

# **New Billing Project**

## **ICP Enquiry (Billing) API Specifications Part 3**

## Revision History

Revision	Date	Description	Author
1.0	Jan 23, 2025	The 3rd list of ICP Enquiry that are interfaced with new billing API	Claudia Fung

## CONTENTS

<b>OBJECTIVES .....</b>	<b>4</b>
<b>ICP ENQUIRY (BILLING) API SPECIFICATIONS.....</b>	<b>4</b>
1. <i>Sales Ledger Details.....</i>	<i>4</i>
2. <i>Kiosk Outstanding BalanceBy Subscriber .....</i>	<i>8</i>
3. <i>Kiosk Outstanding BalanceBy Customer .....</i>	<i>10</i>
4. <i>Get RMM Msisdn Info .....</i>	<i>12</i>
5. <i>Get RMM Msisdn Type Info.....</i>	<i>15</i>
6. <i>Get RMM IMSI/ SIM Info .....</i>	<i>17</i>

## Objectives

This document is to provide the list of enquiry functions interfaced with Covalense Billing API for retrieval Billing information for the New Billing Project. Parallel run logic is also included.

## ICP Enquiry (Billing) API Specifications

### 1. Sales Ledger Details

#### Purpose

To get the sales ledger details within 24 months for the specified customer account from the billing system. It includes invoice and all account receivable transaction details.

#### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /salesLedger

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmcjOiI2NGY2Y2I1ZmFiYzRhYWY1MGNlZDE1NTUjLCJpZCI6IjFiYzI4OGIzYzZjMTQxNjFiM2ZiMWUyNGJlMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

## Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
custNum	String	Customer number		Mandatory
accountNum	String	Account number		Mandatory
serviceType	String	Service Type	PREPAID PREPAID_HPP POSTPAID	Mandatory
startDate	String	Start date of transaction	Format: YYYY-MM-DD	Mandatory
endDate	String	End date of transaction Max for 24 months	Format: YYYY-MM-DD	Mandatory
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM	Mandatory

## Sample Request

```
{
  "custNum": "00008843",
  "accountNum": "00008843.00028",
  "serviceType": "PREPAID",
  "startMonth": "2024-09-01",
  "endMonth": "2024-12-31",
  "parallelRun": "0"
}
```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
salesLedger	JSON Array	List of Sales Ledger of this account		
salesLedger -> ledgerRef	String	The ledger reference, invoice number for invoice / payment reference		
salesLedger -> transactionDate	String	Invoice generation date or payment date	YYYY-MM-DD HH24:MI:SS	
salesLedger -> transactionType	String	Invoice for bill / invoice record and Payment method as below format		
salesLedger -> transactionRef	String	The subscriber number		
salesLedger -> amount	String	Transaction / invoice amount		
salesLedger -> osBalance	String	Balance (o/s) amount of sales ledger by this account i.e. amount – allocated amount		
salesLedger -> allocatedAmount	String	The allocated amount of sales ledger: amount – osBalance		
salesLedger -> allocatedPeriod	String	The allocated period os sales ledger by this account		
salesLedger -> allocatedDate	String	The first allocated date of this invoice of the account	YYYY-MM-DD HH24:MI:SS	
salesLedger -> completeAllocateDate	String	The completed allocated date of this invoice by this account	YYYY-MM-DD HH24:MI:SS	
accountNumber	String	Sales account number		

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```
// Enquiry result for prepaid subscriber
{
  "resultCode": "0",
  "errorDesc": "",
  "errorCode": "",
  "custNum": "04297934",
  "acctNum": "04297934.00001",
  "subrNum": "91234567",
  "salesLedger": {
    "ledgerRef": "55044801",
    "transactionDate": "2024-11-30 01:00:00",
    "transactionType": "ADJ",
    "transactionRef": "91234567",
    "amount": "964.00",
    "osBalance": "200.65",
    "allocatedAmount": "321.32",
    "allocatedPeriod": "5.00",
    "completeAllocateDate": "2024-08-01 10:00:00",
    "accountNumber": "04297934.00001"
  }, {
    "ledgerRef": "55044802",
    "transactionDate": "2024-12-30 01:00:00",
    "transactionType": "ADJ",
    "transactionRef": "91234567",
    "amount": "364.00",
    "osBalance": "100.65",
    "allocatedAmount": "121.32",
    "allocatedPeriod": "6.00",
    "completeAllocateDate": "2024-09-01 10:00:00",
    "accountNumber": "04297934.00001"
  }
}
```

## Fail response

```
{
  "resultCode": "-1",
  "errorCode": "-1",
  "errorDesc": "Missing input parameter"
}
```

## 2. Kiosk Outstanding BalanceBy Subscriber

### Purpose

To get the kiosk o/s balance by subscriber (refer to smc\_outstanding\_bal\_pkg.GetBalByCustSubr)

### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /kioskBalanceBySubr

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmdiOiI2NGY2Y2I1ZmFiYzRhYWY1MGNIWDE1NTU1LCJpZCI6IjFiYzI4OGIzYzZjMTQxNjFIM2ZiMWUyNGJlMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

### Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
custNum	String	Customer number		
subrNum	String	Subscriber number		
accountNum	String	Account number		
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM	Mandatory

### Request Combination

Below parameter combination is accepted for this call; otherwise, the error code is returned

custNum	acctNum	subrNum	Response
Y	Y	Null	Get account balance by account number
Y	Null	Y	Get account balance by customer, subscriber number



## Sample Request

```

Enquiry by customer, subscriber number
{
    "custNum": "00008843",
    "subNum": "90123456",
    "parallelRun": "0"
}

Enquiry by customer, account number
{
    "custNum": "00008843",
    "accountNum": "00008843.00028",
    "parallelRun": "0"
}

```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
kioskSubrBalance	Decimal	Sum of kiosk o/s balance for this subscriber		N.A. for prepaid

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```

{
    "resultCode": "0",
    "errorDesc": "",
    "errorCode": "",
    "kioskSubrBalance": 460.04
}

```

## Fail response

```

{
    "resultCode": "-9000",
    "errorDesc": "Internal Error",
    "errorCode": "10001"
}

```

### 3. Kiosk Outstanding BalanceBy Customer

#### Purpose

To get the kiosk o/s balance by account (refer to smc\_outstanding\_bal\_pkg.GetBalByCustSubr)

#### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /kioskBalanceByCust

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmcjOjI2NGY2Y2I1ZmFiYzRhYWY0MGNIWDE1NTUjLCJpZCI6IjFiYzI4OGIzYzZjMTQxNjFIM2ZiMWUyNGJlMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

#### Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
custNum	String	Customer number		Mandatory
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM	Mandatory

## Sample Request

```
Enquiry by customer number
{
  "custNum": "00008843",
  "parallelRun": "0"
}
```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
kioskCustBalance	Decimal	Sum of kiosk o/s balance for this customer account		N.A. for prepaid

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```
{
  "resultCode": "0",
  "errorDesc": "",
  "errorCode": "",
  "kioskSubrBalance": 460.04
}
```

## Fail response

```
{
  "resultCode": "-9000",
  "errorDesc": "Internal Error",
  "errorCode": "10001"
}
```

#### 4. Get RMM Msisdn Info

##### Purpose

To get the RMM Msisdn Information

##### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /rmmMsisdnInfo

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmcjOjI2NGY2Y2I1ZmFiYzRhYWY0MGNIWDE1NTUjLCJpZCI6IjFiYzI4OGIzYzZjMTQxNjFIM2ZiMWUyNGJlMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

##### Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
msisdn	String	MSISDN number		Mandatory
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value of 1<sup>st</sup> character</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM  <u>Value of 2<sup>nd</sup> character</u> 0 – existing system 1 – new billing	Mandatory

## Sample Request

```
Enquiry by msisdn number
{
    "msisdn": "13802720001",
    "parallelRun": "00"
}
```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
msisdn	String	Msisdn number		
sequenceNo	String	Sequence number		
status	String	Msisdn status		
validFrom	String	Valid date from	Date Format: YYYY-MM-DD HH24:MI:SS	
typeld	String	Type ID		
classId	String	Class ID		
phlr	String	HLR number		
dealerId	String	Dealer ID		
mnpStatus	String	MNP status		
operatorCode	String	Operator code		
accountNum	String	Account number		
lastSwitchOnDate	String	Last switch on date	Date Format: YYYY-MM-DD HH24:MI:SS	
lastSwitchOffDate	String	Last switch off date	Date Format: YYYY-MM-DD HH24:MI:SS	
liveIndicator	String	Live Indicator		
vasType	String	Vas Type		

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```
{
  "resultCode": "0",
  "errorDesc": "",
  "errorCode": "",
  "msisdn": "13802720001",
  "sequenceNo": "1",
  "status": "D",
  "validFrom": "2023-01-01",
  "typeId": "2",
  "classId": "NORM",
  "phlr": "0",
  "dealerId": "HOUSE",
  "mnpStatus": "",
  "operatorCode": "",
  "accountNum": "00538459.00001",
  "lastSwitchOnDate": "2024-02-10 13:00:00",
  "lastSwitchOffDate": "2025-02-10 15:00:00",
  "liveIndicator": "N",
  "vasType": "138"
}
```

## Fail response

```
{
  "resultCode": "-9000",
  "errorDesc": "Internal Error",
  "errorCode": "10001"
}
```

## 5. Get RMM Msisdn Type Info

### Purpose

To get the RMM Msisdn Type Information

### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /rmmMsisdnTypeInfo

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmcjOiI2NGY2Y2I1ZmFiYzRhYWl4MGNIzDE1NTUiLCJpZCI6IjFiYzI4OGlZyZjMTQxNjFIM2ZiMWUyNGJlMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

### Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
msisdn	String	MSISDN number		Mandatory
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value of 1<sup>st</sup> character</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM  <u>Value of 2<sup>nd</sup> character</u> 0 – existing system 1 – new billing	Mandatory

## Sample Request

```
Enquiry by msisdn number
{
    "msisdn": "13802720001",
    "parallelRun": "00"
}
```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
typeId	String	Type ID		
typeCode	String	Type Code		
typeName	String	Type Name		

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```
{
    "resultCode": "0",
    "errorDesc": "",
    "errorCode": "",
    "typeId": "2",
    "typeCode": "CMDM",
    "typeName": "138 Card"
}
```

## Fail response

```
{
    "resultCode": "-9000",
    "errorDesc": "Internal Error",
    "errorCode": "10001"
}
```



## 6. Get RMM IMSI/ SIM Info

### Purpose

To get the RMM IMSI / SIM Information

### Interface Details

**Production Endpoints:** TBC

System	Endpoint (UAT)
UAT	https://crm-uat.smartone.com/api/brm/v1/account
TYK	https://tykapi-u.hksmartone.com/icp/NBill/brm/v1/account

**API:** /rmmImsiSimInfo

**Type:** REST

**Method:** POST

**Add Key to HTTP Request Header for TYK API:**

Name	Auth_ID
Value	eyJvcmcjOjI2NGY2Y2I1ZmFiYzRhYWY0MGNIWDE1NTUjLCJpZCJ6IjYzI4OGIzYzZjMTQxNjFIM2ZiMWUyNGJIMDAyN2FkIiwiaCI6Im11cm11cjY0In0=

### Request Parameters

Parameter	Data Type	Description	Possible Value	Remarks
imsi	String	IMSI number		
sim	String	SIM number		
parallelRun	String	parallelRun indicator to determine the state of the workflow	<u>Value of 1<sup>st</sup> character</u> 0 – existing system 1 – new billing 2 – parallel run in GNV & new billing in OM  <u>Value of 2<sup>nd</sup> character</u> 0 – existing system 1 – new billing	Mandatory

### Request Combination

Below parameter combination is accepted for this call; otherwise, the error code is returned

Imsi	Sim	Response
Y	Y	Get IMSI and SIM information that are matched for IMSI and SIM
Y	Null	Get IMSI and SIM information that is matched with IMSI
Null	Y	Get IMSI and SIM information that is matched with SIM

## Sample Request

```
Enquiry by msisdn number
{
    "imsi": "13802720001",
    "sim": "13802720001",
    "parallelRun": "00"
}
```

## Response Parameters

Parameter	Data Type	Description	Possible Value	Remarks
resultCode	String	Response result	See below table	
errorCode	String	Error code return from Covalense billing api		
errorDesc	String	Error description return from Covalense billing api		
status	String	Imsi / Sim status		
sim	String	SIM number		
imsi	String	IMSI number		
accountNum	String	Account number		
phlr	String	HLR number		
validFrom	String	Valid From	Date Format: YYYY-MM-DD HH24:MI:SS	
dealerId	String	Dealer ID		
simTypeId	String	SIM Type ID		
vasType	String	Vas Type		
lastSwitchOnDate	String	Last Switch On Date	Date Format: YYYY-MM-DD HH24:MI:SS	

## Result Code

Result Code	Severity	Description
0	N/A	Success
-1	N/A	Missing input parameter

## Success response

```
{
  "resultCode": "0",
  "errorDesc": "",
  "errorCode": "",
  "status": "D",
  "sim": "89852069302150047757",
  "imsi": "454061001000324",
  "accountNum": "",
  "phlr": "4",
  "validFrom": "2023-01-01",
  "dealerId": "SH00200000",
  "simType": "1",
  "vasType": "TELP",
  "lastSwitchOnDate": ""
}
```

## Fail response

```
{
  "resultCode": "-9000",
  "errorDesc": "Internal Error",
  "errorCode": "10001"
}
```