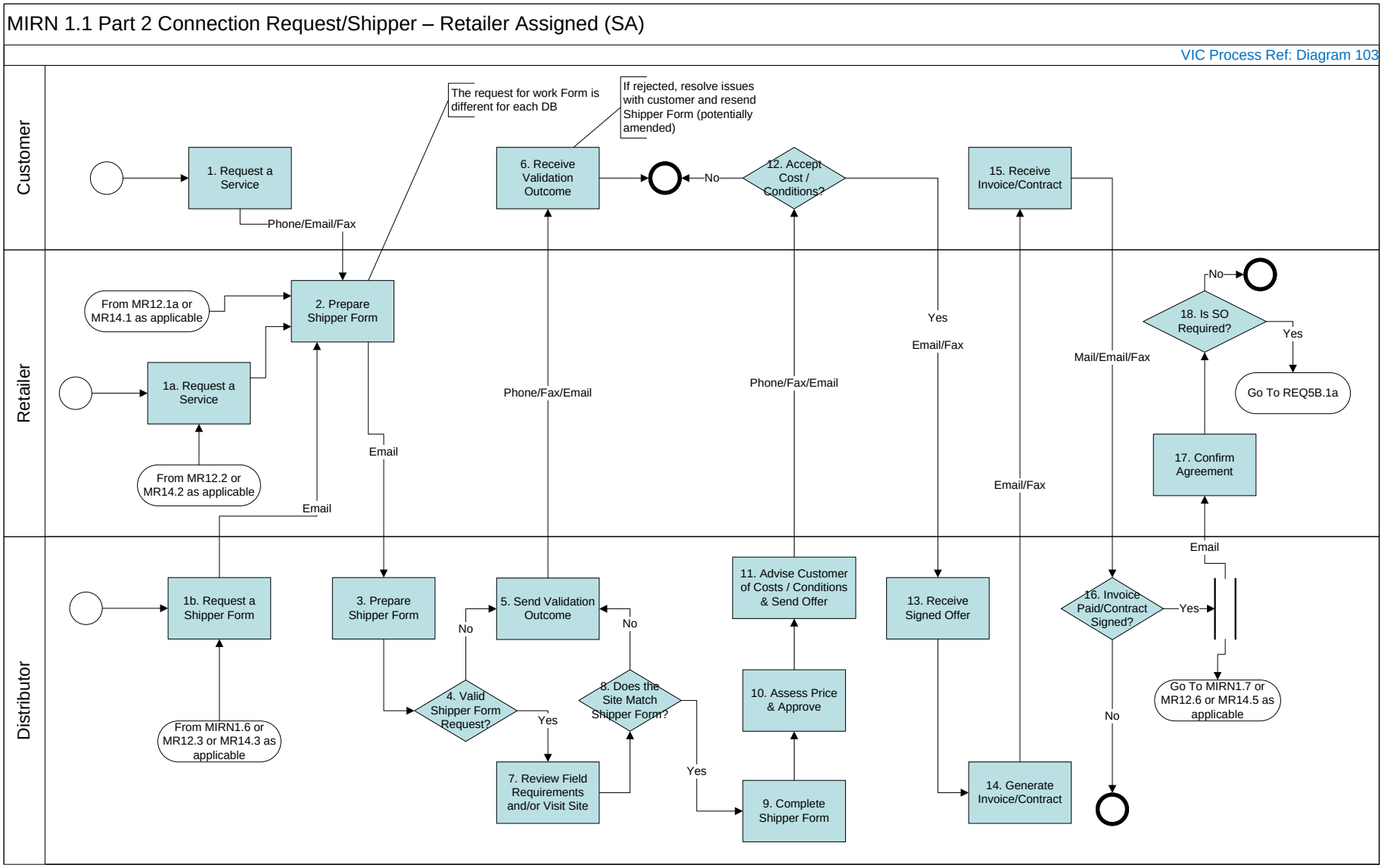
Process Flow: MIRN1: New Connection - Service Connection (SA)



Process Flow: MIRN1.1: Connection Request/Shipper – No Retailer (SA - Part 1)



Process Flow: MIRN1.1: Connection Request/Shipper – Retailer Assigned (SA - Part 2)

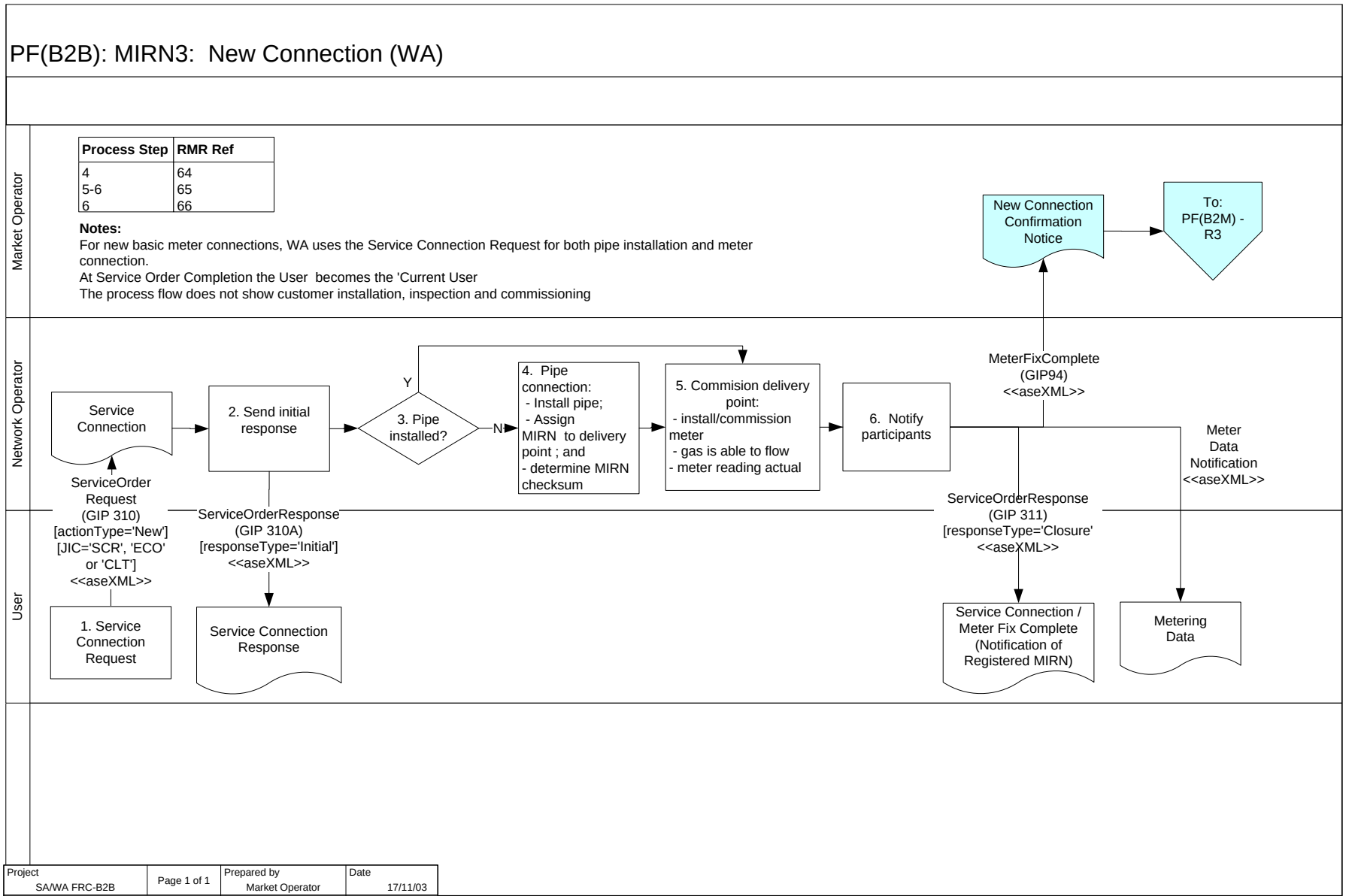


Notes: Service Order Enquiry Code
MAP, MFX, MRT, RSR, SCR, UMS, USR

PF(B2B): MIRN3: New Connection (WA)

Process Step	RMR Ref
4	64
5-6	65
6	66

Notes:
For new basic meter connections, WA uses the Service Connection Request for both pipe installation and meter connection.
At Service Order Completion the User becomes the 'Current User
The process flow does not show customer installation, inspection and commissioning



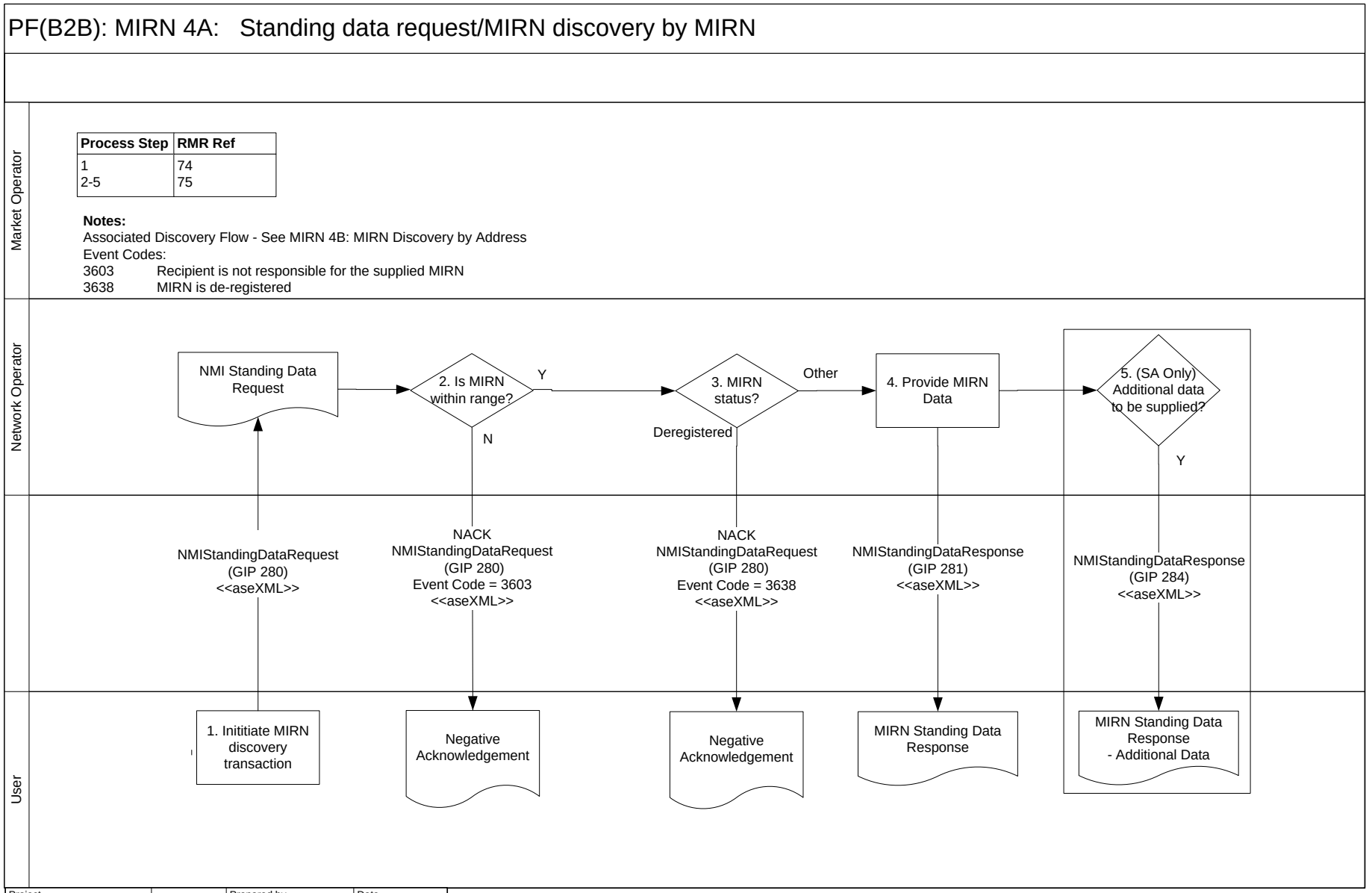
Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
New Connection (WA)		B2B Working Group	Pending

Process Flow: MIRN 4A: Standing data request/MIRN discovery by MIRN

PF(B2B): MIRN 4A: Standing data request/MIRN discovery by MIRN

Process Step	RMR Ref
1	74
2-5	75

Notes:
Associated Discovery Flow - See MIRN 4B: MIRN Discovery by Address
Event Codes:
3603 Recipient is not responsible for the supplied MIRN
3638 MIRN is de-registered



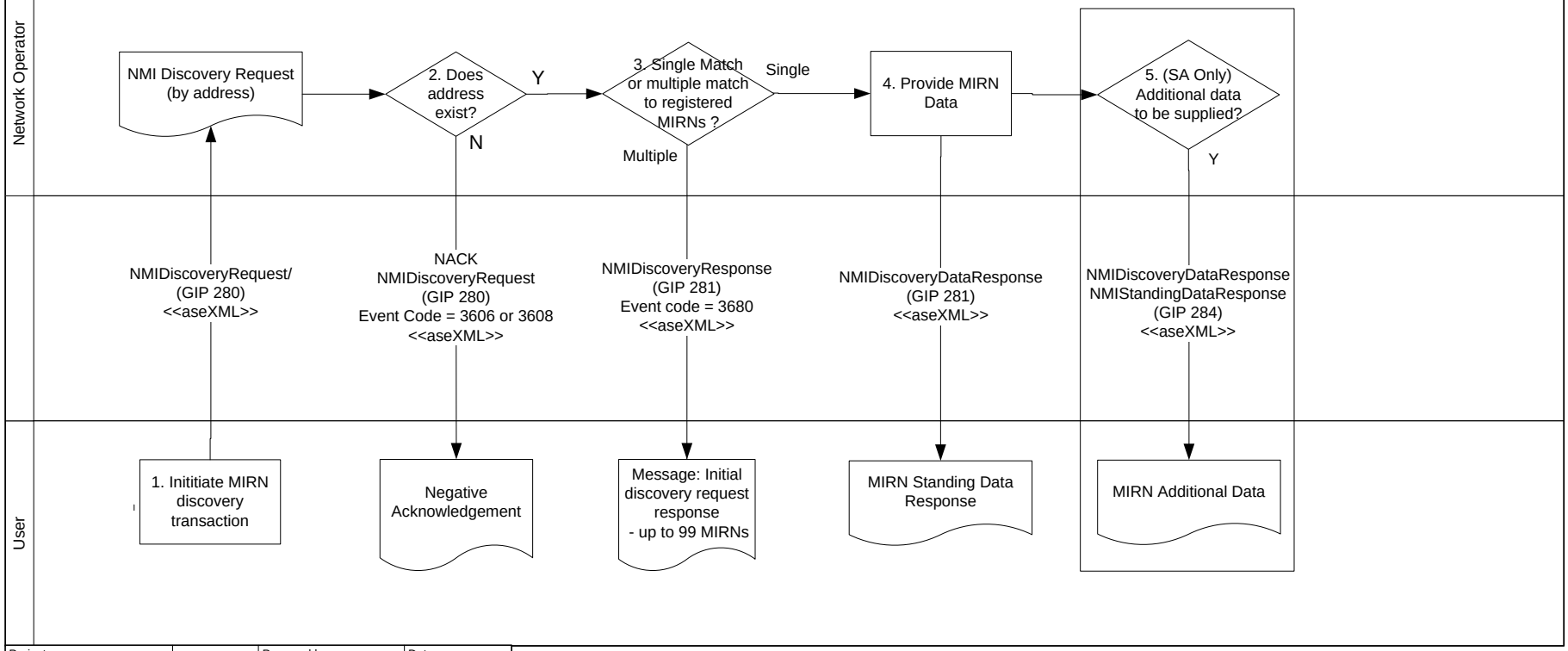
Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process: Standing data request/MIRN discovery by MIRN		Approved by: B2B Working Group	Date: Pending

Process Flow: MIRN 4B: MIRN Discovery by Address

PF(B2B): MIRN 4B: MIRN Discovery by Address

Notes:
The Rules (R75-77) state that the response to a Discovery request should be immediate unless lodged on a non business day when the reply must be as if lodged on the next business day.
Associated Discovery Flow - See MIRN 4A: Standing Data Requesyt/MIRN Discovery by MIRN
Event Codes:
3606 Address not found
3608 Address outside DB area
Note re multiple returns: If 99 MIRNs are returned for one address it should be assumed that more than 99 may exist

Process Step	RMR Ref
1	74
2-4	75



Project	Page 1 of 1	Prepared by	Date
B2B Specification Pack		Market Operator	17/1/03
Process		Approved by	Date
MIRN Discovery by Address		B2B working group	Pending

4. Meter Read

Meter Read

Process Flow: MR1: Meter Reads - Failure of a complete route

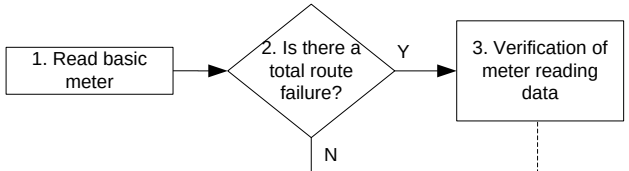
PF(B2B) - MR1: Meter Reads - Failure of a complete route

Market Operator

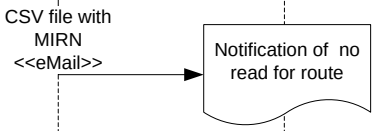
Process Step	RMR Ref
2-3	158(3)

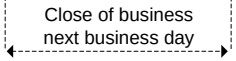
Notes:

Network Operator



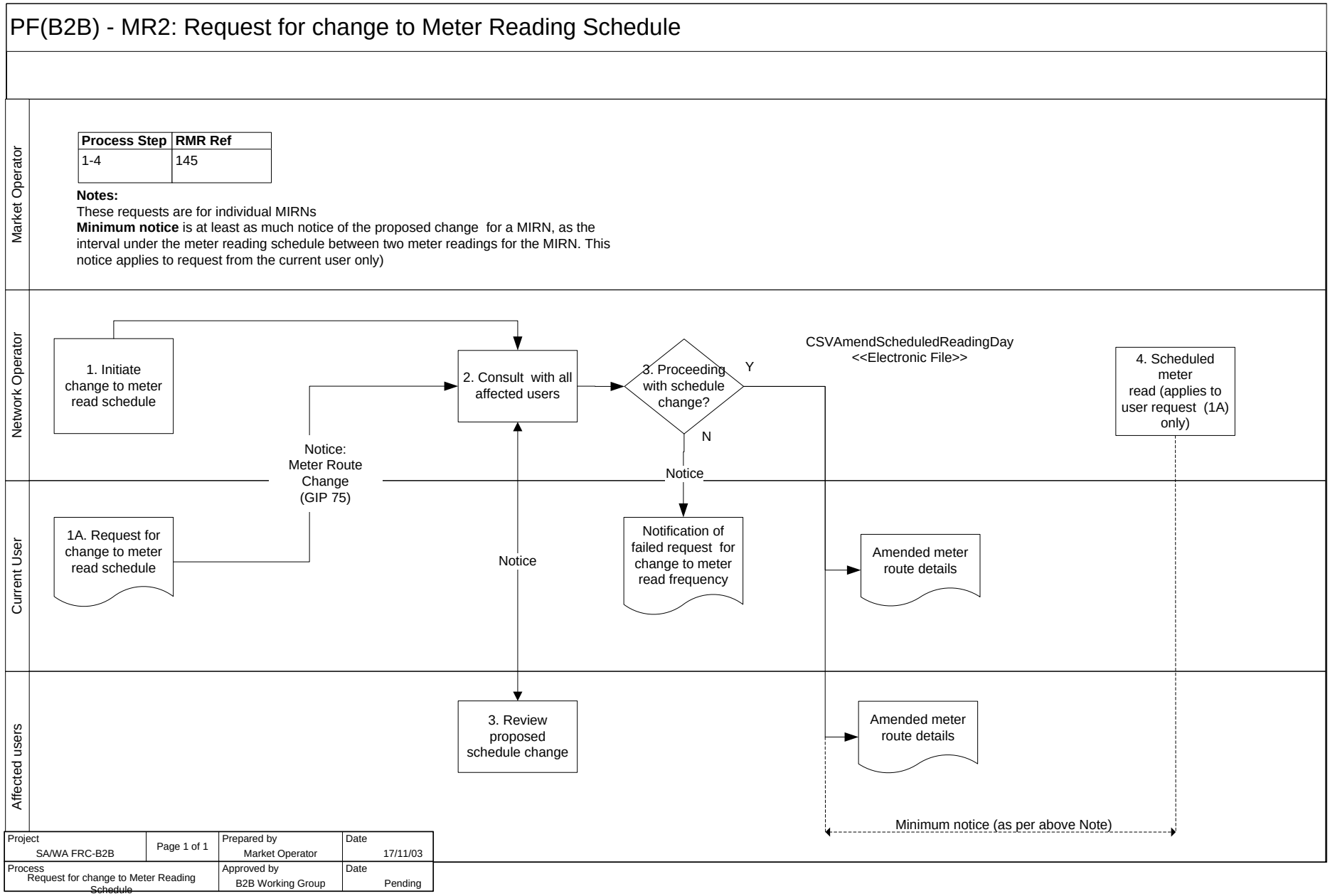
Other affected users





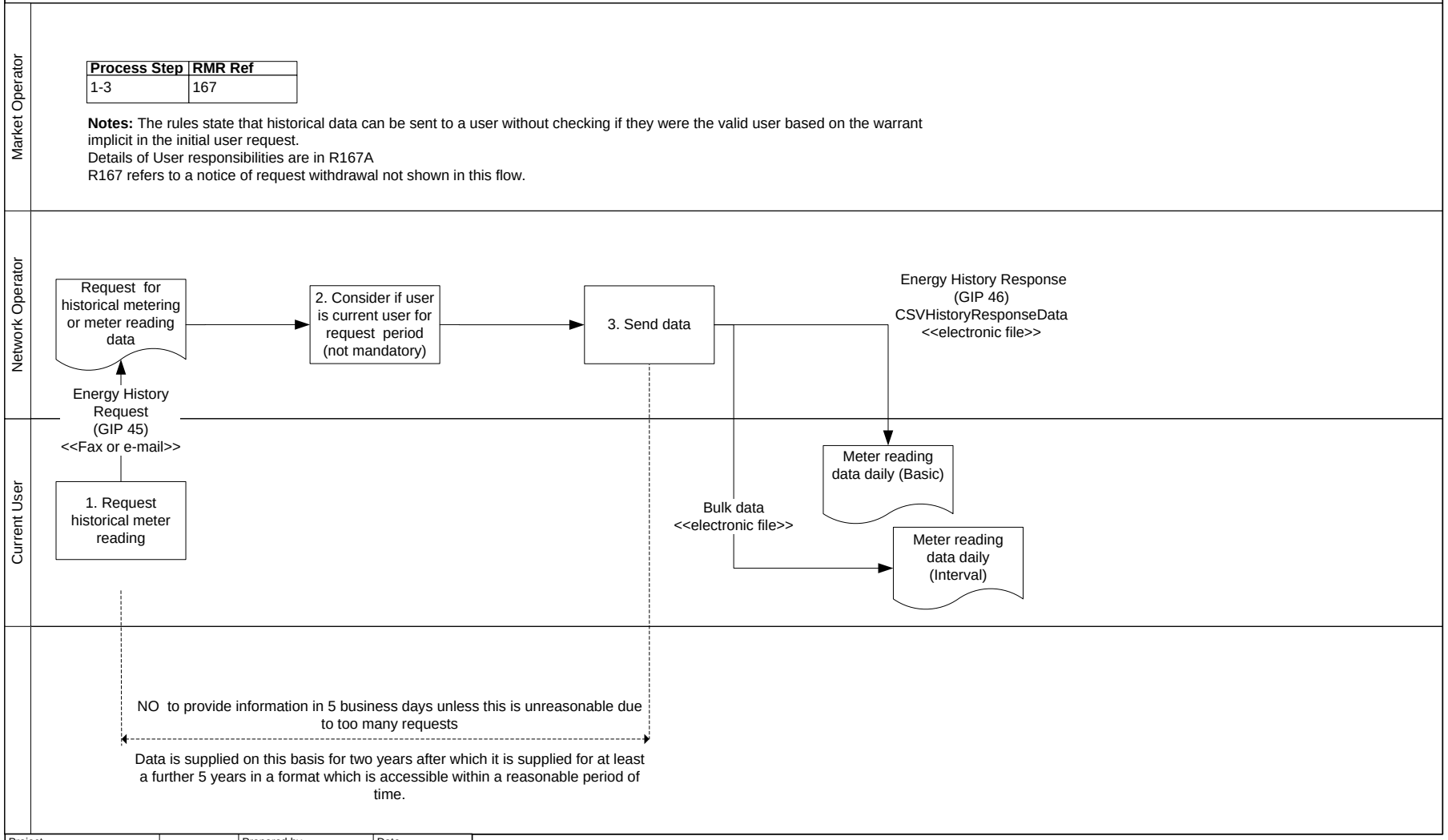
Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
Meter Reads - Failure of a complete route		B2B Working Group	Pending

Process Flow: MR2: Request for change to Meter Reading Schedule



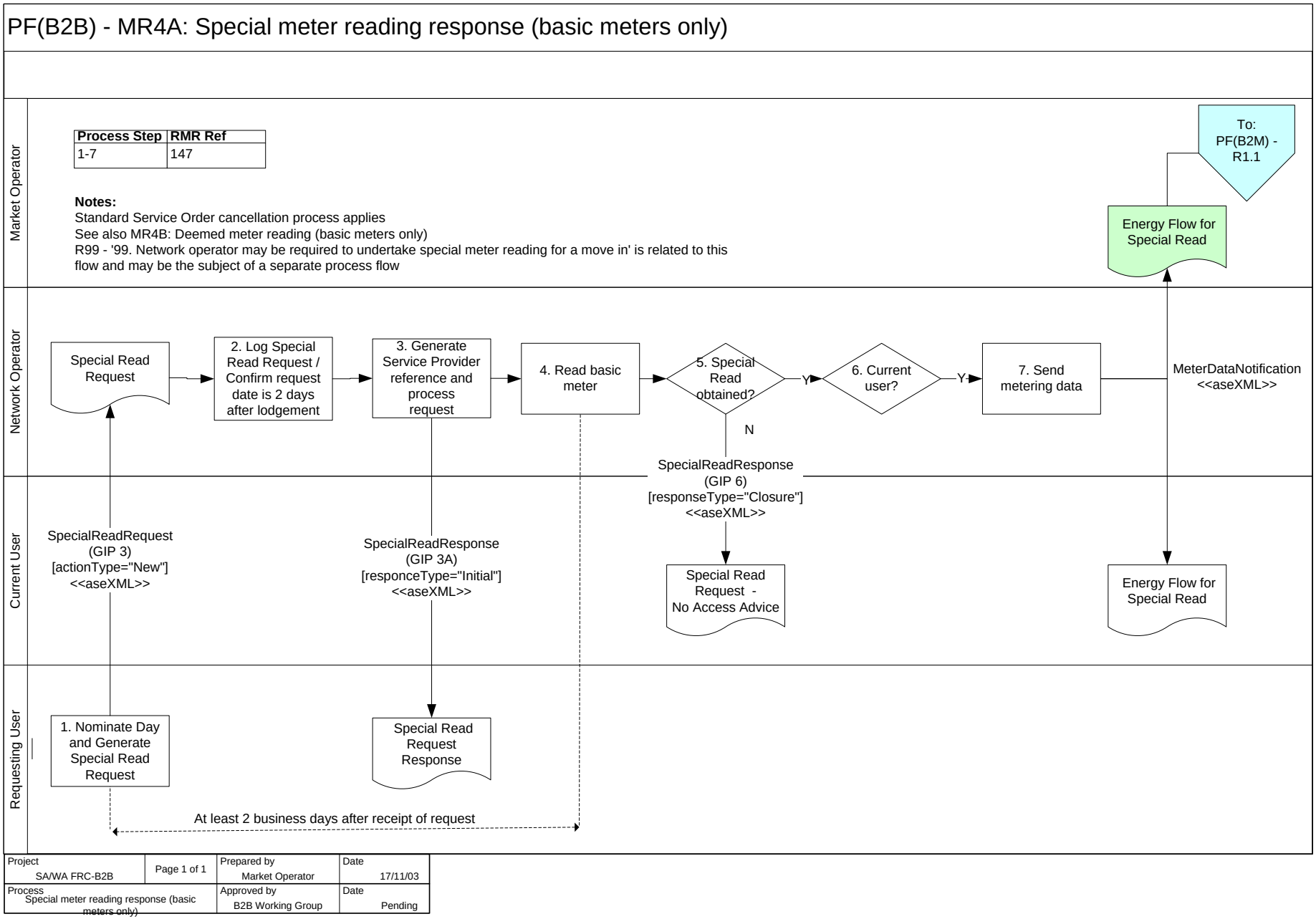
Process Flow: MR3: Request for historical data

PF(B2B) - MR3: Request for historical data

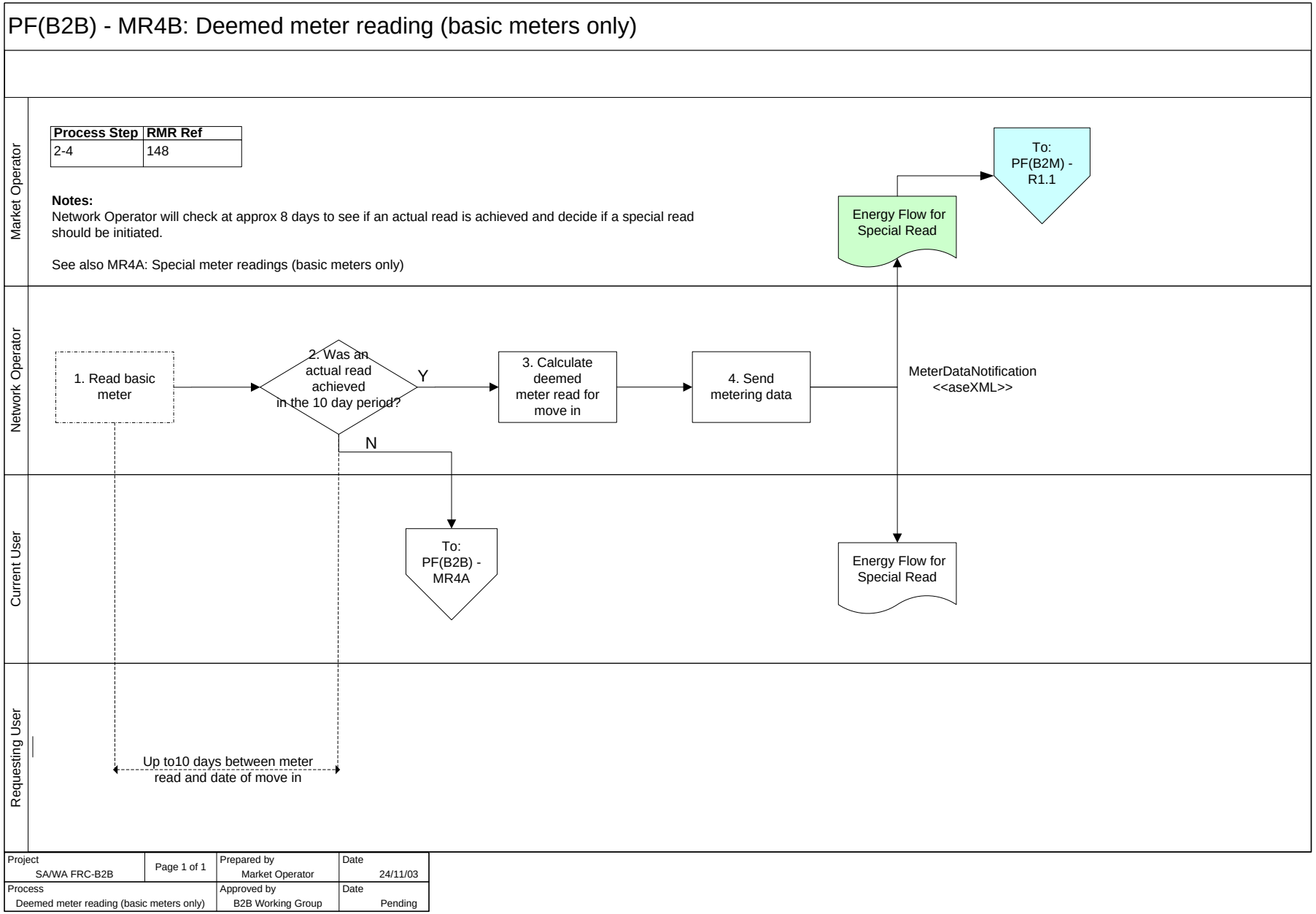


Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
Request for historical data		B2B Working Group	Pending

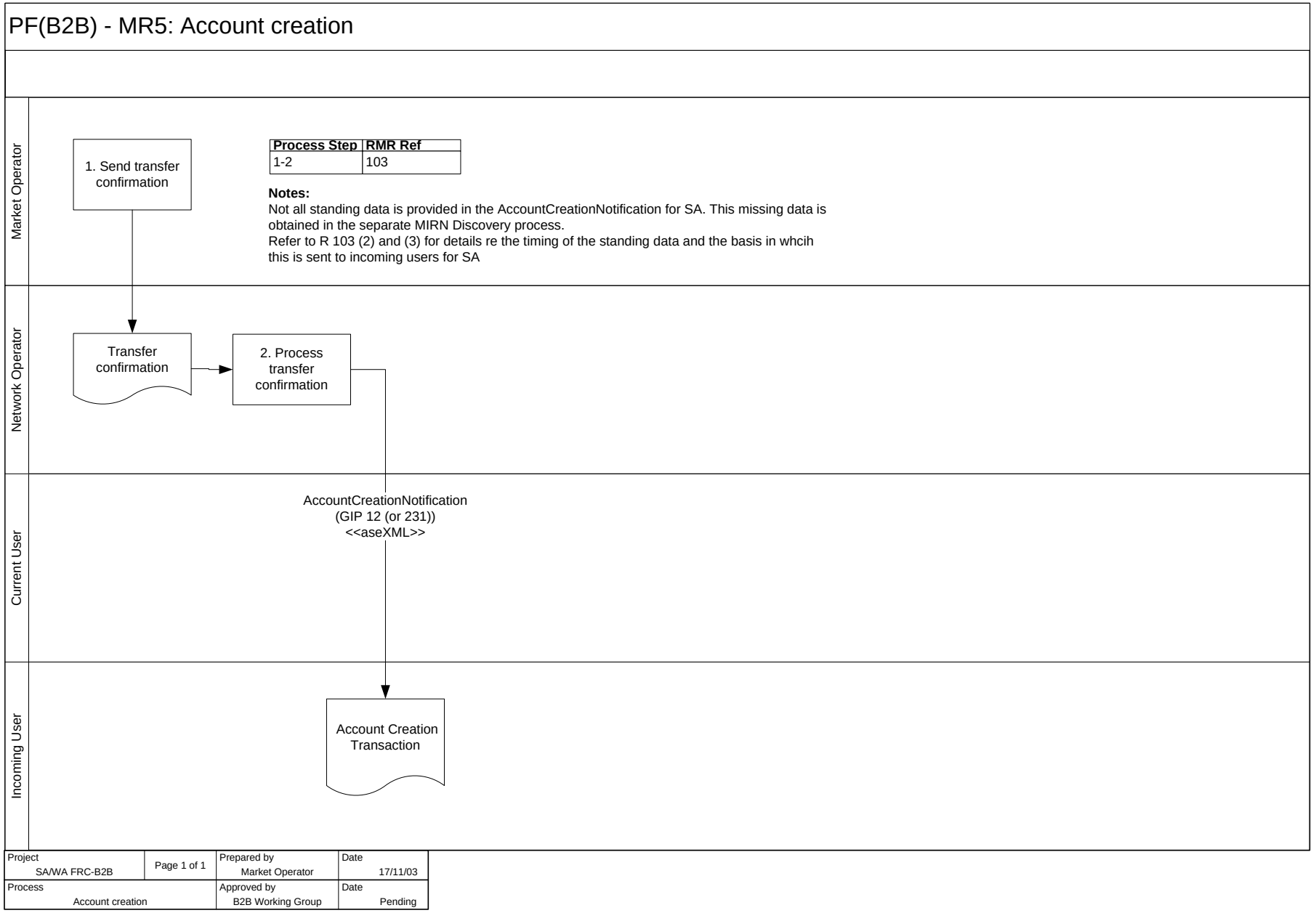
Process Flow: MR4A: Special meter reading response (basic meters only)



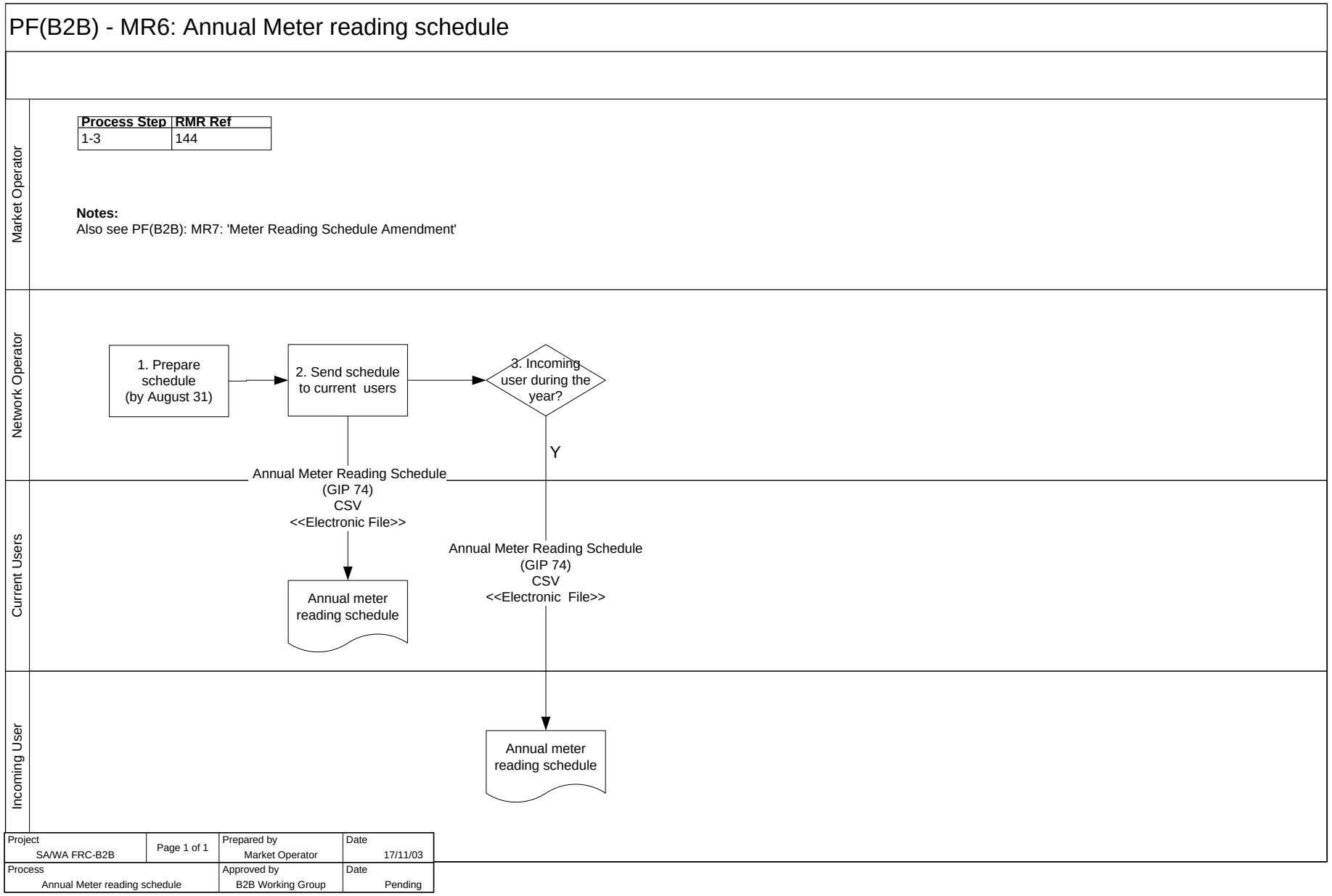
Process Flow: MR4B: Deemed meter reading (basic meters only)



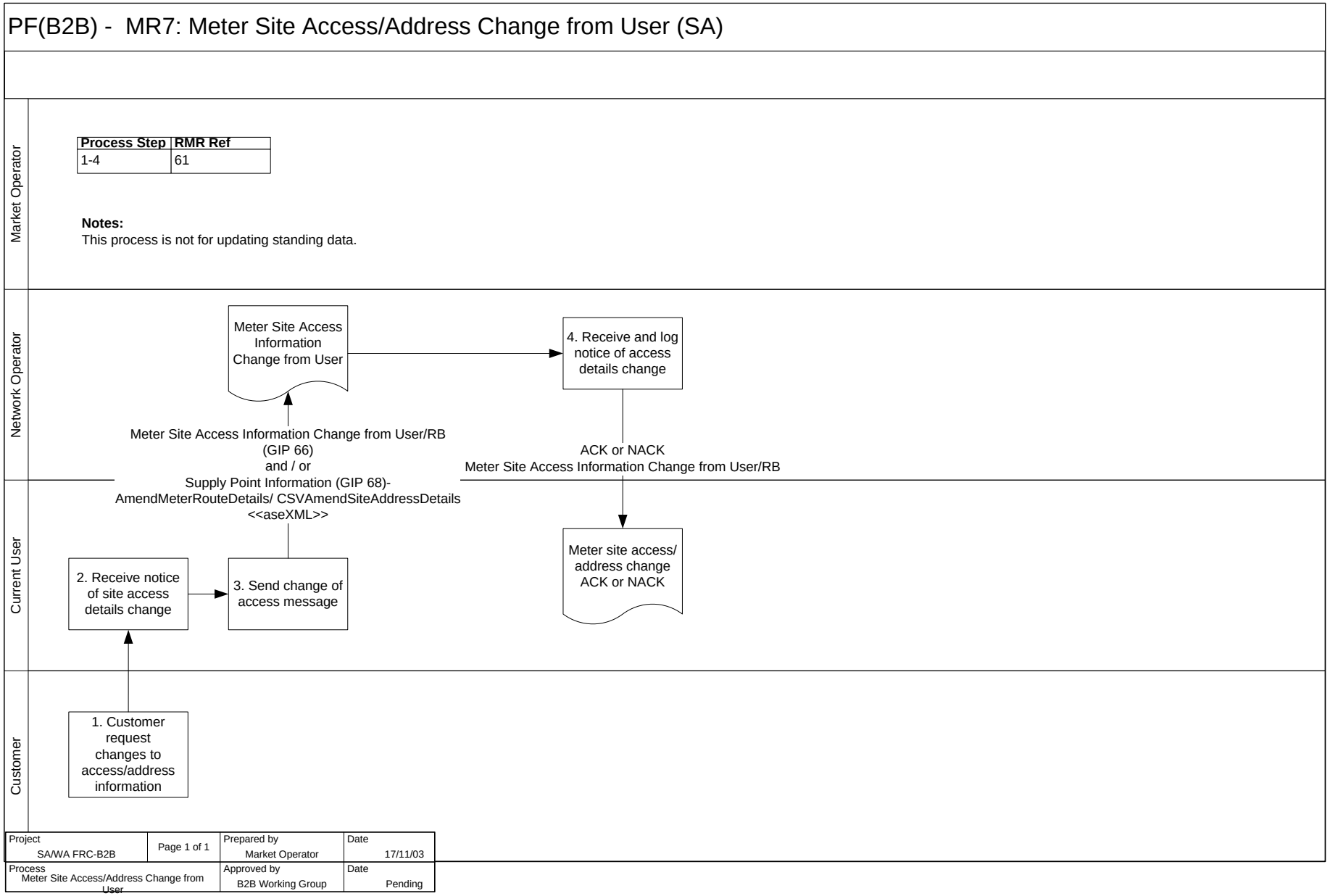
Process Flow: MR5: Account creation



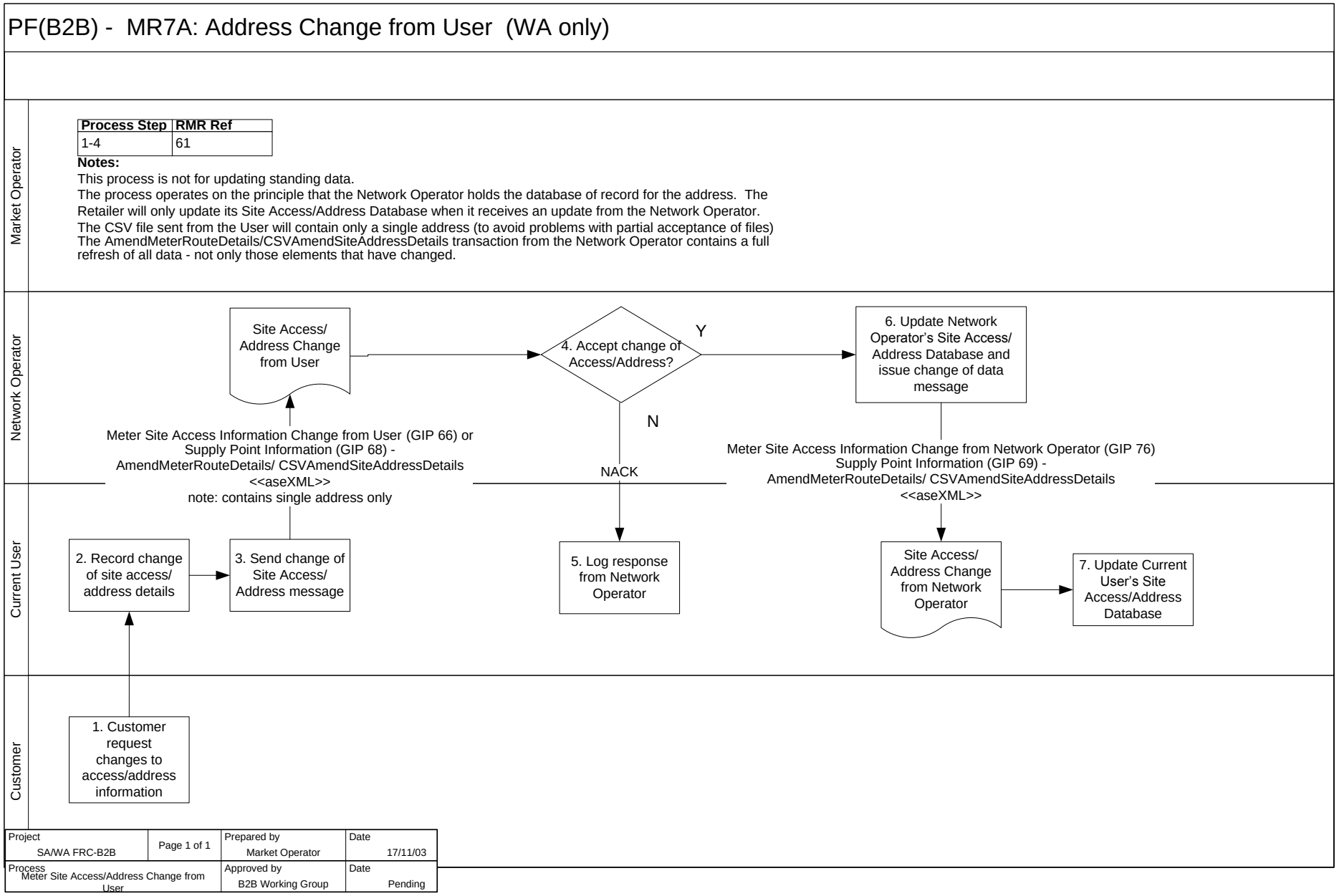
Process Flow: MR6: Annual Meter reading schedule



Process Flow: MR7: Meter Site Access/Address Change from User (SA)



Process Flow: MR7A: Address Change from User (WA)



Process Flow: MR8: Meter Site Access Change from NO

PF(B2B) - MR8: Meter Site Access Change from NO

Market Operator

Process Step	RMR Ref
1-2	61
1-2	62

Notes:
This process is not for updating standing data.

Network Operator

1. Determine site access details have changed

2. Send change of access message

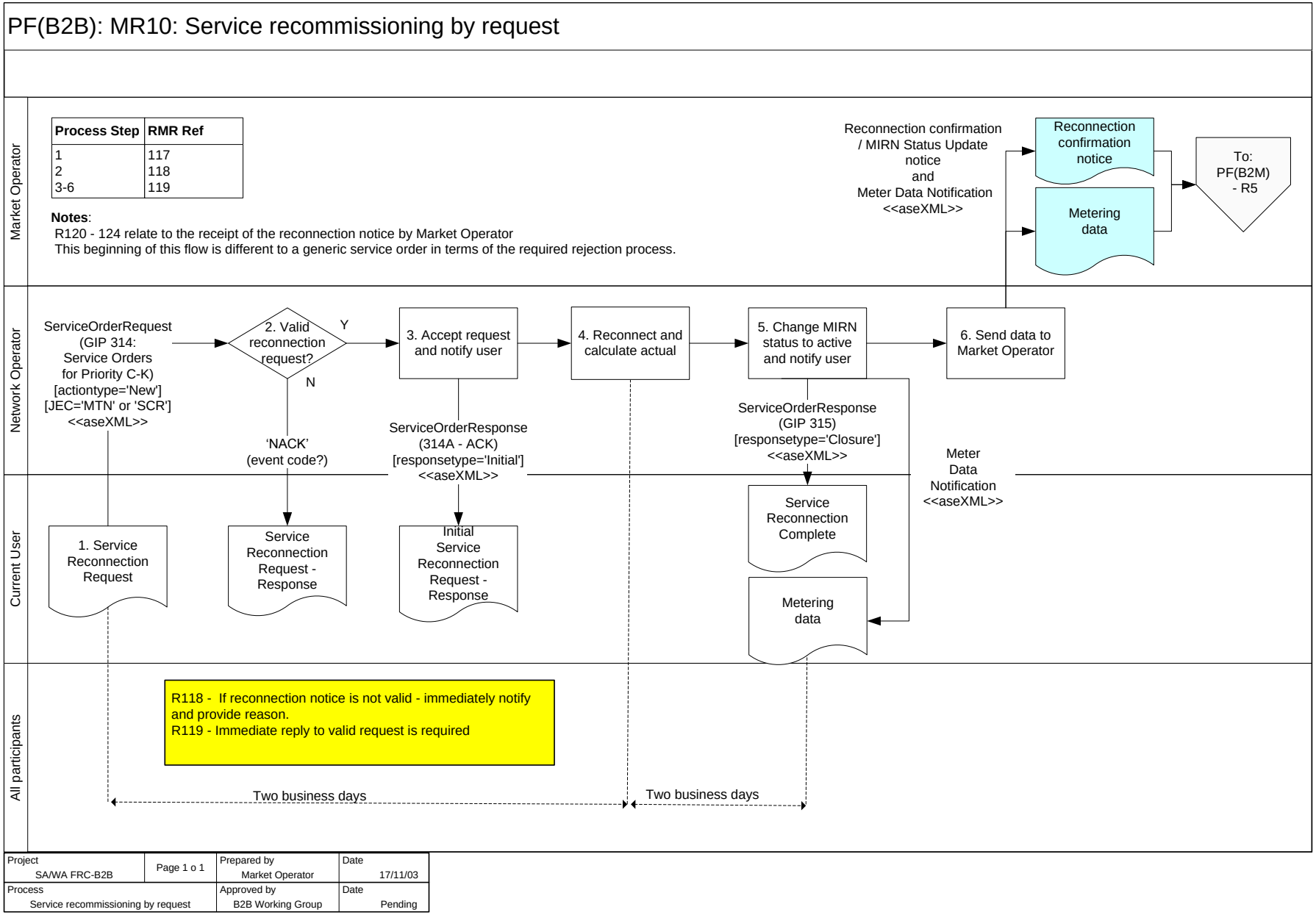
Meter Site Access Information Change from NO/DB (GIP 67)
and/or
Address Information Change from NO/DB (GIP 69)
AmendMeterRouteDetails/ CSVAmendSiteAddressDetails
<<aseXML>>

Current User

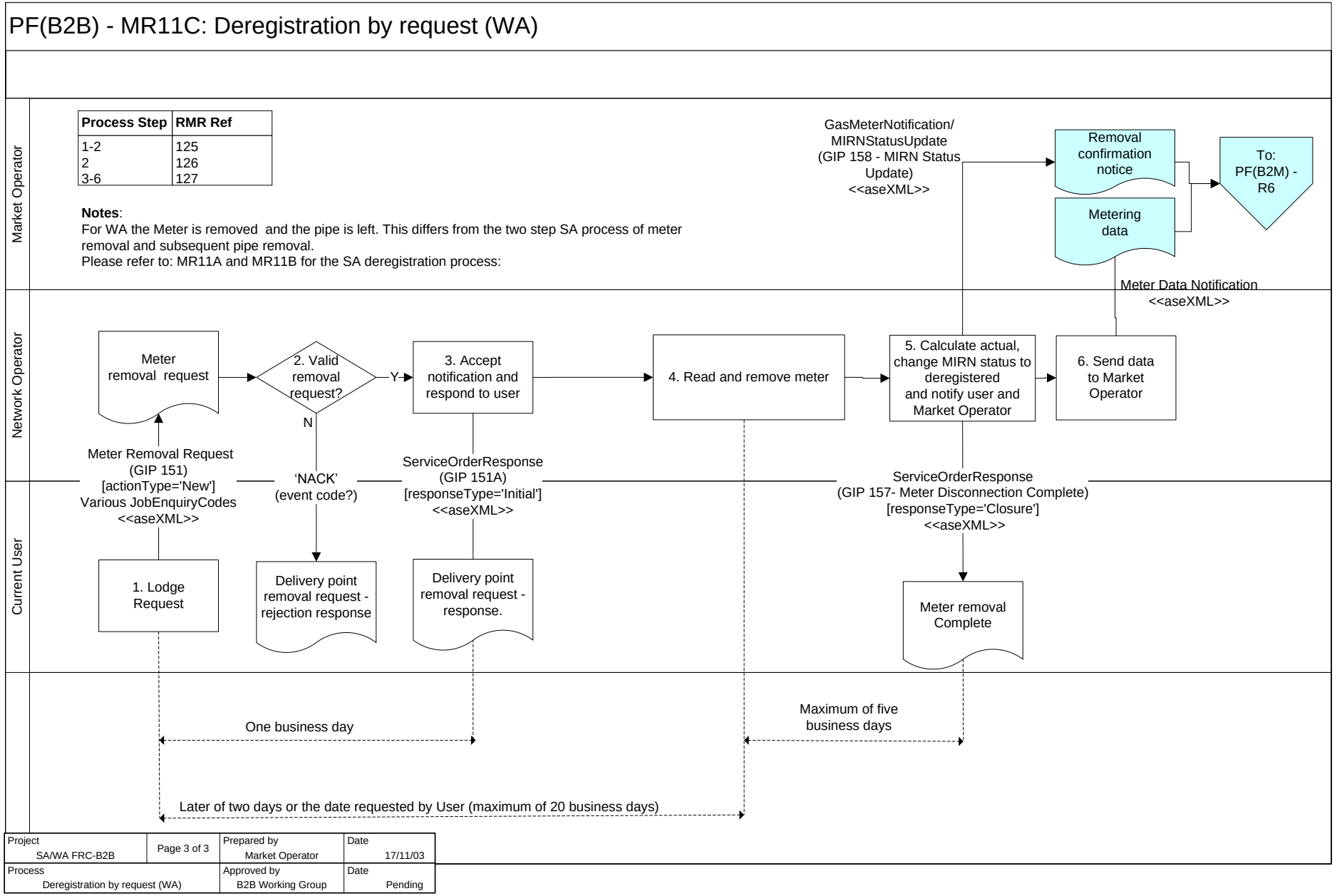
Meter Site Access Information Change from NO

Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
Meter Site Access Change from NO		B2B Working Group	Pending

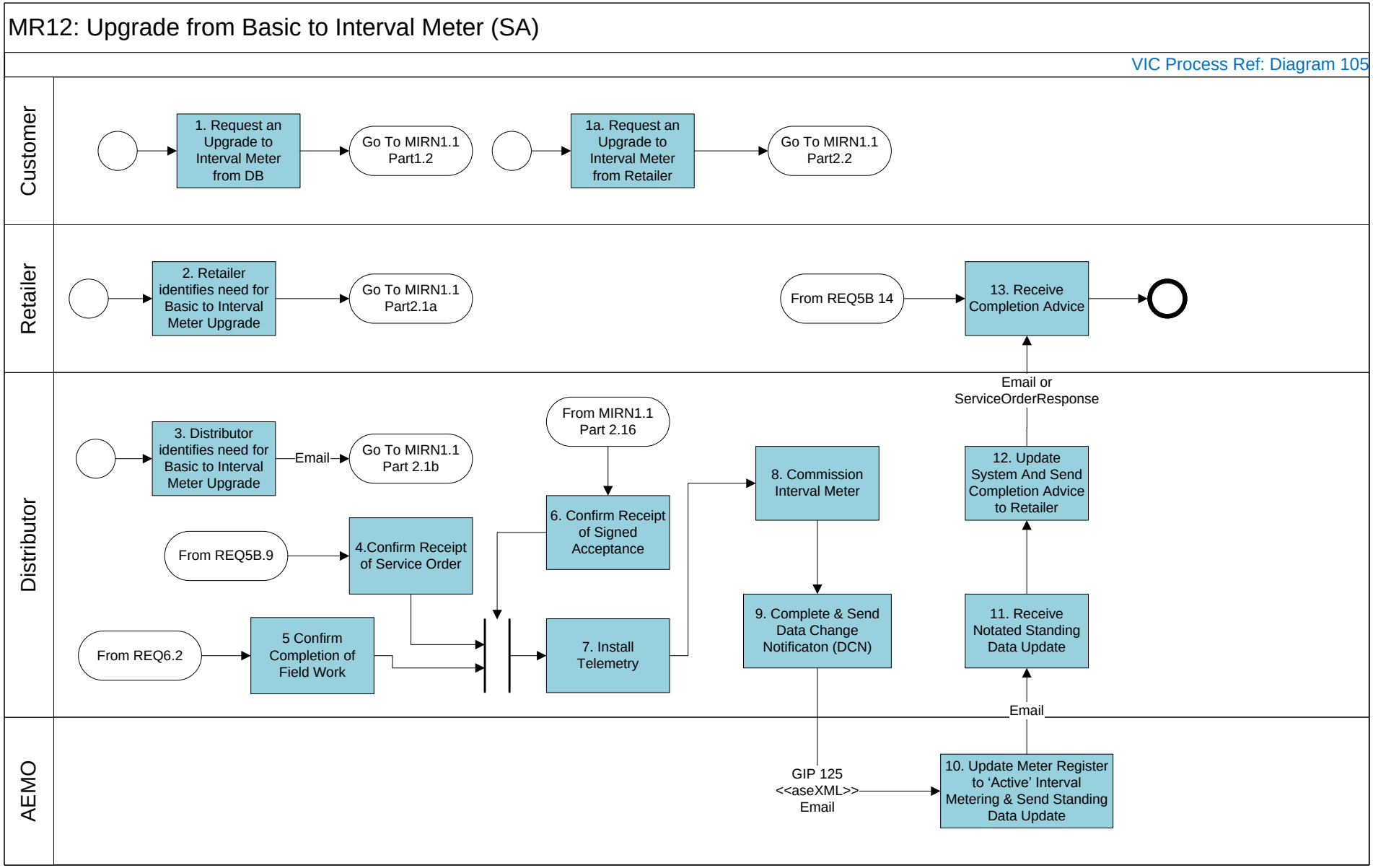
Process Flow: MR10: Service recommissioning by request (WA)



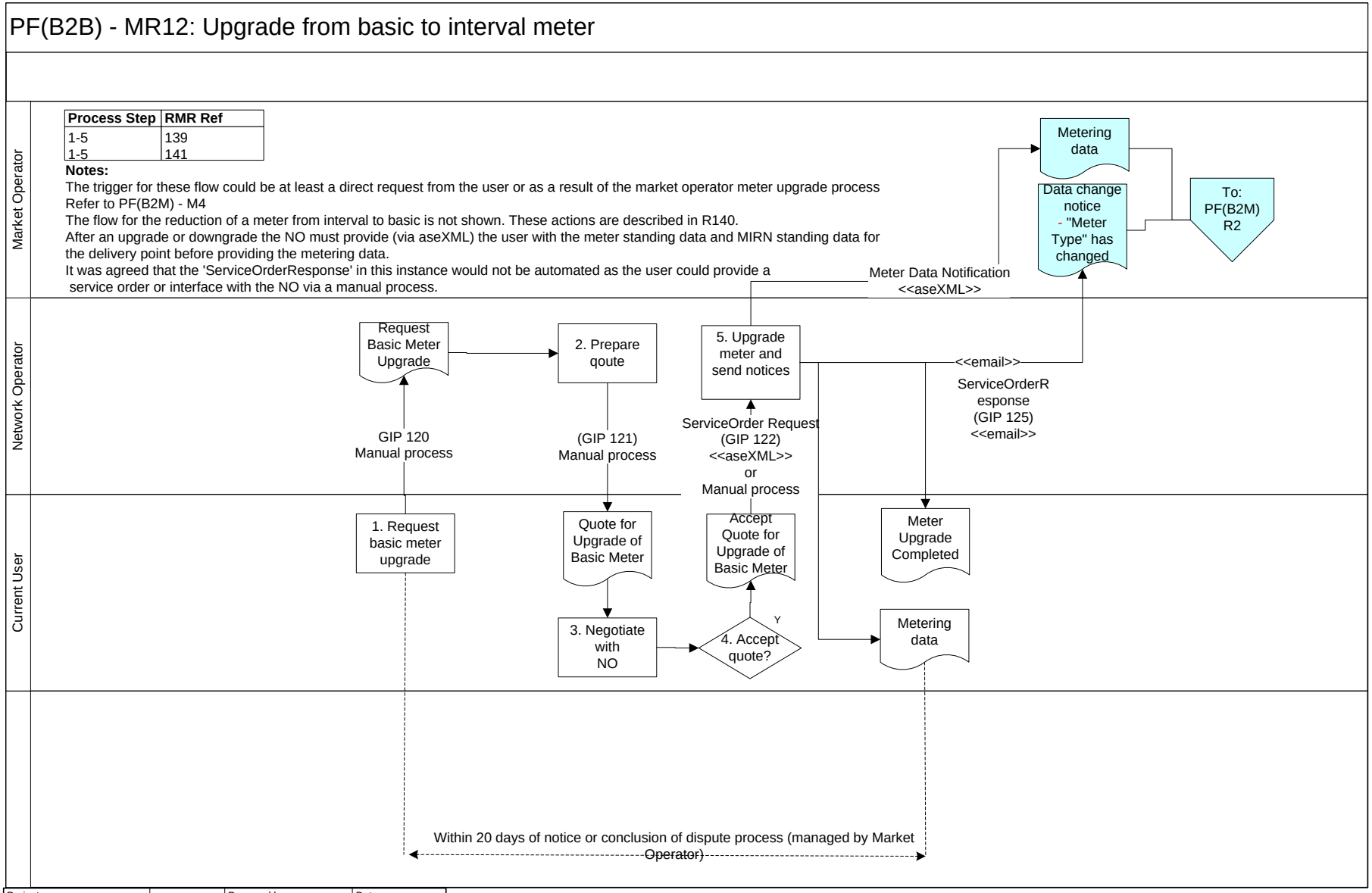
Process Flow: MR11C: Deregistration by request (WA)



Process Flow: MR12: Upgrade from basic to interval meter (SA)



Process Flow: MR12: Upgrade from basic to interval meter (WA)



PF(B2B) - MR13: Generic Energy Flow

Market Operator

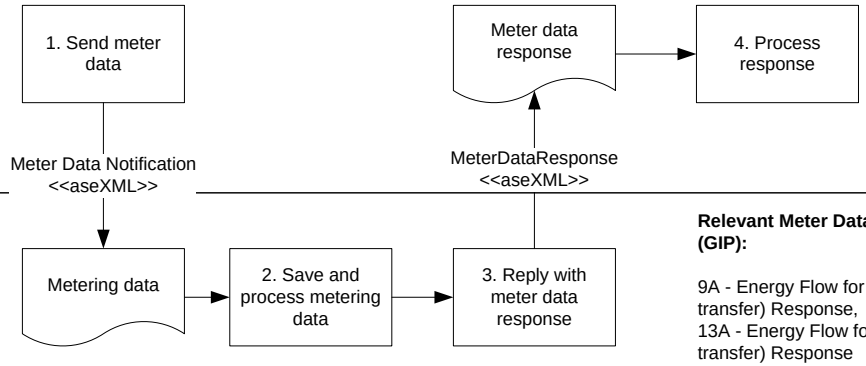
Process Step	RMR Ref
	NA

Other references:
As per the Interface Definitions Document:
- 4.1.2 Provision of Energy Flow Data
- Figure 4.1 Provision of Energy Flow Data Activity Diagram

Notes:
This generic flow applies where energy flow data is required to be sent from a Network Operator to the User.

Network Operator

The MeterDataResponse transaction will identify whether the processing was:
- Successful - all CSV records were successfully processed
- Partially successful - processing of some CSV records failed
- Failure - no processing of the CSV data was possible.



Relevant Meter Data Notification (GIP) transactions:

User

9 - Energy Flow for Special Read (Not customer transfer)
13 - Energy Flow for Special Read (Customer transfer)
17 - Energy Flow for Disconnection Read
41 - Energy Flow for Scheduled or Special Read
50 - Energy Flow for Missing Reads
51 - Energy Flow for Estimated Read
53 - Energy Flow for Substituted Read
246 - Energy Flow Adjustment for RB

Possible read reason codes provided with Meter Data Notification messages:

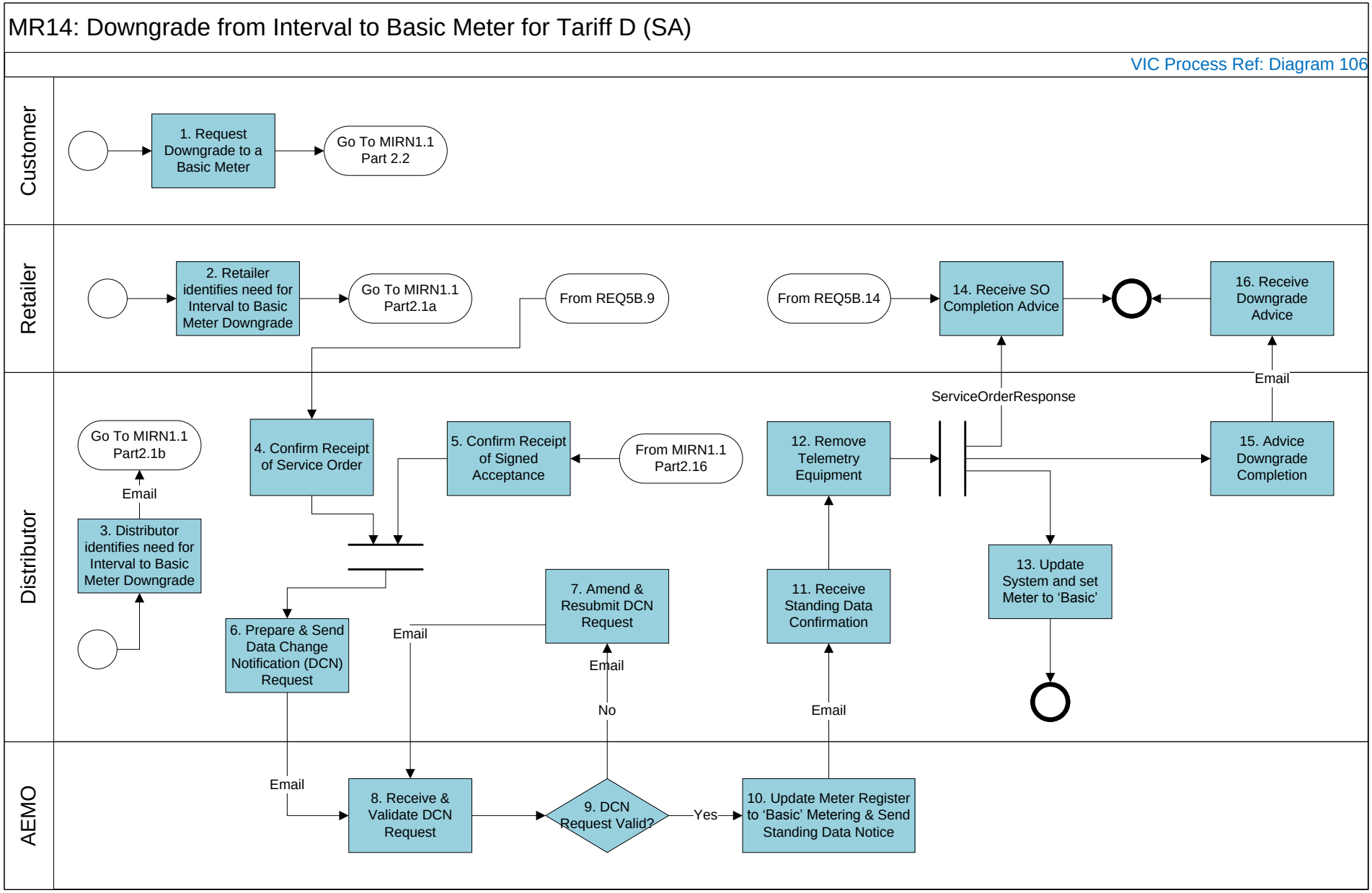
"SRF" = Special Final Read;
"SRR" = Special Reference Read;
"SRA" = Special Account Investigation;
"SRD" = Special Disconnection;
"SRT" = Special Transfer Read;
"SCH" = Schedule Cycle Read;
"INI" = Meter Installation Read;
"REM" = Meter Remove;
"OSO" = Other Service Order; and
"MDV" = Meter Data Verify (residual)

Relevant Meter Data Response transactions (GIP):

9A - Energy Flow for Special Read (Not customer transfer) Response,
13A - Energy Flow for Special Read (Customer transfer) Response
17A - Energy Flow for Disconnection Read Response
41A - Energy Flow for Scheduled or Special Read Response
50A - Energy Flow for Missing Reads Response
51A - Energy Flow for Estimated Read Response
53A - Energy Flow for Substituted Read Response
246A Energy Flow Adjustment for RB Response

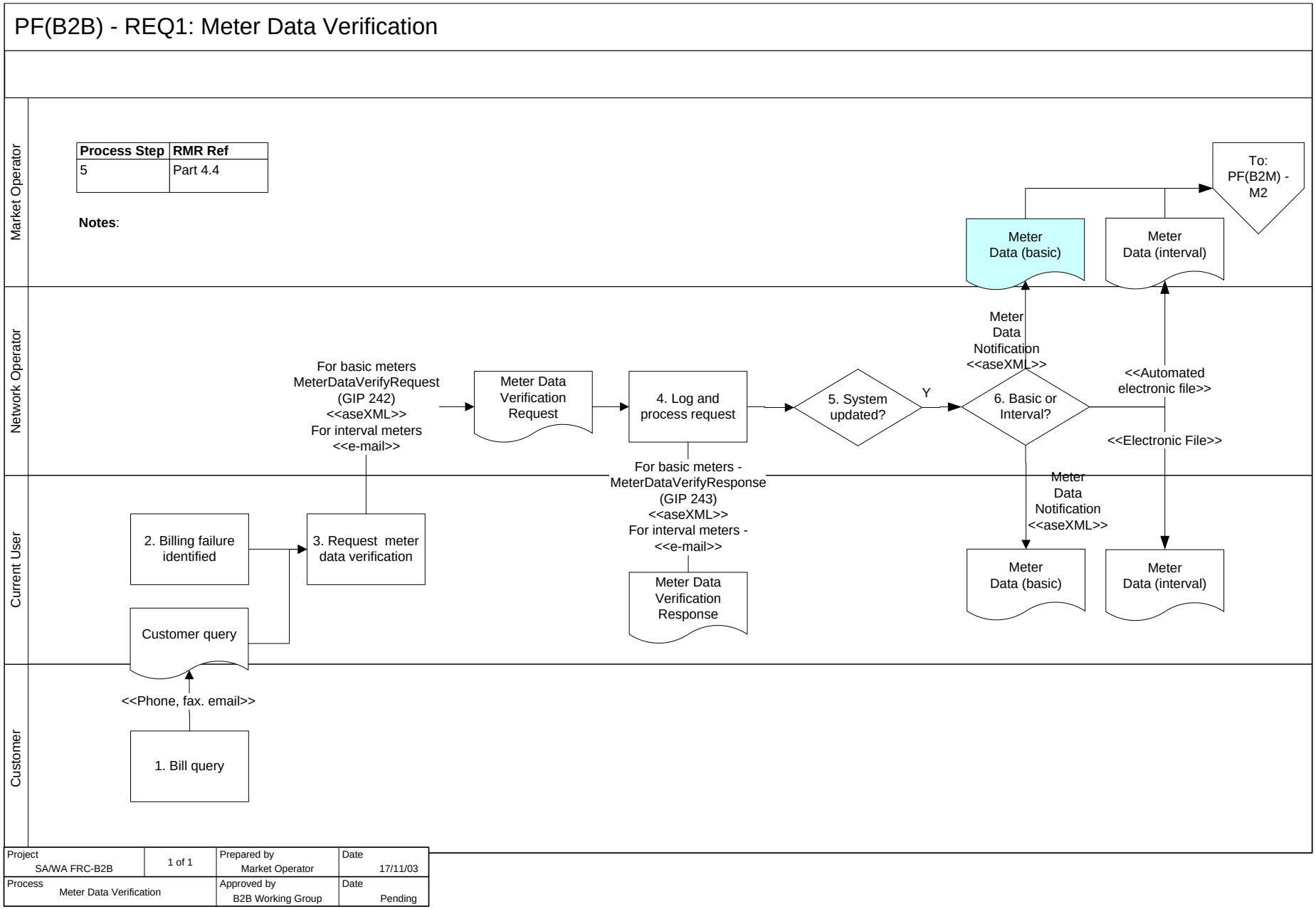
Project	Page 1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
Generic Energy Flow		B2B Working Group	Pending

Process Flow: MR14: Downgrade from Interval to Basic for Tariff D (SA)

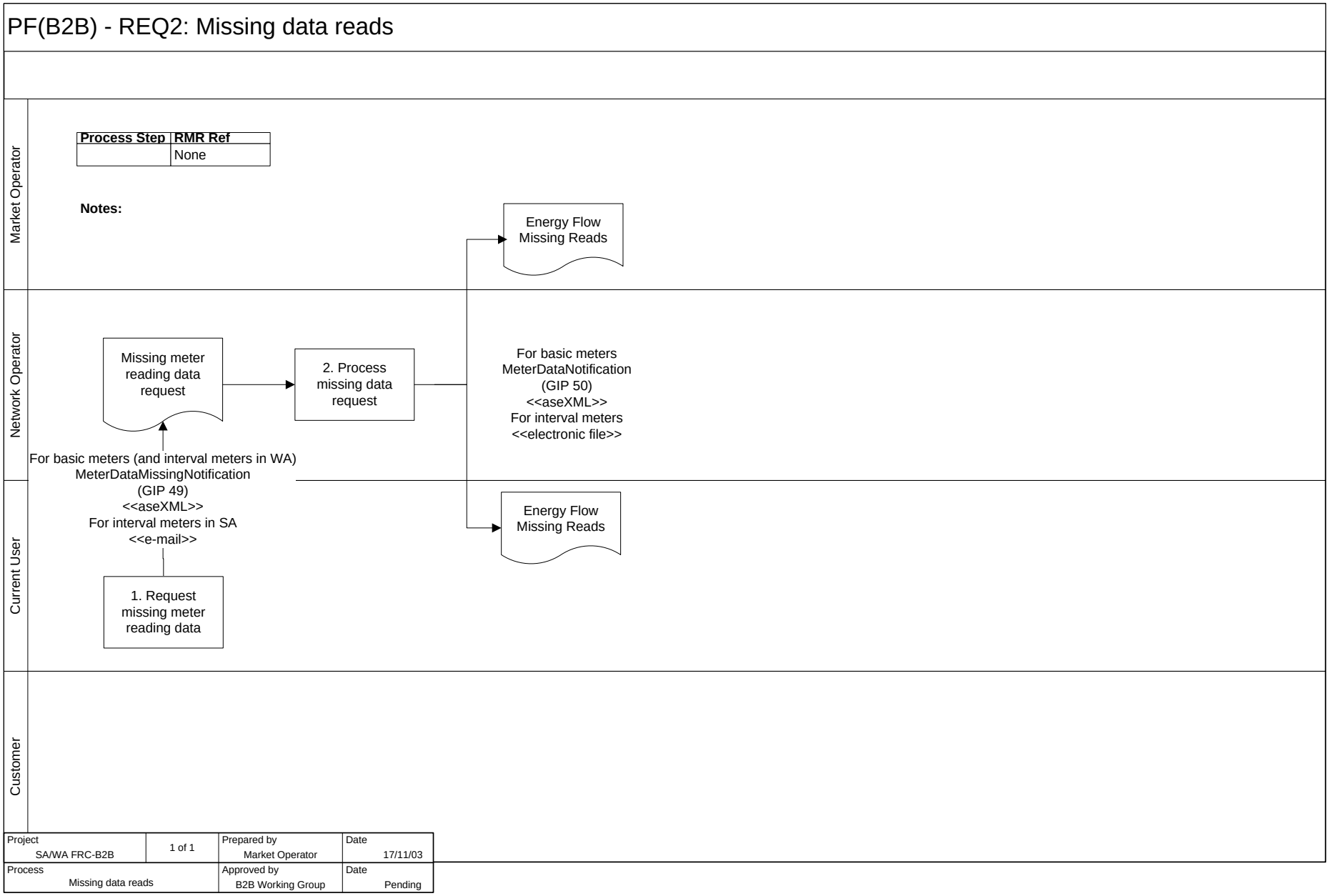


Requests and Service Orders

Process Flow: REQ1: Meter Data Verification



Process Flow: REQ2: Missing data reads



Process Flow: REQ3: Notification of Mains/Service

PF(B2B) - REQ3: Notification of Mains/Service

Market Operator

Process Step	RMR Ref
	None

Notes:
Associated process 'REQ4: Request - Notification of Data Change'

Network Operator

1. Generate notification

FieldWorkNotification/ CSVMainsServiceRenewal
(GIP 330)
<<email>>

Current User

Notification of mains/service renewal

Customer

Project		Prepared by	Date
SA/WA FRC-B2B	1 of 1	Market Operator	17/11/03
Process Notification of Mains/Service		Approved by B2B Working Group	Date Pending

Process Flow: REQ4: Notification of Data Change

PF(B2B) - REQ4: Notification of Data Change

Market Operator

Process Step	RMR Ref
1-2	62
2	27

Notes:
Associated process 'REQ3: Request - Notification of Mains/Service'

A data change notice may be required for Market Operator for a Gas Zone or Meter Type change or if the delivery point is no longer in the NO's GDS

Network Operator

1. Update MIRN/ MSD database

2. Generate notification for change to:
- Heating value zone, - transmission zone, or distribution tariff
(BL and HR for SAustralia)

Notice

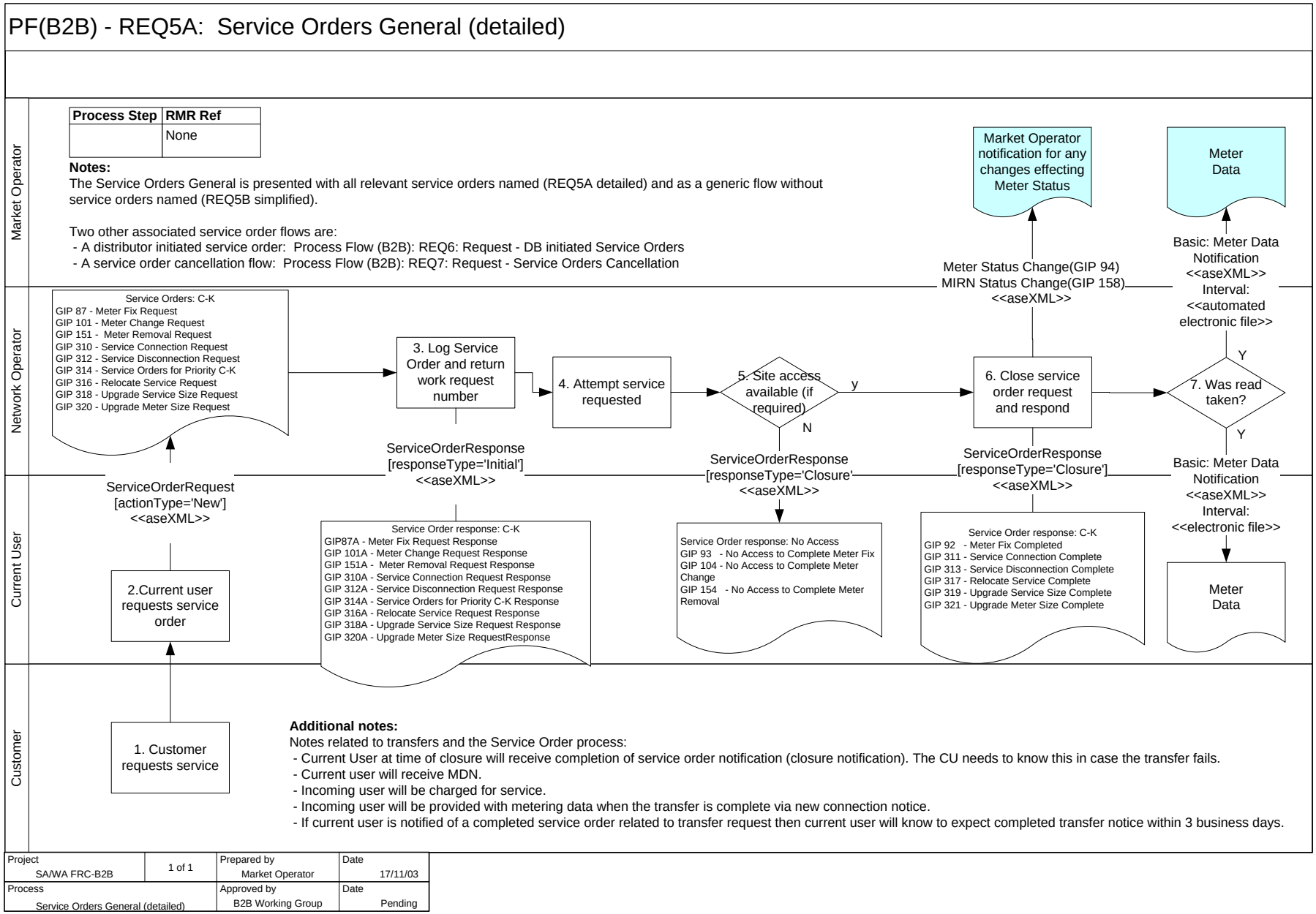
Current User

Standing Data Change from DB/ NO

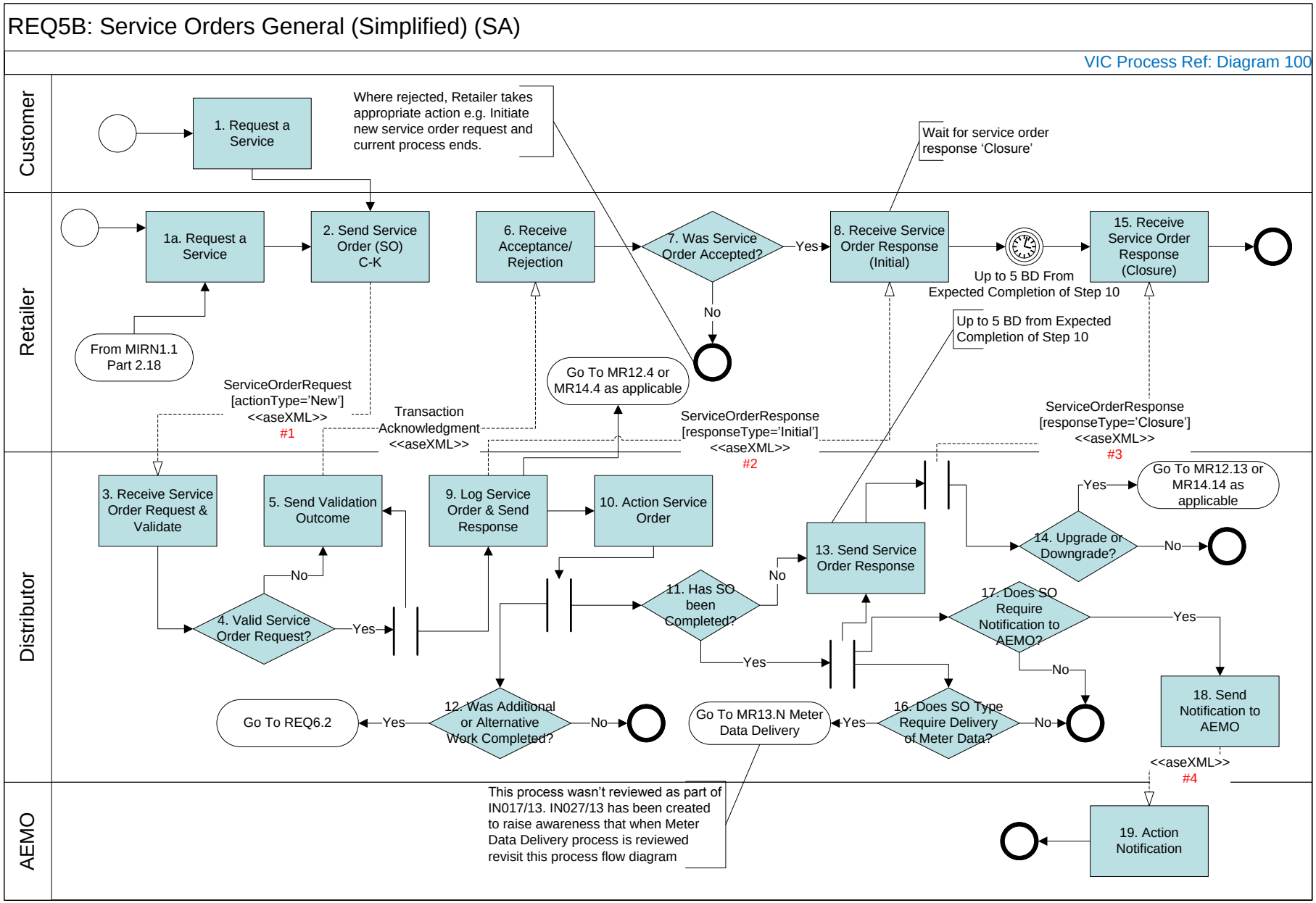
Customer

Project	1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process Notification of Data Change		Approved by B2B Working Group	Date Pending

Process Flow: REQ5A: Service Orders General (detailed) WA

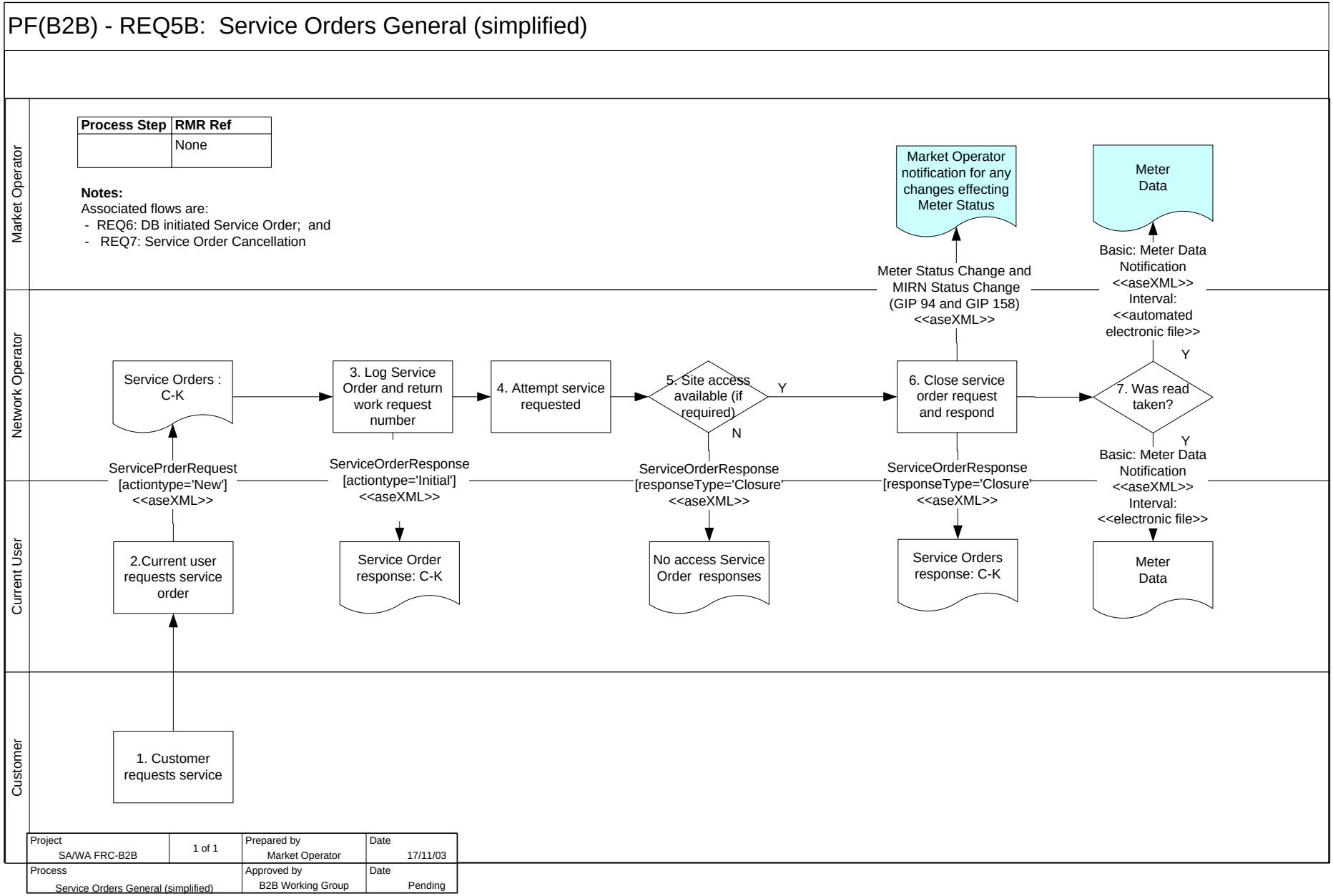


Process Flow: REQ5B: Service Orders General (SA - simplified)



#1, 2, 3 & 4 Refer to REQ5B Det for the transactions involved

Process Flow: REQ5B: Service Orders General (WA - simplified)



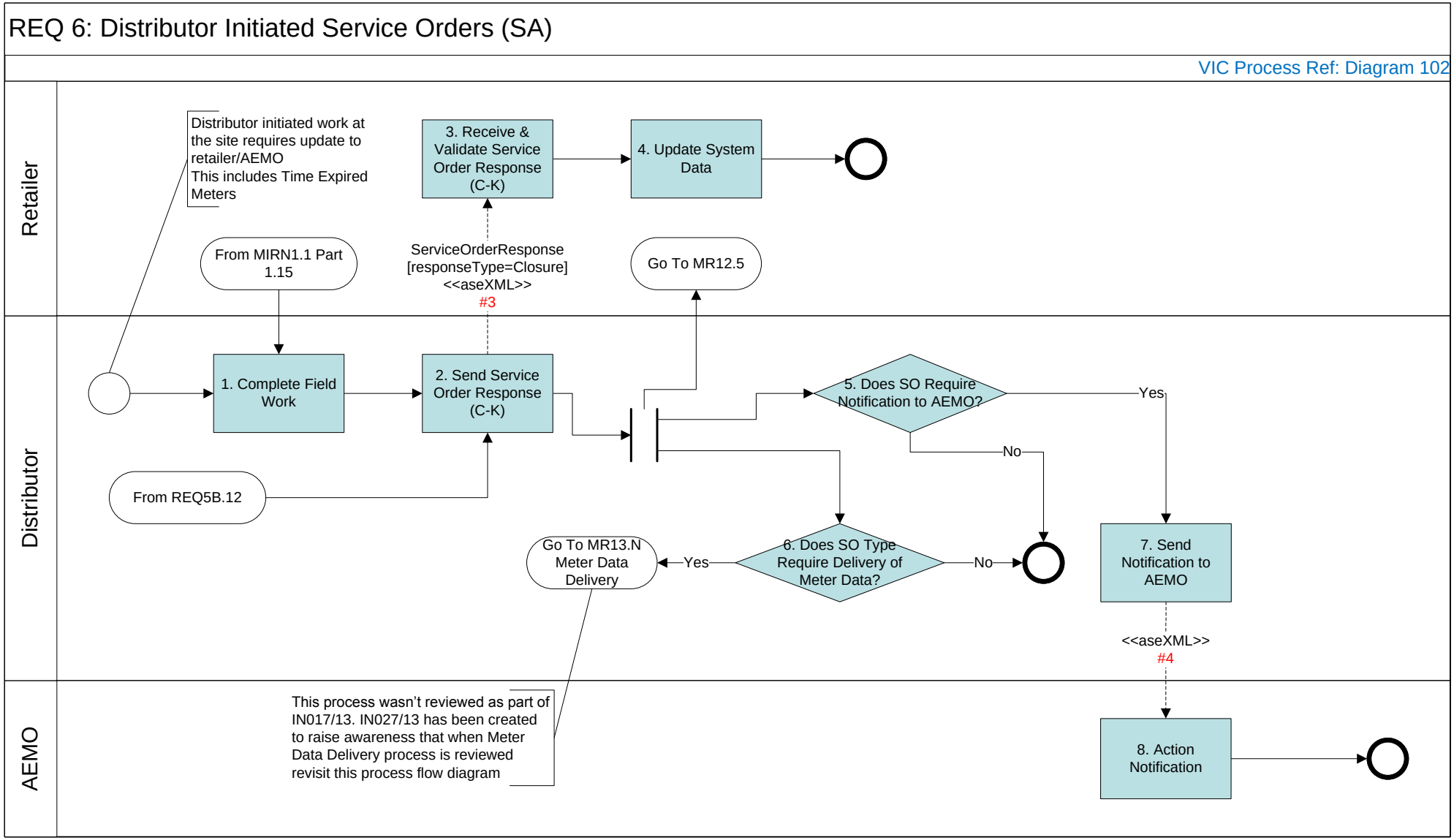
REQ5B: Det: Service Orders Transaction Table (SA)

REQ5B Det: Service Order Transaction Table

#1 Service Orders Request C-K	#2 Service Order Response C-K (Initial)	#3 Service Order Response C-K (Final)	#4 Status Change Response
GIP 87 - Meter Fix Request (JEC = MFX)	GIP 87A - Meter Fix Request Response	GIP 92 - Meter Fix Completed	GIP 94 - Meter Fix Notification
		GIP 93 - No Access to Complete Meter Fix	
GIP 101 - Meter Change Request (JEC = MCH)	GIP 101A - Meter Change Request Response	GIP 104 - No Access to Complete Meter Change	
		GIP 108 - Meter Change Completed	
		GIP 125 - Meter Upgrade Completed	
GIP 151 - Meter Removal Request (JEC = MRM)	GIP 151A - Meter Removal Request Response	GIP 154 - No Access to Complete Meter Removal	GIP 158 - MIRN Status Update Notification
		GIP 157 - Meter Removal Completed	
GIP 310 - Service Connection Request (JEC = SCR)	GIP 310A - Service Connection Request Response	GIP 311 - Service Connection Complete	
GIP 312 - Service Disconnection Request (JEC = SDR)	GIP 312A - Service Disconnection Request Response	GIP 313 - Service Disconnection Complete	GIP 158 - MIRN Status Update Notification
GIP 314 - Service Orders for Priority C-K (JEC = All JEC's)	GIP 314A - Service Orders for Priority C-K Response	GIP 315 - Service Orders Completed for Priority A-K	
GIP 316 - Relocate Service Request (JEC = RSR)	GIP 316A - Relocate Service Request Response	GIP 317 - Relocate Service Complete	
GIP 318 - Upgrade Service Size Request (JEC = USR)	GIP 318A - Upgrade Service Size Request Response	GIP 319 - Upgrade Service Size Complete	
GIP 320 - Upgrade Meter Size Request (JEC = UMS)	GIP 320A - Upgrade Meter Size Request Response	GIP 321 - Upgrade Meter Size Complete	

JEC = Job Enquiry

Process Flow: REQ6: DB initiated Service Orders (SA)



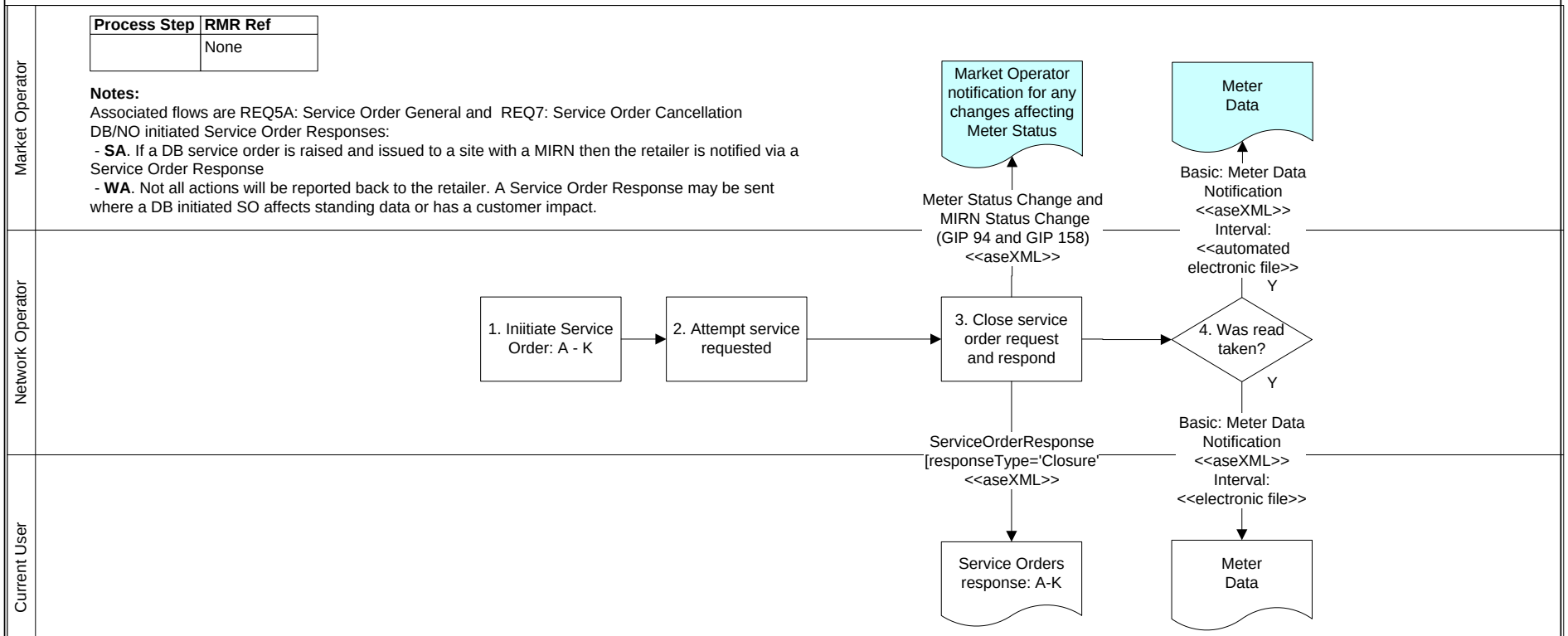
#3 & 4 Refer to REQ5B Det for the transactions involved

Process Flow: REQ6: DB initiated Service Orders (WA)

PF(B2B) - REQ6: DB initiated Service Orders

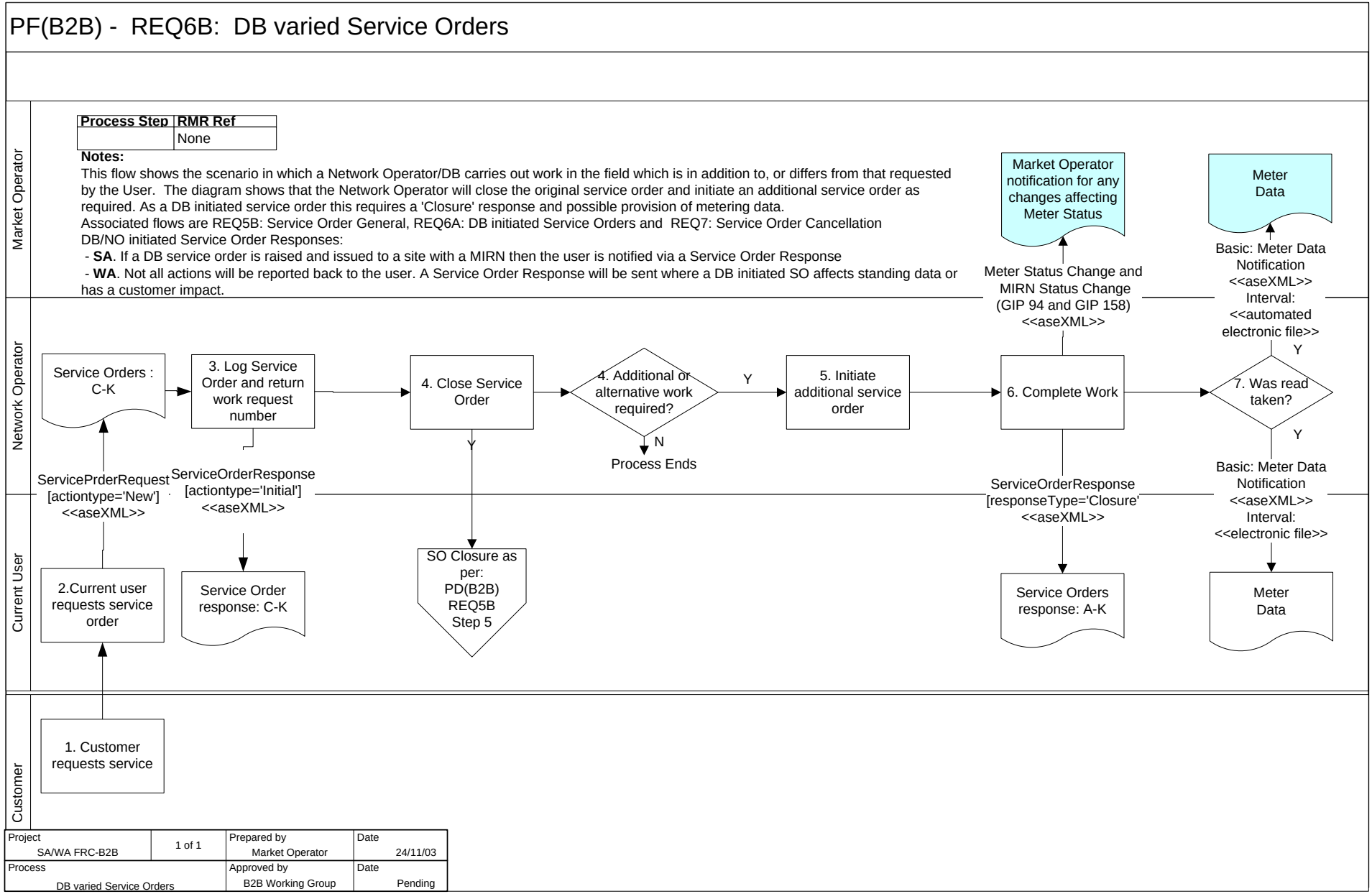
Process Step	RMR Ref
	None

Notes:
Associated flows are REQ5A: Service Order General and REQ7: Service Order Cancellation
DB/NO initiated Service Order Responses:
- **SA**. If a DB service order is raised and issued to a site with a MIRN then the retailer is notified via a Service Order Response
- **WA**. Not all actions will be reported back to the retailer. A Service Order Response may be sent where a DB initiated SO affects standing data or has a customer impact.

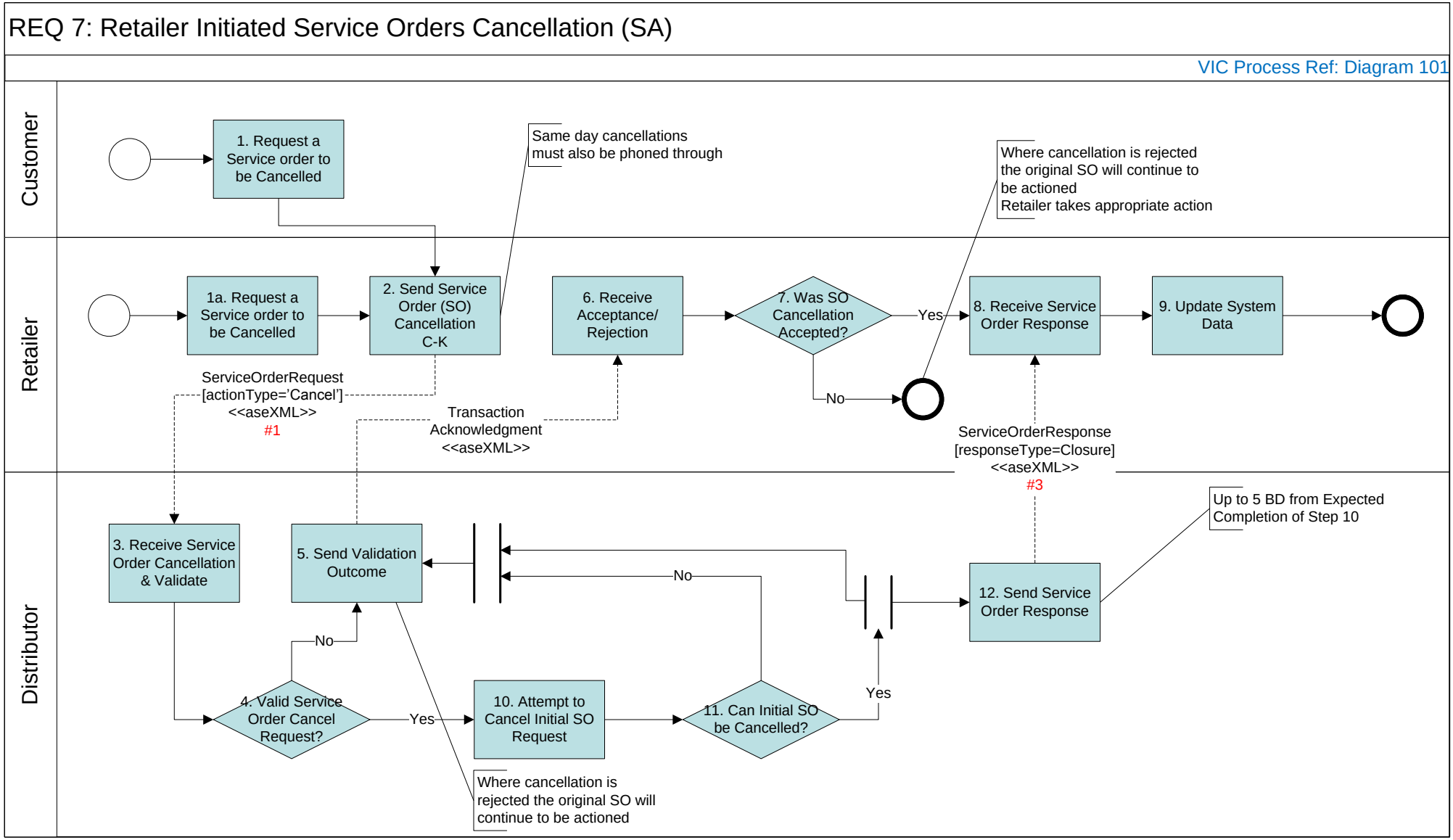


Project	1 of 1	Prepared by	Date
SA/WA FRC-B2B		Market Operator	17/11/03
Process		Approved by	Date
Service Orders General (simplified)		B2B Working Group	Pending

Process Flow: REQ6B: DB varied Service Orders WA

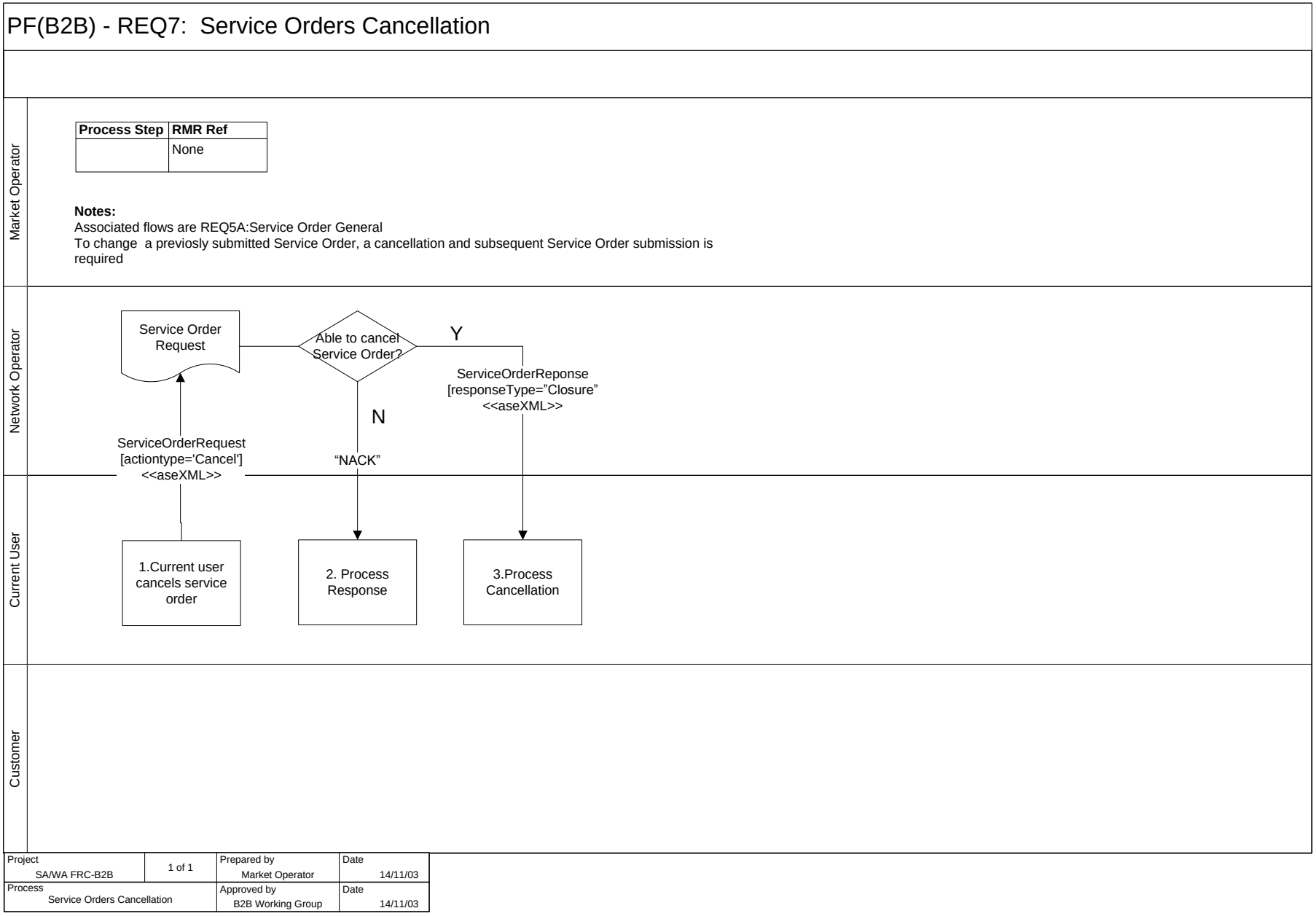


Process Flow: REQ7: Retailer Initiated Service Orders Cancellation (SA)

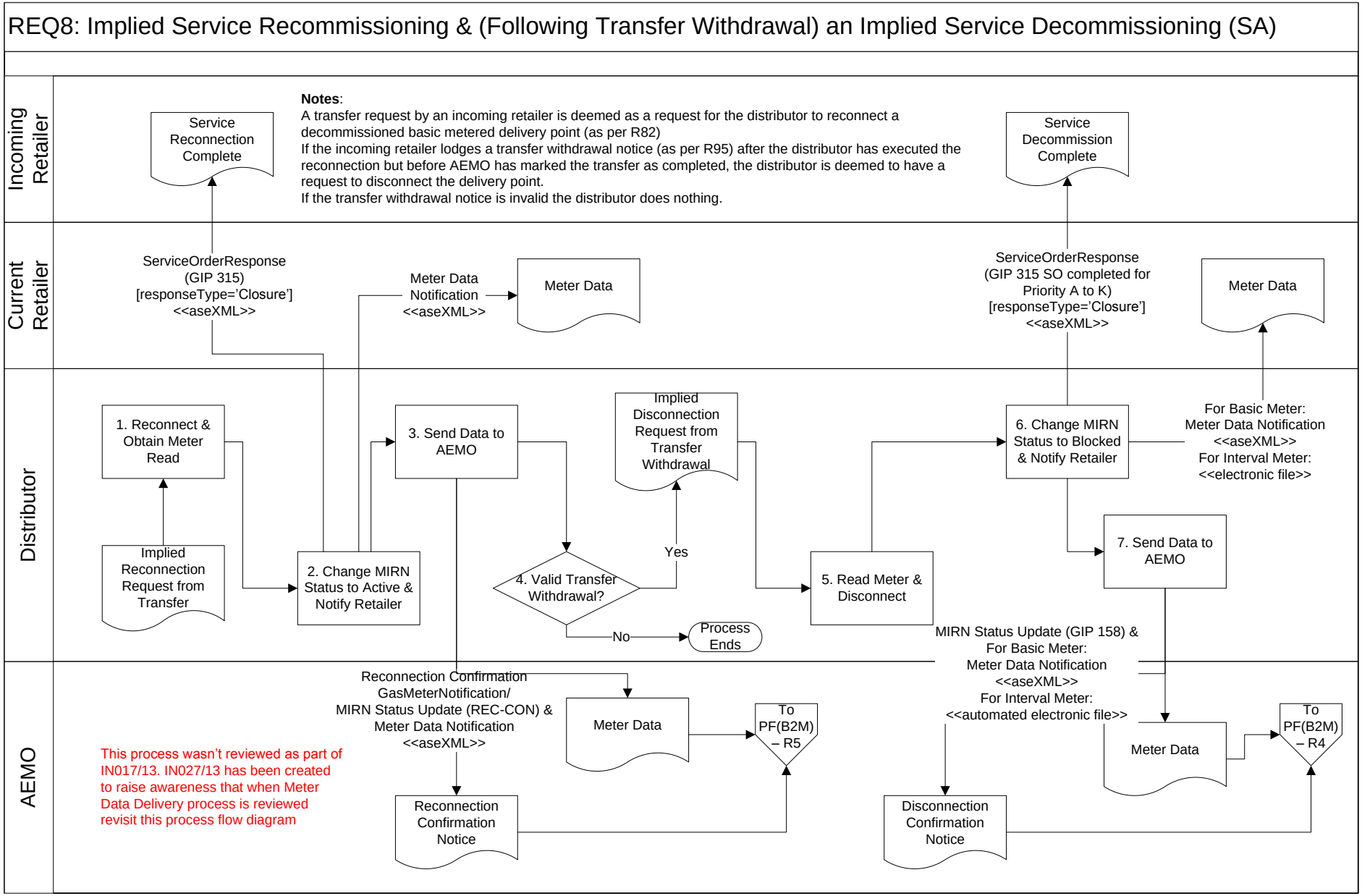
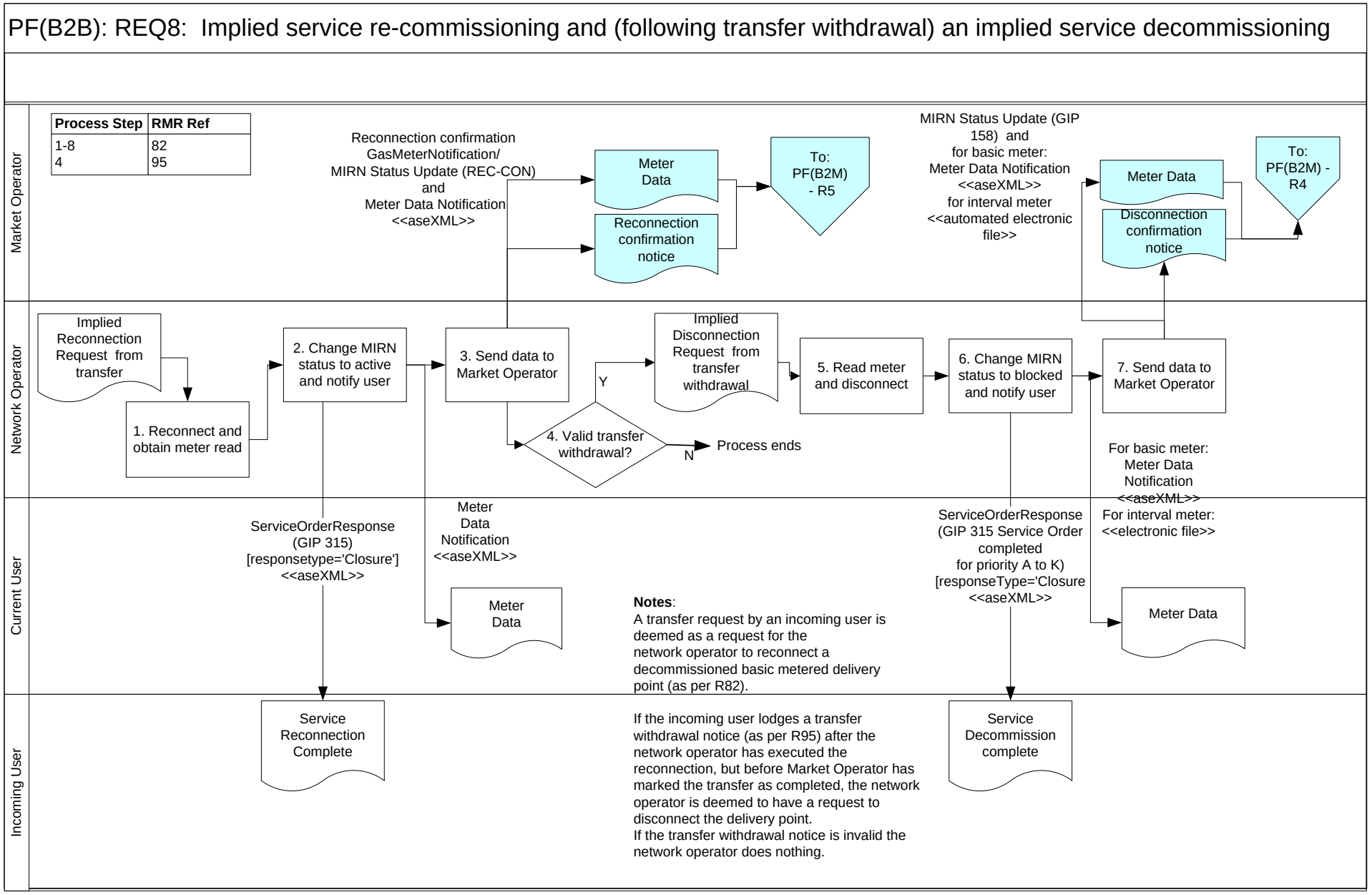


#1 & 3 Refer to REQ5B Det for the transactions involved

Process Flow: REQ7: Service Orders Cancellation (WA)



Process Flow: REQ8: Implied service recommissioning and (following transfer withdrawal) an implied service de-commissioning (SA)



Process Flow: REQ8: Implied service re-commissioning and (following transfer withdrawal) an implied service de-commissioning (WA)