

# **Release Notes**

**for**

## **SAP for Utilities**

**SAP enhancement package 5 for SAP ERP 6.0**



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## Release Notes for Business Functions

### ***Business Function Advanced Metering Infrastructure***

#### **ISU\_AMI\_2: Advanced Metering Infrastructure 2 (New)**

##### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension ***Utilities, Waste & Recycling*** (IS-UT 605), the business function ***Advanced Metering Infrastructure 2 (ISU\_AMI\_2)*** is available.

You can use this business function to activate additional functions in an advanced metering infrastructure.

For more information, see the following release notes:

- o **Meter Reading Functions for AMI**
- o **On-Demand Operational State Request for Advanced Meters**
- o **Monitoring of AMI Communication**
- o **Time-of-Use Billing for Interval Meters**
- o **Profiles with External Profile Values**
- o **Event Management**
- o **Messaging**
- o **Disconnection/Reconnection**
- o **Managing Worklists for Notifications**
- o **BI Content**

##### **See also**

You can find more information in SAP Library under ***SAP ERP -> SAP ERP Central Component -> SAP ERP Enhancement Packages -> Business Function Sets and Business Functions -> Industry Business Function Sets -> Utilities.***

## ISU\_AMI\_2: Enhance Device Management (DM) to be able to cooperate with AMI Systems Part II (new)

### Use

As of SAP enhancement package 5 (EHP5) for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE) business function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can carry out the following functions:

- o New device allocation for meters that need a separate locking device (breaker)  
It is now possible to create new device allocations between a meter and another device called the *breaker*. The breaker permits control of the remote disconnection and reconnection of the controlled meter.
- o Restoration of device allocation when a device removal is reversed  
When you reverse a device removal, any device allocations that were terminated during the original device removal are restored.
- o Notification for device allocations on device level  
The MDUS is now notified as soon as a new allocation involving an advanced metering infrastructure (AMI) device is generated.
- o Notification for device allocations on register level  
The MDUS is notified as soon as a new allocation involving registers belonging to an AMI device is generated.
- o Notification for profile allocations to registers  
The MDUS is notified as soon as a profile is allocated to registers belonging to an AMI meter.
- o Notification for device assignment to a device location  
The MDUS is notified as soon as a device is installed in a new device location.
- o Replication of profiles  
The new transaction **EAMIPROFSYNC** (*Profile synchronization for AMI*) is a mass activity designed to replicate existing allocations between profiles and registers of AMI meters into the MDUS system. Allocations to be replicated can be selected based on a number of attributes, including profile, device, advanced metering system and profile role. Because it is a mass activity, this transaction can handle a large number of replications and allows you to set the time and date of replication.
- o Indication that a non-AMI device is AMI-relevant  
You can now indicate that a non-AMI device is AMI-relevant. For example, you might have a non-AMI meter connected to an AMI-capable breaker, thereby allowing the meter data to be transmitted, by way of a wireless connection, to the MDUS. You do this by specifying the value "Advanced Meter Capability via an AMI Device" in the **Create Device Category** or **Change Device Category** screens, in the *Advanced Meter* field (AMI Data tab).

In addition, master data exchange between the SAP backend and the Meter Data Unification and Synchronization System (MDUS) has been enhanced. More specifically, the following enhancements to existing services are now available:

- o Replication of devices  
New services specially designed for device replication are called when you execute the **EAMISYNC** transaction (*AMI Devices Synchronization*). It can transfer more information related to devices, such as point of delivery (POD), device allocations, installations and device locations.
- o Notification for POD's external ID  
New services are called as soon as you change the external ID of a POD (they are only called when the corresponding installation contains at least one AMI meter).
- o Request for deletion of devices  
New services are called when you delete a device using transaction **SARA**.

### Effects on Existing Data

When specifying AMI data in the **Create Device Category** or **Change Device Category** screens, you have the option to specify the value "Advanced Meter Capability via an AMI Device" in the *Advanced Meter* field (*AMI Data* tab). You select this value for device categories that are typically non-AMI capable, but are connected to an AMI-capable breaker, thereby facilitating remote, wireless communication with the MDUS. For example, you might have a non-AMI meter connected to an AMI-capable breaker, thereby allowing the meter data to be transmitted, by way of a wireless connection, to the MDUS.

### Effects on Data Transfer

The new enterprise services that have been developed enable better communication and better data integrity between SAP backend and the MDUS systems.

### Effects on System Administration

All these functionalities are available at the condition that the switch ISU\_AMI\_EHP5 has been activated.

### Effects on Customizing

In the Customizing activity *Define Types of Device Allocations* (accessed under *SAP Utilities -> Tools -> System Modifications -> User-Defined Enhancements for Device Allocations*), an entry to define the device allocation type "Breaker" has been added (Device Allocation Type 07).

This allows you to specify the "breaker" allocation type when you maintain device allocations (*Maintain Device Allocation* screen, *DAT* field).

### See also

For more information on the new services designed for device replication, see the release note **Enterprise Services for SAP Industry Solutions**.

## ISU\_AMI\_2: Request Operational State for Advanced Meters (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE), Business Function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can use enterprise services to request the operational state of advanced meters. The operational state provides information about the various statuses of advanced meters.

- o The request is made using enterprise service **UtilitiesDeviceERPSmartMeterOperationalStateByIDQuery**.
- o The response is made using enterprise service **UtilitiesDeviceERPSmartMeterOperationalStateByIDResponse**.

You can display the requests and the returned operational states in the device transactions and the connection object transactions.

You can use the **Deletion of Operational State** report (REAMI\_DELETE\_OPERATIONAL\_STATE) to delete existing operational states.

### Effects on Customizing

You define the status codes in Customizing for SAP Utilities under **Advanced Metering Infrastructure -> Basic Settings -> Define Status Codes**.



## ISU\_AMI\_2: Monitoring of Data Exchange with MDUS (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE), Business Function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can monitor data exchange between SAP Utilities and the MDUS system.

You can also use the new archiving object ISU\_AMILOG to archive service logs and messages for service communication in the AMI environment.

This archiving object archives data from the following tables:

- o TEAMI\_LOG\_DATA (Log for Service Communication in AMI Environment)
- o TEAMI\_LOG\_MSG (Messages for AMI Communication)

### Effects on Customizing

Im Anwendungscustomizing können Sie die zeitlichen Bedingungen für das Archivieren einstellen. You can define the time-based conditions for archiving in Customizing.

You can define a residence period in the system for AMI communication:

Customizing for **SAP Utilities** -> **Tools** -> **Archiving** -> **Define Residence Period for Archiving Objects**.

## ISU\_AMI\_2: Time-of-Use Billing for Interval Meters (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling (IS-UT 605)**, business function **Advanced Metering Infrastructure 2 (ISU\_AMI\_2)**, you can use the new time-of-use interface to bill interval meters. This new function is primarily intended for use in billing for residential customers.

The time-of-use interface is an alternative to the RTP interface. It eliminates the need for complex profile calculations and provides a simple and clear rate structure. During the definition of a time-of-use interface, you define the periods for which the profile values are to be aggregated, or for which the peak demand values are to be determined. For each period, you use a time-of-use formula which controls the processing of profile values (for example, aggregation).

Depending on the storage location of the profile values, there are two ways of using the time-of-use interface:

- o Billing of Profile Values in an External System
- o Billing of Profile Values in EDM

#### **Billing of Profile Values in an External System**

If the profile values of the profile to be billed are stored in an external **MDUS system**, billing takes place as follows using an MDUS connection to SAP Utilities:

1. You define a time-of-use interface and select it for execution in an external system. You use time-of-use formulas that refer to formulas in the MDUS system.
2. You use the billing order to analyze the billing period and you use an enterprise service to send a request to the MDUS system (see **MDUS Request ID**).

The following transactions are available for this in the menu for **Billing** under **Billing**

#### **Execution:**

-> **Parallel Processing -> Mass Activity: Create MDUS Request**

-> **Mass Processing -> Create MDUS Request**

3. The MDUS system uses your request to process the profile values and then uses an enterprise service to send the values (aggregated consumption values, for example) back to the SAP system for billing.

A transaction for monitoring communication between the SAP system and the MDUS system is available in the Utilities Industry menu under **Advanced Metering Infrastructure -> Utilities -> Monitoring of AMI Communication**.

For more information, see the release note **ISU\_AMI\_2: Monitoring of Data Exchange with MDUS**.

**Advantages of this procedure:** You do not have to copy the profile values into EDM.

**Disadvantages of this procedure:** The billing process is split into two steps. You have to make sure that the formulas you want to use in the time-of-use interface are implemented properly in the MDUS system.

#### **Billing of Profile Values in EDM**

If the profile values of the profile to be billed are available in the SAP system, billing takes place as follows:

1. You define a time-of-use interface and select it for execution in EDM. You use time-of-use formulas with a **formula class**. SAP provides formula classes for aggregation and determination of peak demand values. You can also define your own formula classes.
2. You import the profile values into EDM (SAP system) - for example, using BAPI BAPI\_ISUPROFILE\_IMPORT.

3. You execute billing as normal.

**Advantages of this procedure:** The billing process is executed without interruption. An MDUS request is not required.

**Disadvantages of this procedure:** You have to transfer the profile values into EDM (the runtime of BAPI\_ISUPROFILE\_IMPORT is optimized, as is the processing of profile values in Billing).

### Restrictions of Time-of-Use Billing

Unless stated otherwise, the restrictions apply for both types of time-of-use billing.

- o **Billing simulation for billable billing orders only**

The following activities are **not** supported:

- Billing simulation without a billable billing order
- Billing using simulation scenarios
- Unbilled revenue reporting (billing of simulation indexes)
- Billing simulation for a product proposal from the IC WebClient
- Budget billing simulation (however, the budget billing procedure “Payment Plan” is supported)
- Billing using variant programs that execute an internal billing simulation – for example, QUANT126, COMPUT25, COMPUT26, COMPUT27, and COMPUT52
- Billing of master agreements

- o **Billing for periodic billing periods only**

The following activities are **not** supported:

- Billing using dynamic period control
- Billing in combination with period-end billing, backbilling, or advance billing are only possible with restrictions.  
You can only use RTP operands that receive values from the time-of-use interface in rate steps that belong to the periodic billing period. For example, RTP operands are not provided for backbilling periods.

- o **No integration with other dialog transactions**

It is **not** possible to create MDUS requests from the following transactions:

- Bill Correction (transaction EABICO)
- Single Bill (transaction EASIBI)
- Scenario SAP Utility Customer E-Services (UCES)
- Final Billing for Move-Out
- Enterprise Services for Contract Billing

If all the profile values are available in EDM, you can use time-of-use billing with formula classes.

- o **Restrictions for the profile**

Certain restrictions apply for profiles billed with a time-of-use interface. For more information, see the **Dependencies** section of **Profile Can be Billed with TOU Interface** .

### Effects on Existing Data

For rates that can only be used for interval meters, use the **RTP billing category** to define whether you want to bill profile values with an RTP interface or a TOU interface (see **RTP Billing Category**). If you use the rate in connection with a time-of-use interface, you have to specify a time-of-use interface for each fact group.

### Effects on Customizing

You make the Customizing settings for this function in Customizing for **SAP Utilities** under **Advanced**

***Metering Infrastructure -> Time-of-Use Interface -> Edit Time-of-Use Formula and Edit Time-of-Use Interface.***

**See also**

For more information, see SAP Library for ***SAP Utilities*** under ***Advanced Metering Infrastructure*** or SAP Help Portal (<http://help.sap.com>) under ***SAP ERP -> SAP ERP Enhancement Packages -> Enhancement Package 5 -> Industries in SAP ERP -> SAP Utilities -> Advanced Metering Infrastructure.***

## ISU\_AMI\_2: Profiles with External Profile Values (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0., industry extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE), business function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can create EDM profiles whose data (profile values and status) is stored in external systems.

The following storage locations are available for the original profile values:

- o **Profile values originally in EDM**  
The profile values are originally stored in EDM (SAP system). This storage location is the same as for the previous IS-U profiles.
- o **Profile values originally in external system; Copy in EDM**  
The profile values are originally stored in an external system. Copies of the values are stored in EDM and made available using a profile value import.  
You cannot change the profile values in EDM, but you can display them at any time and use them for subsequent processes. There is no service communication with external systems using enterprise services.  
We recommend that you use these profiles in connection with **Time-of-Use Billing for Interval Meters**.

If a profile value import takes place for these profiles, the following profile import functions are deactivated:

- New source systems specified during profile value import are not saved.
  - An import log (transaction **Monitoring of Profile Value Import - EDM1**) is only generated if errors occur.
  - If only new profile values are imported for the import period, there is no check for profile values that have already been billed.
  - If no error messages are generated during profile value import, no statistical messages are written to the application log.
  - The user status is not taken into account during import.
- o **Profile values originally in external system**  
The profiles values are originally stored in an external system; no profile values are stored in EDM.  
When displaying profiles with externally stored profile values, the system uses the enterprise service `UtilitiesTimeSeriesItemByIDQuery_sync` to request the profile values and the statuses from the external system.  
We recommend that you use these profiles in connection with **MDUS Connection**.

In the definition of profile roles you can also specify that the profile values are stored in an external system.

To ensure consistency of system data and performance, there are a number of restrictions regarding the use of externally stored profile values:

- o You can only specify elementary profiles to have profile values that are stored externally.
- o It is not possible to change externally stored profile values using EDM.
- o Profiles or roles with externally stored profile values and that have been marked as such cannot be used in settlement, in connection with formulas, in connection with synthetic profiles, or in connection with the RTP interface.
- o You can only allocate profile roles with externally stored profile values to profiles whose values are also stored externally.

- o You can only edit the storage location of profile values during creation of the profile header.  
For more information, see: **Storage Location of Original Profile Values**

#### **Effects on Existing Data**

Existing profile data is not changed and you can use it as before.

You cannot change the storage location of original profile values for existing profiles.

#### **Effects on System Administration**

To process profile values that are originally stored in an external system without a copy in EDM, the corresponding enterprise services must be properly configured and a connection to the respective external system must exist.

#### **Effects on Customizing**

The **Storage Location of Original Profile Values** field has been added to Customizing for the profile roles.

## ISU\_AMI\_2: Event Management (New)

### Use

As of SAP enhancement package 5 for SAP ECC 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE) business function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can use the AMI Event Management Framework to flexibly define business rules controlling how the SAP system reacts to events sent by devices via the Meter Data Unification and Synchronization (MDUS) system.

You can carry out the following activities using the AMI Event Management Framework:

#### Event Processing from SOA

The MDUS collects events from meter reading devices and sends messages to SAP Process Integration (PI). SAP PI then triggers an asynchronous bulk enterprise service (SOA), which accepts events and verifies whether they are to be processed or rejected. A positive or negative confirmation is then sent back to the MDUS via an asynchronous enterprise service.

#### Mass Event Execution

The mass execution report (REAMIEM\_EVENT\_PROCESS) can be scheduled to run every ten minutes in the background via transaction **SM36**. This report selects events with status 'New' for execution.

#### Mass Activity Report

The Mass Activity transaction (**EAMIEVTPROC01**) has been created and can be run at night to execute events with the status 'New', 'Interrupted' and 'Error'.

#### BRF+

When an event is executed, BRF+ function is identified based on the event type code customizing. All necessary input data (event type code, event severity code, event properties) is sent to the function. BRF+ executes expressions (actions) which start business processes on the system (for example, the creation of a business partner contact).

#### Custom BRF+ expressions

The following BRF+ expressions were added to BRF+:

- o BPEM Case
- o Service Order
- o Service Notification
- o Business Partner Contact
- o Compatible Unit Order
- o No action

#### BRF+ Interrupt Processing

You might decide to interrupt some parts of function processing because of performance issues. BRF+ provides an exit condition in the BRF+ rulesets as an interrupt. Each time an exit condition is reached during the processing of a ruleset, an interrupt record is created. The interrupt record allows processing to re-start from the point of interrupt for the remaining rules of the interrupted ruleset. The mass activity report will then be scheduled at night and re-execute events which were interrupted.

### Archiving

The new archiving object **ISU\_AMIEVT** has been created and is used to archive, delete and retrieve events for the AMI Event Management.

The following reports have been created:

- o REAMIEM\_EVENT\_ARCHIVING\_ARCH: Analyze and archive event data stored in DB
- o REAMIEM\_EVENT\_ARCHIVING\_DELETE: Delete archived data from DB

### Event Monitor

A Dynpro-based transaction (**EAMIEVTMON01**) for monitoring processed events has been created. The event monitor consists of three parts:

- o A selection screen that allows you to specify which events to display
- o An ALV grid for displaying the selected events
- o A screen for displaying details about a specific event

### Enhancements

The BAdI *ISU\_AMI\_EM\_CORE* allows you to parse Lean Trace for results, display documents that result from actions, and have access to extra selection criteria for event monitoring display. You can also get chunk size for new events batch processing, and convert key to DB format.

### Business Intelligence

The BW events extractors with the DataSources for the AMI event management support initial and delta upload for extracting the AMI event management information into the BW system. Moreover, all the required new BW objects (such as InfoObjects and DataStore Objects) are provided in the BI content.

### Restrictions

In one execution of BRF+ function there shouldn't be more than one execution of BRF+ expression 'Service Order', 'Service Notification', and 'Compatible Unit Order'.

### Effects on Existing Data

In addition to the new AMI event management, existing transactions Change Device and Display Device (transactions **IQ02/ IQ03**), Change Installation and Display Installation (transactions **ES31/ ES32**), and Device Modification (transaction **EG42**) have been enhanced with a button that allows you to navigate to the event monitor and display all relevant events. The button is switched via the EhP5 switch **ISU\_AMI\_EHP5**.

### Effects on Data Transfer

The new enterprise services (SOA) enable communication and data integrity between the SAP backend and the MDUS systems.

### Effects on System Administration

The new authorization object **E\_AMI\_EM** allows you to define a user's access to display, process



and cancel the events from AMI Event Monitor.

All these functionalities of AMI event management are available if the switch **ISU\_AMI\_EHP5** has been activated.

To be able to use these AMI event management functionalities, the relevant enterprise services (SOA) must be properly configured and there must be a connection to the respective external system.

### Effects on Customizing

The Event-Management sub-node has been added to the existing IMG node for the customizing of AMI event management. The path is: **SAP Utilities-> Advanced Metering Infrastructure-> Event Management**

You can define the settings for AMI Event Management in the Customizing under **SAP Utilities-> Advanced Metering Infrastructure-> Event Management-> Define Settings for Event Management**.

You can define the maximum number of events that are displayed in the AMI Event Monitor (when you navigate from the other ISU transactions) in the Customizing under **SAP Utilities-> Advanced Metering Infrastructure-> Event Management-> Define Selection Criteria for Event Management**.

In the Customizing activity Archiving Objects (accessed under **SAP Utilities -> Tools -> Archiving-> Define Retention Period for Archiving Objects**), a new archiving object ISU\_AMIEVT is created. You can define the retention periods for the archiving object in the system for AMI event.

In addition, there is one customizing activity, Default function profile for AMI Event Monitor (IUCAMIEVENT), available in the CRM system. It is accessible in the Utilities CRM Customizing under **Utility Industries->Settings for User Interfaces->Advanced Metering Infrastructure->Settings for AMI Event Monitor**.

### See also

For information on event management in CRM, see the CRM\_UT\_ER\_1: Event Management (New) release note.

## ISU\_AMI\_2: Messaging (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE), business function **Advanced Metering Infrastructure 2** (**ISU\_AMI\_2**), you can use enterprise services to send messages to advanced meters. Messages are sent using the enterprise service

`UtilitiesDeviceERPSmartMeterTextBulkNotificationMessage`.

You can send messages using the following transactions or processes:

- o **Send message to a single advanced meter**
  - Device Modification (EG42)
  - Display Device Information Record (EG43)
  - Change/Display Material Serial Number (IQ02/IE02/IQ03/IE03)

You can choose a predefined message template, or you can enter a text message directly in the text editor. The new authorization object E\_AMI\_MSG controls the messaging authorizations.

To carry out customer-specific checks before sending, to filter messages before they are

displayed, to carry out customer-specific authorization checks, and to replace your own template parameters, you can use the BAdI ISU\_AMI\_MSG.

- o **Send messages created in FI-CA dunning using a mass activity**
  - The new dunning activity R012 in FI-CA Customizing creates and saves messages for advanced meters that are related to the dunning notice.
  - The dunning activity has to be assigned either to the configuration of the dunning procedures or dunning by collection strategy within Customizing. It is then included in the dunning activity run (transaction FPVB). Moreover, the ID of a template text has to be assigned to the dunning activity in AMI Customizing. Alternatively, you can use a copy of dunning activity R012 with an adapted function module.
  - The sending of saved text messages has to be carried out by a new mass activity in transaction EAMIMSGSEND01. The mass activity enables you to send messages created by the dunning activity and other mass functions which may be available in the future.

When a message has been sent successfully, the new BOR event `MessageSent` of BOR object DEVICE is triggered.

The new BOR method `CreateAndSendMessage` of BOR object DEVICE is available for creating and sending messages using a template.

The following attributes, which are relevant for sending messages, have been added to the device category, device, device information record, device modification, device installation, and device replacement:

- o A new attribute *Message Attribute* has been added to the device, device information record, device modification, device installation, and device replacement. This message attribute is a combination of the message length and the message category. The message attribute can be entered during device or device information record creation, during device modification, device installation, and device replacement.
- o A new attribute *Message Attribute Determination Group* has been added to the device category for advanced meters. The *Message Attribute Determination Group* is used in the device or device info record to determine the relevant message attribute.

You can use the report **Change AMI Device Data (REAMI\_FILL\_AMS\_AMCG\_IN\_DEVICE)** to write the advanced meter attributes (including the message attribute which is relevant for sending messages) to the device and device information record, as long as the device category is enabled for advanced meters.

To archive messages, a new archiving object (*ISU\_AMIMSG*) is available. To filter the messages that have to be archived, you can use the BAdI ISU\_AMI\_MSG\_ARCHIVE.

For more information, see the documentation for the **Archiving Report REAMI\_MSG\_ARCH** and for the **Deletion Report REAMI\_MSG\_DELETE**

### Effects on Customizing

You make settings in Customizing for SAP Utilities under **Advanced Metering Infrastructure -> Messaging -> Define Messages**.

## ISU\_AMI\_2: Disconnection/Reconnection (new)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE) business function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can carry out the following functions:

#### **Carry out remote disconnection and reconnection of advanced metering infrastructure (AMI) devices**

You can use the system to disconnect and reconnect AMI devices remotely, thereby eliminating the requirement for a technician to manually disconnect these devices at the source. You can also carry out reversals (cancellations) of remote disconnections or remote reconnections.

If the order involves a remote disconnection or reconnection, validations are performed to ensure that:

- o Only one AMI device is part of a disconnection or reconnection order
- o AMI and non-AMI devices are not part of the same order if the AMI device is selected for remote disconnection or reconnection.
- o PM *Plant* and *Order* codes are not filled when creating remote disconnection or reconnection orders

#### **Disconnection and reconnection mass activities**

You can execute the following *mass activities*:

- o multiple remote disconnection or remote reconnection requests (AMI meters)
- o multiple remote disconnection or remote reconnection reversals (AMI meters)
- o rescheduling of multiple disconnection or reconnection requests for both AMI and classical meters

#### **Monitoring report**

You can run a monitoring report that displays the status of disconnection and reconnection requests made for both AMI and classical meters.

#### **Create customer notification work items**

You can configure the system to create a customer notification *work item* when a disconnection or reconnection order is saved. SAP CRM agents use work items to contact their customers and inform them of an upcoming disconnection or reconnection.

No work items are generated when the agent creates disconnection or reconnection orders directly in CRM.

#### **Manage worklists for customer notifications**

You can create and manage worklists used for the processing of notifications related to disconnection and reconnection of services.

#### **Indicate that a device information record is remotely disconnectable or reconnectable**

If you indicate that a device information record is AMI-relevant, the system will automatically allow it to be remotely disconnected or reconnected. However, you can prevent remote disconnection or reconnection by implementing a validation within BAdI ISU\_AMI\_DISCONNECT.

### Note

AMI functionality is only available when you implement the BAdI *ISU\_AMI\_DISCONNECT*.

### Effects on Existing Data

#### **No integration of remote disconnection or reconnection activities into SAP Business Workflow Processes**

You cannot integrate activities that feature remote disconnection and reconnection of AMI devices into SAP Business Workflow processes, since this would conflict with the direct communication processing used for these devices.

Therefore, if you implement workflows, you need to adjust your operating procedures to manually execute workflow steps related to such remote disconnection and reconnection activities.

**No change to existing fields and functionality**

All existing fields and functionality remain unchanged, and the existing functionality still works for all cases, including those that involve AMI devices.

**Effects on System Administration**

The new authorization object **E\_DISC\_AMI** allows you to define a user's access to request, reschedule and reverse (cancel) remote disconnections and reconnections.

**Effects on Customizing**

New entries have been added to the *Confirmation Status* table in the **Define Confirmation Status** Customizing activity, to account for the new remote disconnection and reconnection confirmation statuses.

In addition, new sections entitled *Notification Processing*, *Presettings for Advanced Meters*, and *Rescheduling* have been added to the **Define Processing Variants for Disconnection Documents** Customizing activity.

**See also**

For more information on managing worklists for notifications, refer to the release note **Managing Worklists for Notifications**

## ISU\_AMI\_2: Managing Worklists for Notifications (new)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can create work items and worklists for processing notifications related to disconnection and reconnection of services. To be able to do so, you have to create organizational units in Contract Accounts Receivable and Payable, and assign the following standard tasks to them:

- o 21400001 - Disconnection notification agent
- o 21400002 - Disconnection notification group
- o 21400003 - Disconnection notification department

You can create a simple model using the report **Create Organizational Model in ERP**.

To have automatic assignment when work items are created, you have to enter the responsibilities. On the SAP Easy Access screen, choose *Utilities Industry -> Customer Service -> Process Execution -> Disconnection/Reconnection -> Work Item Management*:

- o *Responsibility Maintenance for Agent*
- o *Responsibility Maintenance for Group*
- o *Responsibility Maintenance for Department*

To manage work items and worklists, you use the new transaction *Manage Worklists for Disconnection Notifications*. In this transaction, the manager of a department or group can perform the following tasks:

- o Create worklists manually
- o Change attributes of a worklist
- o Display work items
- o Assign work items to new processors or groups
- o Change the starting time of work items

You can temporarily release additional users for managing worklists, without having to change the organizational model. To do so, on the SAP Easy Access screen, choose *Periodic Processing -> For Contract Accounts -> Dunning Notice -> Areas of Responsibility -> Define Additional Department or Group Head*.

The work items are processed in the SAP CRM system in Financial Customer Care.

You can temporarily release additional users for processing worklists, without having to change the organizational model. To do so, on the SAP Easy Access screen, choose *Periodic Processing -> For Contract Accounts -> Dunning Notice -> Areas of Responsibility -> Define Additional Specialist*.

## ISU\_AMI\_2: BI Content (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE) business function **Advanced Metering Infrastructure 1** (ISU\_AMI\_2) you can use the following modified and new BI objects:

### Modified DataStore Objects

- o Profiles - Detail Data (Technical name: 0UC\_PRFDS)  
This DataStore objects (DSO) contains the new field 0UC\_MDUSLOC to indicate whether or not profile values are located in an MDUS system.
- o Disconnection/Reconnection Activity Data (Technical name: 0UCAMDS01)  
This DSO contains the new fields for disconnection orders stored in the ERP table EDISCACT.

### New DataStore Objects

- o AMI Log Data (Technical name: 0UCAMDS02)  
This DSO contains log data for service communication in the AMI environment.
- o AMI LOG MSG (Technical name: 0UCAMDS03)  
This DSO contains messages for AMI communication (TEAMI\_LOG\_DATA).

### New InfoObjects

- o Flag: Approval Required (Technical name: 0UCAPPREQ)  
This characteristic is used to indicate if an approval is required for disconnection/reconnection orders.
- o Approved Date (Technical name: 0UCAPPDAT)  
This characteristic shows the approved date of disconnection/reconnection orders.
- o Approved Time (Technical name: 0UCAPPTIM)  
This characteristic shows the approved time for the disconnection/reconnection orders.
- o Approval Date (Technical name: 0UCDISAPPD)  
This characteristic shows the approval date of disconnection/reconnection orders.
- o Approval Time (Technical name: 0UCDISAPPT)  
This characteristic shows the approval time of disconnection/reconnection orders.
- o Approval Agent (Technical name: 0UCAPPAGENT)  
This characteristic shows the approval agent of disconnection/reconnection orders.
- o Approval Source (Technical name: 0UCAPPSRC)  
This characteristic shows the approval source of disconnection/reconnection orders.
- o Flag: Remote Disc/Reconn (Technical name: 0UCDISCRMT)  
This characteristic indicates if the device is capable of remote disconnection/reconnection.
- o AMI Request ID (Technical name: 0UCAMIRQID)  
This characteristic shows the AMI request ID of disconnection/reconnection orders sent to the MDUS system.
- o Internal Number of AMI Log Entry (Technical name: 0UC\_AMILGID)  
This characteristic shows the AMI log ID.
- o Object Category of Log Entry (Technical name: 0UC\_LGOBTY)  
This characteristic describes the object category of the log entry.
- o Object Key (Technical name: 0UC\_LGOBKY)

This characteristic describes the object key of the log entry.

- o Secondary Object Category of Log Entry (Technical name: 0UC\_LGOBTY2)  
This characteristic describes the secondary object category of log entry.
- o Direction of Data Transfer (Technical name: 0UC\_TRSDIR)  
This characteristic indicates the direction of data transfer of log data.
- o Communication Action (Technical name: 0UC\_AMIACT)  
This characteristic describes the communication action of the log entry.
- o Process Status (Technical name: 0UC\_PROSTAT)  
This characteristic describes the process status of the log entry.
- o Outbound: UTC Time Stamp (Technical name: 0UC\_STMPOUT)  
This characteristic shows the outbound UTC time stamp of the log entry.
- o Inbound: UTC Time Stamp (Technical name: 0UC\_STMPIN)  
This characteristic shows the inbound UTC time stamp of the log entry.
- o Text, 40 Characters Long (Technical name: 0UC\_AMLGMSID)  
This characteristic shows the message ID of the log entry.
- o Profile values located in MDUS (Technical name: 0UC\_MDUSLOC)  
This characteristic indicates whether or not profile values are located in the MDUS system.

## ***Business Function Utilities, Contract Accounts Receivable and Payable*** **1**

### **ISU\_CA\_1: Business Function Utilities, Contract Accounts Receivable and Payable** **1**

#### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension Utilities, Waste & Recycling (IS-UT 605), the business function Utilities, Contract Accounts Receivable and Payable 1 (ISU\_CA\_1) is available.

You can use this business function to do the following:

- o Process multiple credit memos at the same time in a single step in credit processing (for example, pay, transfer, pay by check, or write off).
- o Process the reversal of a cash desk closing using enterprise *serviceCashPointClosingDocumentERPCancelNotification\_In* as part of the external cash desk services.
- o Send data in information container types, which you transfer for each XI message, using *Web Services Reliable Messaging (WS-RM)* for asynchronous enterprise services.
- o Set clearing priorities for original items from installment plans on receipt of payment.
- o Aggregate reconciliation keys under a single reconciliation key before transfer to the general ledger.
- o Use contract accounts receivable and payable and *SAP Credit Management* in a single or multiple system landscape without an XI server.
- o Extract promises to pay for Business Intelligence.
- o Post withholding tax with the vendor bill.
- o Outsort the meaning of the **Reference Details** field from the contract for specific industries using the **subapplication**.
- o Update external tax systems such as VERTEX, TAXWARE, or SABRIX in parallel.
- o Display open and not yet due items by due date and post the respective reclassifications.
- o Record BRF traces in Collections Management to monitor decisions in the Business Rules Framework (BRF).
- o Use new enterprise services for business objects *Cash Point* and *Promise to Pay*.
- o Generate work items and work lists for processing customer notifications during disconnections and reconnections.
- o Distinguish between bank clearing accounts for payment lots and distribution lots.

For more information, see the following release notes:

- o **Archiving**
- o **Closing Operations**
- o **Collections Management**
- o **Credit Clarification**
- o **New Events**
- o **External Cash Desk Services**
- o **Information Container**



- o **Deferral and Installment Plan**
- o **Integration**
- o **Mass Activities**
- o **Subapplication in Contract Accounts Receivable and Payable**
- o **Update for External Tax Systems**
- o **Withholding Tax**
- o **Enterprise Services**
- o **Doubtful Entries and Individual Value Adjustments**
- o **Extraction of Promise to Pay Data**
- o **Disconnection/Reconnection**
- o **Bank Clearing Accounts for Payment and Distribution Lots**

**See also**

SAP Library for SAP ERP on SAP Help Portal at <http://help.sap.com/erp> under *SAP ERP Enhancement Packages -> ERP Central Component*

Enhancement Package 5 -> Business Functions (SAP Enhancement Package 5 for SAP ERP 6.0) -> Business Functions in SAP ERP -> Industry Business Function Sets -> Utilities -> Utilities, Contract Accounts Receivable and Payable 1.

## Archiving (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can use a new enhancement in Contract Accounts Receivable and Payable in the area of archiving totals records for external payment information (archiving object **FI\_MKKEXCS**).

When archiving totals records, the system now automatically archives table **DFKKEXC\_SUM\_HIST** (history) as well.

### Enhancement of the FI-CA document archiving object (FI\_MKKDOC)

If telecommunications tax data exists for an FI-CA document, then you have to archive this data before archiving the FI-CA document.

### Enhancement of the contract account archiving object (FI\_FICA)

During archiving, the charges and discounts for the relationship between the contract account and partner (table FKKVKP\_CHGDISC) are also archived.

In addition, the following new archiving objects are available.

### New archiving object: reconciliation key

You can archive reconciliation keys using the new archiving object **FI\_MKKSUM**. The prerequisites for archiving are described in the documentation of report **RFKKSUMAR01** (see SAP Easy Access screen: **Periodic Processing -> Archive Data**).

### New archiving object: credit card supplements

You can archive credit card supplements using the new archiving object **FI\_MKKPCARD**. The prerequisites for archiving are described in the documentation of report **RFKKPCARDAR01** (see SAP Easy Access screen: **Periodic Processing -> Archive Data**).

### New telecommunications tax archiving object

You can archive telecommunications tax data using the new archiving object **FI\_MKKUSTX**. The prerequisites for archiving are described in the documentation of report **RFKKUSTAXAR01** (see SAP Easy Access screen: **Periodic Processing -> Archive Data**).

### New Archiving Object: Worklists for Disconnection Notifications

You can archive worklists for disconnection notifications using the new archiving object **FI\_MKKWLA**. The prerequisites for archiving are described in the documentation of report **RFKKWLAAR01** (see SAP Easy Access screen: **Periodic Processing -> Archive Data -> Worklists for Disconnection Notifications**).

### New Archiving Object: Notification Work Item

You can archive notification work items using the new archiving object **FI\_MKKWLIA**. The prerequisites for archiving are described in the documentation of report **RFKKWLIAAR01** (see SAP Easy Access screen: **Periodic Processing -> Archive Data -> Notification Work Items**).

### Effects on Customizing

Enter the residence times and activate the archiving information structure for **reconciliation keys** in Customizing for Contract Accounts Receivable and Payable under **Basic Functions -> Postings and Documents -> Archiving**.

Enter the residence times and activate the archiving information structure for **payment card supplements** in Customizing for Contract Accounts Receivable and Payable under **Business Transactions -> Payments -> Archiving**.

Enter the residence times and activate the archiving information structure for **telecommunications tax** in Customizing for Contract Accounts Receivable and Payable under **Basic Functions -> Telecommunications Taxes -> Archiving**.

## Closing Operations (New)

### Use

#### *Reclassification by Due Date*

As of SAP enhancement package 5 for SAP ERP 6.0, you can display open but not yet due items according to their due date in Contract Accounts Receivable and Payable, and post reclassifications for these items. It is also possible for the system to consider installment plans when determining the due date. In that case, the due date of an assigned installment overrides the original due date of the open item.

### Effects on Customizing

You can enter the G/L accounts you want to use as adjustment accounts and target accounts. You enter this for each company code, G/L account, and grid interval. In Customizing for Contract Accounts Receivable and Payable, choose **Closing Operations -> Reclassifications -> Define Adjustment Accounts for Reclassification by Due Date**.

## Collections Management (New)

### Use

#### *BRF Traces*

As of SAP enhancement package 5 for SAP ERP 6.0, you can record BRF traces. Using a BRF trace, you can, in individual cases, interpret decisions of the Business Rules Framework (BRF), and based on this you can make targeted adjustments to the check rules in the Business Rules Framework (BRF).

You trigger the recording of a BRF trace in the dunning proposal run by setting the **Trace Active** indicator on the **Dunning Parameters** tab page. (On the SAP Easy Access screen, choose **Periodic Processing -> For Contract Accounts -> Dunning -> Dunning Proposal Run.**)

To ease the load on your database, enter an amount of time after which the BRF trace is released to be deleted. Enter this in the **Days Until Trace Deleted** field. Based on the number of days you enter, the system determines the date the trace expires and stores this date in the trace data record. The system automatically proposes 30 days. However, you can change this value. If you do not enter a value, the system automatically sets the expiration date to December 31, 9999.

Once the expiration date has been reached, the system deletes the BRF trace automatically the next time the dunning proposal run is executed.

In the case of BRF traces with the expiration date December 31, 9999, the system never deletes them automatically. It is only possible for you to delete these BRF traces manually. On the SAP Easy Access screen, choose **Periodic Processing -> Delete Data -> BRF Traces**. You can also use the same transaction to directly delete BRF traces that do have an expiration date.

You can display recorded BRF traces using these methods:

- o Using the report **Collections Management: Display BRF Trace**  
On the SAP Easy Access screen, choose **Periodic Processing -> For Contract Accounts -> Dunning -> By Collection Strategy -> Display BRF Traces**.
- o In the dunning proposal run  
You can also call the report directly in the dunning proposal run. Enter the date ID and the run ID of the run you want. Choose the @10@ **Trace** pushbutton on the **Dunning Parameters** tab page.
- o In the dunning history  
To access the dunning history from the dunning proposal run, in the menu choose **Environment -> Dunning History**. Or on the SAP Easy Access screen, choose **Account -> Further Information**. Then in the history display, choose the @10@ **Trace** pushbutton. Or from the menu, choose **Goto -> Display BRF Trace**. Here you can display BRF traces using different selections. You can select by dunning proposal run using the date ID and run ID. Or you can display for business partners, contract account groups, collection steps, and collection strategies.  
Displaying for contract accounts and business partners is only possible here if the system has actually generated dunning headers.

If the system did not generate any dunning notices, you can access the above report only by means of the BRF trace.

#### *Updating Collection Strategies*

As of SAP enhancement package 5 for SAP ERP 6.0, you can update collection strategies at the master data level (contract account, contract account group, contract, contract group). To do so, on the SAP Easy Access screen, choose **Periodic Processing -> For Contract Accounts -> Dunning -> By Collection Strategy -> Update Collection Strategies**.

You have two options. You can explicitly enter which collection strategy in the master data you want to replace with a new strategy. Or you can enter a test series that the run uses to replace the collection strategy.

On the SAP Easy Access screen, by choosing **Periodic Processing -> For Contract Accounts ->**

**Dunning -> By Collection Strategy -> Edit Updated Collection Strategies**, you can

- o Display the log for an update run
- o Run an update run again in the case of errors
- o Reverse an update run

## Credit Clarification (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can use additional functions for processing credits (SAP Easy Access screen: **Account -> Process Credits**). This includes simultaneous processing of multiple credits in one step for all allowed functions, such as, payment, transfer, payment by check, and write-off.

In addition, you can now enter partial amounts in all credit processing processes. For example, you can pay out different partial amounts of different items together in one step by creating a repayment request for them.

In credit clarification (SAP Easy Access screen **Payments -> Credit -> Clarification**), it is not possible to clarify multiple clarification cases at the same time (the individual clarification cases have and retain their own status management); however, you can enter partial amounts there.

The function brings the following changes in the individual processes:

- o **Payment**  
The system creates a repayment request for all selected items that have the same account assignments for **Segment, Business Area** and **Profit Center**. If the mentioned account assignments are different for the different selected items, then the system creates multiple repayment requests accordingly.  
To have the payment run process the repayment requests, you have to set the **Repayment Requests** indicator in the payment run parameters (as usual).
- o **Transfer**  
The system does not effect the changes to the selected items (entries of bank details and payment method) using document changes. Instead, the system creates a payment specification for all selected items, and notes the entered payment data in the header of the payment specification. To have the payment run select and process these payment specifications later, you have to set the **Payment Specifications** indicator in the parameters for item selection in the payment run.
- o **Check**  
The system creates a repayment request for all selected items.
- o **Write-Off**  
The system writes off the entered (partial) amounts of all selected items together.
- o **Clearing**  
The system clears the entered (partial) amounts of all selected items against the open items of the business partner, the contract account, or the contract.  
The system displays the selected open items and activates the selected items. Then you can activate any applicable additional items in dialog mode and thereby clear the credit.
- o **Business Partner Transfer**  
The system transfers the entered (partial) amounts of all selected items to the specified business partner.
- o **General Ledger Transfer**  
The system transfers the entered (partial) amounts of all selected items to the general ledger account that you entered using the short account.

### Effects on Customizing

You activate credit processing in Customizing for Contract Accounts Receivable and Payable under **Basic Functions -> Postings and Documents -> Basic Settings -> Maintain Central Settings for Posting** by setting the **Enhanced Credit Processing** indicator.

## New Events

### Use

As of SAP ERP 6.0, Enhancement Package 5, you can use the following new events:

- o **0066**: Posting: Add Expense/Revenue Account for Cash Flow Analysis
- o **0191**: Promise to Pay: Determine Extraction Date
- o **0337**: Dunning: Dunning Run Schedule for Simulation
- o **0410**: Telecommunications Tax (U.S.A.): Account Determination and Assignment
- o **0413**: Update Telecommunications Tax (U.S.A.) in External System
- o **0413**: Calculate Telecommunications Tax (U.S.A.) in External System
- o **0415**: Determination of Telecommunications Tax (U.S.A.) at Write-Off
- o **0450**: Promise to Pay: Proposal (Inbound XI Interface)
- o **0451**: Promise to Pay: Proposal (Outbound XI Interface)
- o **0452**: Promise to Pay: (Inbound XI Interface)
- o **0453**: Promise to Pay: (Outbound XI Interface)
- o **0454** : Promise to Pay: Proposal Query (Inbound XI Interface)
- o **0455**: Promise to Pay: Proposal Query (Outbound XI Interface)
- o **0456**: Promise to Pay: Query (Inbound XI Interface)
- o **0457**: Promise to Pay: Response (Outbound XI Interface)
- o **0946**: G/L Transfer: Determine Default Jurisdiction Codes
- o **1032**: Mass Contract Maintenance: Update of Collection Strategy
- o **1033**: Check of Master Data Group for Updating Collection Strategy
- o **1034**: Work Item: Display of Additional Fields
- o **1035**: Collections: Reprioritization of a Work Item
- o **1350**: Mass Activity: Update of Delta Queue
- o **1379**: BRF: Define Customer-Specific Context Object
- o **1792**: Mass Activity: Delete Run Parameters
- o **1855**: Mass Activity: Credit Score Comparison: Current <-> Replication
- o **1856**: Mass Activity: Credit Score Comparison: Current <-> Replication (Param.)
- o **1890**: Mass Activity: Update External Tax System
- o **1891**: Mass Activity: Update External Tax System (Postpone)
- o **2692**: INV: Mass Activity: Creation of Periodic Invoicing Orders
- o **2693**: INV: Mass Activity: Move Periodic Invoicing Order Parameters
- o **2772**: INV: Check Reversal of Billing Documents
- o **2774**: INV: Change Customer-Specific Fields in Billing Reversal Document
- o **2778**: INV: Transfer Finished Billing Reversal with Document Number

- o **2814:** ICWC Document for Adjustment Request: Adjustment of Items
- o **2827:** ICWC Document Reversal: Change Profile
- o **4509:** Credit Management: Enhancement of Standard Key Figures
- o **4510:** Credit Management: Fill Customer-Defined Key Figures
- o **4511:** Credit Management: Update of Trigger for Key Figures
- o **4614:** CreditManagementAccountERPPaymentBehaviourSummaryByDebtorPar
- o **5800:** Master Data Transfer: Check Authorization (Display)
- o **5801:** Master Data Transfer: Check If Transfer Is Allowed
- o **5802:** Master Data Transfer: Determine Contract Objects
- o **5803:** Master Data Transfer: Determine Target Contract Account
- o **5804:** Master Data Transfer: Display Tree Structure (Name)
- o **5805:** Master Data Transfer: Change Contract Account (Partner-Specific Data)
- o **5806:** Master Data Transfer: Transfer Contract to Contract Account
- o **5807:** Master Data Transfer: Follow-On Activities
- o **5808:** Master Data Transfer: Activation
- o **6206:** External Cash Desk Services: Select Contract Account
- o **6515:** Requests: Change of Data Before Transfer
- o **8112:** BIX: Filter and Check Selection of Billable Items
- o **8114:** BIX: Create and Check Billing Unit
- o **8120:** BIX: Enrich Billable Items for Each Billing Unit
- o **8125:** BIX: Creation of Customer-Specific Billing Document Items
- o **8135:** BIX: Check and Enrich Billing Document
- o **8137:** BIX: Transfer Finished Billing Document (w/o Document No.)
- o **8139:** BIX: Transfer Finished Billing Document (with Document No.)
- o **8170:** BIX: Enrich Transfer of One-Off Charges (Main Items)
- o **8171:** BIX: Enrich Transfer of One-Off Charges (Payment Data)
- o **8180:** BIX: Mass Activity: Create Billing Documents
- o **8181:** BIX: Mass Activity: Postpone Billing Parameters
- o **8185:** BIX: Mass Activity: Create Billable Items

### Effects on Customizing

You enter installation-specific function modules in Customizing for Contract Accounts Receivable and Payable under **Program Enhancements -> Define Customer-Specific Function Modules**.



## External Cash Desk Services (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can use the new enterprise service **CashPointClosingDocumentERPCancelNotification\_In** to process reversals of cash desk closings (sent using the notification **CashPointClosingDocumentNotification\_In**).

This enables you to reverse a cash desk closing that was transmitted incorrectly by the front end, so that you can replace it with the correct cash desk closing that was sent subsequently.

### Example

1. An external cash desk (front end) sends 10 messages with payments for a total amount of 500 to the SAP system (back end).
2. At the end of the day, you receive a cash desk closing message for 495 from this external cash desk.
  - i. You receive a message for each cash desk, branch, and grouping key.
3. The system records the reported cash desk closing in tables DFKKEXC\_SUM and DFKKEXC\_SUM\_HIST.
4. The system recognizes the difference of 5 between the amounts. On the **Monitor for External Cash Desk Services** screen, on the **Overview** tab page, the system displays a payment amount of 500 for the reported payments. It also shows a reconciliation amount of 495 for the reported cash desk closing.
  - i. On the **Agent Postings** tab page, the system displays a payment amount of 495 for the reported cash desk closing, and a **Difference to be assigned** of 5.
  - ii. Due to the difference between the amount of the reported payments and the cash desk closing, you cannot post a receivable to the agent account (agent posting).
5. The external cash desk now sends you a message for reversing the cash desk closing in the amount of 495.
6. In table DFKKEXC\_SUM (totals records for external payment information), the system sets reconciliation status **C** for the reversed cash desk closing. In table DFKKEXC\_SUM\_HIST (cash desk closing history), the system records the reversal of the cash desk closing, also with reconciliation status **C**.
7. The **Overview** tab page of the **Monitor for External Cash Desk Services** now displays a payment amount of 500 for the reported payments, but no longer shows a reconciliation amount. On the **Agent Postings** tab page, the system displays the following for the reported cash desk closing: the payment amount of 495 with reconciliation status **C (Totals Record Reversed)**, and a **Difference to be assigned** of 500.
8. After that, the external cash desk sends you another cash desk closing message – now with the correct amount of 500.
9. The system records the reported cash desk closing in tables DFKKEXC\_SUM and DFKKEXC\_SUM\_HIST.
10. The **Overview** tab page of the **Monitor for External Cash Desk Services** now displays a payment amount of 500 for the reported payments.
  - i. On the **Agent Postings** tab page, the system displays a payment amount of 500 for the reported cash desk closing, and no longer shows a **Difference to be assigned**.
11. Now you can enter the agent posting. On the SAP Easy Access screen, choose **Payments -> External Cash Desk Services -> Post Agent Receivable**.

You also have the option of correcting the cash desk closing manually in the Monitor for External Cash Desk Services.

**Example**

1. An external cash desk (front end) sends 10 messages with payments for a total amount of 500 to the SAP system (back end).
2. At the end of the day, you receive a cash desk closing message for 495 from this external cash desk.
  - i. You receive a message for each cash desk, branch, and grouping key.
3. The system records the reported cash desk closing in tables DFKKEXC\_SUM and DFKKEXC\_SUM\_HIST.
4. The system recognizes the difference of 5 between the amounts. On the **Monitor for External Cash Desk Services** screen, on the **Overview** tab page, the system displays a payment amount of 500 for the reported payments. It also shows a reconciliation amount of 495 for the reported cash desk closing.
  - i. On the **Agent Postings** tab page, the system displays a payment amount of 495 for the reported cash desk closing, and a **Difference to be assigned** of 5.
5. You notice the discrepancy and contact the branch. The employee there informs you that the cash desk closing was for 500 and that only the message contains the wrong amount.
6. On the **Overview** tab page of the **Monitor for External Cash Desk Services**, you select the affected entry and choose the **@OZ@ Cash Desk Closing** pushbutton.
7. In the dialog box that appears, you change the item total of the grouping key to 500 and confirm your entry.
8. The system records the cash desk closing with reconciliation status **U (Updated Manually)**, both in table DFKKEXC\_SUM (totals records for external payment information) and in table DFKKEXC\_SUM\_HIST (cash desk closing history).
9. Now you can enter the agent posting. On the SAP Easy Access screen, choose **Payments -> External Cash Desk Services -> Post Agent Receivable**.

In the **Monitor for External Cash Desk Services**, you can choose the **@HJ@ History of Cash Desk Closing** pushbutton on the **Overview** and **Agent Postings** tab pages to analyze changes made to the cash desk closing. This means that you can see the XI messages received for a cash desk closing, and you can see any changes made manually. To do so, select an entry in the list and choose the **@HJ@ History of Cash Desk Closing** pushbutton. As long as the history recorded data for the selected entry (for the combination of branch, cash desk, and grouping key), the system displays this data.

## Information Container (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, for data in information container categories that you transfer by XI message, you can now also send this data using Web Services Reliable Messaging (WSRM) for asynchronous enterprise services.

The WSRM send type is available for the following information container categories:

- o 0001 (returns) with service operation PaymentReturnERPOccuredBulkNotification\_Out
- o 0002 (clearing and clearing resets) with service operation ContractAccountReceivablesPayablesRegisterERPSubscribedItemBulkNotification\_Out

To make it possible to send using WSRM, you have to configure the send type in Customizing. In addition, you have to configure the following service groups in SOAMANAGER:

- o FKK\_PAYRETBULKOCNO for information container category 0001
- o FKK\_CARPRSUBSCRITEMBULKNO for information container category 0002

The recipient field of the information container is used for logical determination of the recipient in SOAMANAGER. You can determine the values for the recipients of an information container entry in a function module entered for event **3701**.

If you have implemented your own information container categories and you want to send the related enterprise service using WSRM, then you have to implement the new method SEND\_VIA\_WSRM of interface IF\_FKK\_INFECO\_TYPE accordingly.

### Effects on Customizing

Configure the send type for WSRM in Customizing for Contract Accounts Receivable and Payable under *Integration -> Information Container -> Make Settings for Information Container Categories*.

## Deferral and Installment Plan (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can influence the priority with which original items of installment plans are cleared when payments are received.

You can now assign numerical values to the original items when you create an installment plan. These numbers specify the **clearing priority for the original items of the installment plan** when payments are received later.

### Effects on Customizing

Set the **ClrPriority** (clearing priority) indicator in Customizing for Contract Accounts Receivable and Payable under **Business Transactions -> Deferral and Installment Plans -> Activate Additional Installment Plan Enhancement**.

## Integration (New)

### Use

#### *Transfer to General Ledger Accounting: Aggregation of Reconciliation Keys*

Mass activities with jobs running in parallel, in which documents are posted, use a separate reconciliation key for each job. As of SAP enhancement package 5 for SAP ERP 6.0, you can aggregate these reconciliation keys under a single reconciliation key (aggregation key) before the transfer to general ledger accounting. As a result, you transfer only the totals records of the aggregation key. This enables you to reduce the number of posting items in the general ledger.

You have two options. You can set up automatic aggregation in Customizing that is then applied when the mass activity is run. Or you can request a manual aggregation after the mass activity is run. On the SAP Easy Access screen, choose **Document -> Reconciliation Key -> Aggregate**.

#### *Reconciliation Between Open Items and G/L*

As of SAP enhancement package 5 for SAP ERP 6.0, you can link the reconciliation report RFKKOP10 to the SAP Solution Manager to be able to monitor the status of the reconciliation with the general ledger there (see SAP Easy Access screen: **Periodic Processing -> Forward Postings -> Reconciliation -> Reconcile Open Items**).

#### *Integration with SAP Credit Management: Web Services Reliable Messaging*

As of SAP enhancement package 5 for SAP ERP 6.0, you can use Contract Accounts Receivable and Payable and SAP Credit Management in a single or multiple system landscape without an XI server. This means that you can connect an instance of Contract Accounts Receivable and Payable directly with SAP Credit Management without using an XI server. Contract Accounts Receivable and Payable and SAP Credit Management can be running in the same system or in separate systems.

The prerequisite for this is as follows: You have installed enhancement package 5 for both Contract Accounts Receivable and Payable and SAP Credit Management, and you activated the business function FSCM Functions 3 (FIN\_FSCM\_CCD\_3). Activating a business function in Contract Accounts Receivable and Payable is not a requirement.

You set up the connection between SAP Credit Management and Contract Accounts Receivable and Payable by configuring the appropriate endpoints and logical ports in SOA Manager.

Message exchange takes place using Web Services Reliable Messaging (WS-RM), which guarantees the transfer of messages and monitors the correct sequence of incoming messages.

#### *Integration with SAP Credit Management: Transferring Key Figures of Contract Accounts Receivable and Payable*

As of SAP enhancement package 5 for SAP ERP 6.0, you can use the asynchronous service CreditPaymentBehaviourSummaryNotification\_Out to transfer key figures from Contract Accounts Receivable and Payable to SAP Credit Management. Up to now, this service was sent using the mass activity **Transfer Credit Data** (on the SAP Easy Access screen, choose **Periodic Processing -> Forward Data to SAP Credit Management**). However, the system also fills the PropertyValuation of the service, in which the characteristics of the individual key figures are filled. You define in Customizing which key figures you want to transfer.

The **Transfer Credit Data** mass activity now also transfers business partners who have negative payment behavior. In event **4511** you can specify the time period in which business partners are transferred.

The system can calculate the following standard key figures and transfer them to SAP Credit Management:

- o Open items
- o Payment methods
- o Payments
- o Collections
- o Dunning notices
- o Days Sales Outstanding (DSO)
- o Promises to pay
- o Returns
- o Deferrals and installment plans
- o Write-offs

You can add your own data to these standard key figures in event **4509**.

In addition, in event **4510** you can also define your own key figures, fill them, and then send them along with the standard key figures using the PropertyValuation of the service to SAP Credit Management.

In SAP Credit Management there is a new synchronous service `CreditManagementAccountERPPaymentBehaviourSummaryByDebtorPartyQueryResponse_In`. This service also contains the PropertyValuation. If the service calls Contract Accounts Receivable and Payable from SAP Credit Management, then the system calculates the key figures to be transferred.

*Integration with SAP Credit Management: Compare Creditworthiness*

If monthly credit weighting was specified in Customizing for Contract Accounts Receivable and Payable, and the credit score of the business partner changes, this information does not arrive automatically in SAP Credit Management. Therefore, the credit score of the business partner changes over time in Contract Accounts Receivable and Payable, but the business partner does not receive a new creditworthiness entry in SAP Credit Management. As of SAP enhancement package 5 for SAP ERP 6.0, using the mass activity **Compare Score with Last Replication**, you can identify business partners whose credit score has changed since the last replication in SAP Credit Management (on the SAP Easy Access screen: **Periodic Processing -> Forward Data to SAP Credit Management -> Compare Credit Score**). The mass activity identifies the business partners for which you have to transfer data again. The actual transfer is made (as before) using the mass activity **Replication of Score** (see SAP Easy Access screen: **Periodic Processing -> Forward Data to SAP Credit Management -> Replicate Creditworthiness**).

*Integration with Funds Management*

If you use the fund as a balancing unit in the general ledger, then event 0032 no longer generates zero balance items in Contract Accounts Receivable and Payable. Instead, the system generates the zero balance items for each fund; this is done directly in the general ledger when the postings are transferred from Contract Accounts Receivable and Payable to the general ledger.

## Effects on Customizing

*Transfer to General Ledger Accounting: Aggregation of Reconciliation Keys*

If you want the system to perform aggregation automatically when a mass activity is run, then enter the necessary **reservation objects** in Customizing for Contract Accounts Receivable and Payable under **Integration -> General Ledger Accounting -> Specify Aggregation of Reconciliation Keys**.

*Integration with SAP Credit Management: Transferring Key Figures from Contract Accounts Receivable and Payable*

You make settings for transferring key figures from Contract Accounts Receivable and Payable to SAP Credit Management in Customizing for Contract Accounts Receivable under **Integration -> Financial Supply Chain Management -> Credit Management -> Key Figures in the following activities**:

- o **Key Figures for Transfer to Credit Management**
- o **Define Specifications for Key Figures for Credit Management**
- o **Specify Evaluation Period for Key Figures**

## Mass Activities (New)

### Use

*Deletion of specific data of a mass activity*

You can access program RFKK\_MASS\_ACT\_PARAMETER\_DELETE on the SAP Easy Access screen under **Periodic Processing -> Administration of Mass Processing -> Delete Parameter Records**. This program deletes only entries from the following tables of the framework of mass activities:

- o FKKDIHDTMP
- o FKKDIPOTMP
- o FKKDIPOTMPCOUNT
- o FKKDIJOB
- o FKKDISTOP
- o RFDT

As of SAP enhancement package 5 for SAP ERP 6.0, you can also delete additional data when you delete parameter records by defining event 1792 accordingly.

Select the appropriate indicator on the initial screen to ensure that event 1792 is processed in program RFKK\_MASS\_ACT\_PARAMETER\_DELETE.

### Effects on Customizing

You define installation-specific function modules in Customizing for Contract Accounts Receivable and Payable under **Program Enhancements -> Define Customer-Specific Function Modules**.



## Subapplication in Contract Accounts Receivable and Payable (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, by activating a subapplication, you can control the use of the **Reference Specifications from Contract** field individually for each industry. This means that the **Contract** field can thereby relate to different contract master data in each subapplication.

The standard value for the subapplication is SPACE.

Up to now, a subapplication was already available in the industry component Public Sector Contract Accounting for real estate contracts of Flexible Real Estate Management (RE-FX).

As of SAP enhancement package 5 for SAP ERP 6.0, a subapplication for contracts of Sales and Distribution (SD) is available for the industry component Utilities.

You can use the number of the SD contract as a selection criterion in the transactions for processing incoming payments (such as, payment lot, cash desk). To do this, proceed as follows:

1. Define a selection category "SD Contract" in Customizing for Contract Accounts Receivable and Payable under **Basic Functions -> Open Item Management -> Specify Selection Categories**.
2. Enter the field name VBELN.
3. Set the indicator to designate the selection category as an external selection criterion.
4. Enter function module FKK\_SAMPLE\_0210\_VTREFSUBAPC for event 0210.

### Effects on Customizing

You activate the subapplication in Customizing for Contract Accounts Receivable and Payable under **Basic Functions -> Activate Subapplication**.

## Update for External Tax Systems (New)

### Use

#### Parallel Tax Update for External Tax Systems

In the U.S.A., external tax systems, such as VERTEX, TAXWARE, SABRIX, are frequently used for calculating taxes and for recording tax data for later tax reporting.

Up to now, the relevant tax data was updated in FI-CA using report RFYTXF00 or RFYTXU00. Using these reports, it is not possible to update the external tax systems by means of parallel processing.

As of SAP enhancement package 5 for SAP ERP 6.0, you can now update the external tax systems using a mass activity and thereby make use of parallel processing. Parallel processing assists in speeding up the update.

After you have activated this new tax update variant in Customizing, you can call the mass activity from the SAP Easy Access screen under **Periodic Processing -> Transfer Tax Data -> Update External Tax Systems**.

### Effects on Customizing

To activate the parallel update of external tax systems, in Customizing for Contract Accounts Receivable and Payable, choose **Basic Functions -> Postings and Documents -> Basic Settings -> Maintain Central Posting Settings**.

On the screen that appears, select the **Parallel Tax Update for U.S.A.** checkbox. Also see the documentation (F1 help) for this field, which contains additional technical information.

## Withholding Tax (New)

### Use

#### Withholding Tax: Posting with Invoice

Vendor withholding tax is tax that is deducted when a company pays a business partner. For this type of tax, it was previously only possible to agree that the posting was made at the time of the payment.

When this was done, the system identified the gross amount (including the withholding tax) as a liability. When the liability was paid, the system deducted the withholding tax from the payment amount, and posted the withholding tax to an account for withholding tax to be paid.

As of SAP enhancement package 5 for SAP ERP 6.0, you can already post the withholding at the time you post the vendor invoice.

#### The Posting Specifications

In the most simple example - without withholding tax - the posting of a liability would look as follows:

80.00	Liability to business partner (open item)
80.00	Expense

If we now consider 25 percent withholding tax, which we want to post directly with the invoice, the document would look as follows:

80.00	Liability to business partner, split into
	... 60.00 open subitem
	... 20.00 subitem, immediately cleared
[ 20.00]	Clearing item for withholding tax amount
80.00	Expense
20.00	Withholding tax to be paid

There is an immediate partial clearing of the liability item in the amount of the withheld tax; to offset this, the system posts the withholding tax to be paid.

In the subitem that is immediately cleared, the system enters the subitem's own document number, with the clearing reason **Withholding Tax Deduction at Time of Invoicing**.

The system supports the posting of withholding tax with the invoice even if several amounts need to be deducted by means of withholding tax supplements. This applies even if these supplements are variable, meaning that amounts or percentages can be entered directly in the line item. In these cases, the document display shows the detail data for the withholding tax supplements next to the immediately cleared subitem.

#### Withholding Tax: Posting Partially with the Invoice and Partially at Payment

You can also post the withholding tax and withholding tax supplements at different points in time. For each combination of a withholding tax code and withholding tax supplement, you can specify when the posting for the withholding tax supplement should take place:

- o At the same time as the posting of the withholding tax (standard setting)
- o Always at the time of the invoice
- o Always at the time of the payment

### Effects on Customizing

You can make all the necessary settings for withholding tax in Customizing for **Contract Accounts Receivable and Payable** under **Basic Functions** -> **Withholding Tax**.

To specify for a withholding tax indicator that posting should take place at the time of invoicing, choose the **Enter Additional Specifications for Vendor Withholding Tax** IMG activity.

Note that the setting **Posting with Invoice** for vendor withholding tax takes precedence over the general setting **Posting with Payment** that you can choose when defining the withholding tax code. The general setting **Posting with Payment** is then valid only for customer withholding tax, that is, the withholding tax that your customers can withhold when making payments to you.

If you want to specify that a withholding tax supplement for a withholding tax code is posted at a different time, then process the **Define Allowed Entries for Withholding Tax Supplements** IMG activity.

## Enterprise Services (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can access new enterprise services as XI interfaces in Contract Accounts Receivable and Payable.

The **Enterprise Service Repository** contains the following XI interfaces for software component **FI-CA** under **FI-CA 605** -> <http://sap.com/xi/FICA/Global> -> **Service Interfaces**:

#### Cash Point

*CashPointClosingDocumentERPCancelNotification\_In*

The **Enterprise Service Repository** contains the following XI interfaces for software component **FI-CA** under **FI-CA 605** -> <http://sap.com/xi/FICA/Global2> -> **Service Interfaces**:

#### Promise to Pay

*PromiseToPayERPAllowedProfileByDebtorPartyQueryResponse\_In*

- o *PromiseToPayProposalERPCreateRequestConfirmation\_In*
- o *PromiseToPayProposalERPByIDQueryResponse\_In*
- o *PromiseToPayERPCreateRequestConfirmation\_In*
- o *PromiseToPayERPByIDQueryResponse\_In*

#### Changed Interfaces

The following services can now exchange messages using Web Services Reliable Messaging (WS-RM):

*CashPointDepositERPNotification\_In*

- o *CashPointDepositERPCancellationNotification\_In*
- o *CashPointWithdrawalERPNotification\_In*
- o *CashPointWithdrawalERPCancellationNotification\_In*
- o *CashPointDifferenceERPNotification\_In*
- o *CashPointDifferenceERPCancellationNotification\_In*
- o *CashPointClosingDocumentERPCancelNotification\_In*
- o *CashPointPaymentCreateNotification\_In*
- o *CashPointPaymentReverseNotification\_In*
- o *CashPointClosingDocumentNotification\_In*

In the **Enterprise Service Repository** for software component **FI-CA** under **FI-CA 605** -> <http://sap.com/xi/FICA/Global2> -> **Service Interfaces**, the **Tax Submission ID** was added to the following XI interfaces:

- o *ContractAccountERPSPplitItemGroupByBusinessPartnerIDQueryResponse\_In*
- o *ContractAccountDownPaymentRequestERPCreateRequestConfirmation\_In*

This enhancement is only relevant for you if you are using Public Sector Contract Accounting with SAP enhancement package 5.

## Doubtful Entries and Individual Value Adjustments (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can use additional accounts with calculation type **08** when individual value adjustments are reset for the following business processes:

- o Reset due to a change to a value adjustment (reduction of the percentage of the value adjustment or of the specified value adjustment amount) for an adjusted receivable
- o Reset due to sale of an adjusted receivable
- o Reset due to reversal of an adjusted receivable

For more information on calculation types for individual value adjustments, see this **text**.

### Effects on Customizing

#### *Calculation Types for Individual Value Adjustments*

You can define the calculation type for individual value adjustment directly in Customizing for Contract Accounts Receivable and Payable under **Business Transactions -> Doubtful Items and Individual Value Adjustment -> Define Calculation Types for Individual Value Adjustments**.

## Extraction for Business Intelligence (new)

### Use

#### *Extraction of Promise to Pay Data*

You can now extract all promise to pay data to Business Intelligence (BI). You can run the extraction as a full upload, as a delta initialization with or without data, and as a delta update.

#### **Extraction structure:**

The extraction structures FKKPPBW\_DELTA and FKKPPDBW\_DELTA contain all fields that could be relevant for evaluation in BI. The DataSources 0FC\_PP (Promise to Pay Header) and 0FC\_PPD (Amount Due Per Payment Date) deliver all these fields for extraction.

#### **Full upload/Delta and initialization without data:**

Extractor FKK\_BW\_P2P supports selection of entered dates in full upload or Deltainit modes, and transfers promise to pay data from the ERP system to the BW system.

#### **Delta update:**

Transactions that create, change, replace, withdraw, reactivate, evaluate, approve or reject promise to pay data; such as Valuation of Promises to Pay (FP2P), and Promises to Pay of a Business Partner (FP2P1), set the trigger in trigger table DFKKP2PBW for mass activity Update Delta Queue (FPBW\_EXTRACT) to extract the data to delta queue.

The Update Delta Queue transaction is found in the SAP Easy Access menu under **Utilities Industry -> Contract Accounts Receivable and Payable -> Periodic processing -> Extraction for Business Intelligence**.

Deltainit must be executed once for the delta update function to work. The delta procedure After Image via Delta Queue (AIM) is used.

#### *Extraction of Disconnection/Reconnection Notification Workitems*

You can now extract all disconnection and reconnection notification data to Business Intelligence (BI). You can run the extraction as full upload, as a delta initialization with or without data, and as a delta update.

#### **Extraction structure:**

The extraction structure FKKWLIABW\_DELTA contains all fields that could be relevant for evaluation in BI. The DataSource 0FC\_WLIA (Disconnection/Reconnection Notification) delivers all these fields for extraction.

#### **Full upload/Delta and initialization without data:**

The extractor FKK\_BW\_WLI supports selection of entered dates and work item type in full upload or Deltainit modes, and transfers disconnection and reconnection notification data from the ERP system to the BI system.

#### **Delta update:**

Transactions that create or update disconnection or reconnection notification data; such as Dunning Proposal Run (FPVA), Dunning Activity Run (FPVB) and some operations in Financial Customer Care; set the trigger in trigger table DFKKWLIABW for mass activity Update Delta Queue (FPBW\_EXTRACT) to extract the data to delta queue. Deltainit must be executed once before the delta update. The delta procedure After Image via Delta Queue (AIM) is used.

### Effects on Customizing

Before using promise to pay extraction, you must first activate the extraction.

You can do this in Customizing for **Financial Accounting(New)** under **Contract Accounts Receivable and Payable -> Integration -> Business Intelligence -> Make Central Settings**.

#### Note

Be aware that DataSource 0FC\_PP (Promise to Pay Header) must be activated before you activate DataSource 0FC\_PPD (Amount Due Per Payment Date).

Before using Disconnection/Reconnection Notification extraction, you must first activate the extraction.

You can do this in Customizing for Financial Accounting(New) under **Contract Accounts Receivable and Payable -> Integration -> Business Intelligence -> Make Central Settings**.



## ISU\_AMI\_2: Disconnection/Reconnection (new)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (ISU\_UTIL\_WASTE) business function **Advanced Metering Infrastructure 2** (ISU\_AMI\_2), you can carry out the following functions:

#### **Carry out remote disconnection and reconnection of advanced metering infrastructure (AMI) devices**

You can use the system to disconnect and reconnect AMI devices remotely, thereby eliminating the requirement for a technician to manually disconnect these devices at the source. You can also carry out reversals (cancellations) of remote disconnections or remote reconnections.

If the order involves a remote disconnection or reconnection, validations are performed to ensure that:

- o Only one AMI device is part of a disconnection or reconnection order
- o AMI and non-AMI devices are not part of the same order if the AMI device is selected for remote disconnection or reconnection.
- o PM *Plant* and *Order* codes are not filled when creating remote disconnection or reconnection orders

#### **Disconnection and reconnection mass activities**

You can execute the following *mass activities*:

- o multiple remote disconnection or remote reconnection requests (AMI meters)
- o multiple remote disconnection or remote reconnection reversals (AMI meters)
- o rescheduling of multiple disconnection or reconnection requests for both AMI and classical meters

#### **Monitoring report**

You can run a monitoring report that displays the status of disconnection and reconnection requests made for both AMI and classical meters.

#### **Create customer notification work items**

You can configure the system to create a customer notification *work item* when a disconnection or reconnection order is saved. SAP CRM agents use work items to contact their customers and inform them of an upcoming disconnection or reconnection.

No work items are generated when the agent creates disconnection or reconnection orders directly in CRM.

#### **Manage worklists for customer notifications**

You can create and manage worklists used for the processing of notifications related to disconnection and reconnection of services.

#### **Indicate that a device information record is remotely disconnectable or reconnectable**

If you indicate that a device information record is AMI-relevant, the system will automatically allow it to be remotely disconnected or reconnected. However, you can prevent remote disconnection or reconnection by implementing a validation within BAdI ISU\_AMI\_DISCONNECT.

### Note

AMI functionality is only available when you implement the BAdI *ISU\_AMI\_DISCONNECT*.

### Effects on Existing Data

#### **No integration of remote disconnection or reconnection activities into SAP Business Workflow Processes**

You cannot integrate activities that feature remote disconnection and reconnection of AMI devices into SAP Business Workflow processes, since this would conflict with the direct communication processing used for these devices.

Therefore, if you implement workflows, you need to adjust your operating procedures to manually execute workflow steps related to such remote disconnection and reconnection activities.

**No change to existing fields and functionality**

All existing fields and functionality remain unchanged, and the existing functionality still works for all cases, including those that involve AMI devices.

**Effects on System Administration**

The new authorization object **E\_DISC\_AMI** allows you to define a user's access to request, reschedule and reverse (cancel) remote disconnections and reconnections.

**Effects on Customizing**

New entries have been added to the *Confirmation Status* table in the **Define Confirmation Status** Customizing activity, to account for the new remote disconnection and reconnection confirmation statuses.

In addition, new sections entitled *Notification Processing*, *Presettings for Advanced Meters*, and *Rescheduling* have been added to the **Define Processing Variants for Disconnection Documents** Customizing activity.

**See also**

For more information on managing worklists for notifications, refer to the release note **Managing Worklists for Notifications**

## Bank Clearing Accounts for Payment and Distribution Lots

### Use

You can now distinguish between bank clearing accounts for payment lots and for distribution lots, which avoids problems in reconciliation. If you use payment lots and distribution lots, you must define different accounts for them. You can use report **REDEREG\_DISPLAY\_PARAM\_BVRKO** to determine which bank clearing accounts are used in the service provider agreement, and to change the Customizing settings in accordance with this evaluation as described below.

When using payment and distribution lots, there can no longer be postings to identical bank clearing accounts for the same company code.

### Effects on Customizing

If you want to use bank clearing accounts for distribution lots, you must mark them as valid for this purpose under Contract Accounts Receivable and Payable -> Business Transactions -> Payments -> Processing Incoming and Outgoing Payments -> **Define Bank Clearing Accounts for Payment Lots**. This distinction between the validity of bank clearing accounts for payment and distribution lots means that when you want to use payment lots, you must maintain additional bank clearing accounts that are valid for payment lots. You also make these settings under Contract Accounts Receivable and Payable -> Business Transactions -> Payments -> Processing Incoming and Outgoing Payments -> **Define Bank Clearing Accounts for Payment Lots**.

## ***Business Function Customer Relationship Management for Utilities 1***

### **ISU\_CRM\_2: Business Function CRM for Utilities 1**

#### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling** (IS-UT 605), the business function **Customer Relationship Management for Utilities 1** (ISU\_CRM\_2) is available. This business function is primarily intended for utility suppliers who want to sell product packages in the Interaction Center WebClient.

If you activate this business function, you can use the enhancements from the integration between SAP CRM 7.0 enhancement package 1 and SAP ERP 6.0 enhancement package 5. This allows you to benefit from the extensive improvements in the sales process for residential customers and for commercial and industrial customers.

The business function **Customer Relationship Management for Utilities 1** (ISU\_CRM\_2) includes the following functions:

- o **Division-dependent replication of points of delivery**  
Division-dependent master data templates are now available for the replication of points of delivery. The points of delivery can easily be allocated to division-dependent master data templates. This is particularly beneficial for utility companies that manage more than one division in their SAP CRM system.
- o **Remote disconnection/reconnection of advanced meters**  
A new user interface is available for the customer notification process in the event of a remote disconnection or reconnection. The creation and change process for disconnections and reconnections in the IC WebClient have been changed to meet the requirements of advanced meters that can be disconnected and reconnected remotely. The process for notifying customers of a remote disconnection or reconnection has been implemented in the IC WebClient.

This mainly benefits the customer service departments of utility companies.

- o **Enhancements for prices defined in SAP CRM**  
Previously, it was not possible to process a variable number of price nodes in the master data template. However, enhancements are now available for managing dynamic prices from SAP CRM. The agent in SAP CRM can determine the number of price nodes in the master data template generator.

This functional enhancement is particularly interesting for utility companies that sell energy supply products to commercial and industrial customers.

- o **Enhancements for the replication of an alternative business partner**  
Previously it was possible to allocate utility contract items in SAP CRM to different partner functions. However, the system only took business partners allocated to the CRM contract header into account for the replication. Now, enhancements are available for processing alternative business partners in utility contracts from SAP CRM. You can now bill contracts with the correct/direct contract partner. The alternative business partner at contract item level in SAP CRM is replicated to the utility contract partner in SAP ERP.

This functional enhancement is particularly interesting for utility companies that sell energy supply products to commercial and industrial customers.

- o **Enhancements for form classes**  
Standard product information (such as product name) is now available in form classes, which are used for utility bills and welcome letters.

### **Effects on Existing Data**

To use the business function **Customer Relationship Management for Utilities 1** (ISU\_CRM\_2) you first need to activate business functions ISU\_CA\_1, ISU\_AMI\_2, ISU\_CRM\_1, and ISU\_MCOMM\_2.

## ***Business Function Utilities, Convergent Invoicing 1***

### **ISU\_INV\_1: Business Function Utilities, Convergent Invoicing 1 (New)**

#### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension Utilities, Waste & Recycling (IS-UT 605), the business function Utilities, Invoicing 1 (ISU\_INV\_1) is available.

You can use this business function to process billing documents created in Sales and Distribution (SD) directly (without having to create FI-CA sample documents) in Invoicing in Contract Accounts Receivable and Payable (FI-CA). The SD billing documents are integrated into the invoicing document for the bill display. You can also use all of the central functions of Invoicing in Contract Accounts Receivable and Payable for the open items generated for the SD billing documents. A report is also available for reconciliation between FI-CA documents and SD billing documents.

For more information, see the release note **Invoicing**.

#### **See also**

SAP Library for SAP ERP on SAP Help Portal at <http://help.sap.com/erp> under *SAP ERP Enhancement Packages -> ERP Central Component Enhancement Package 5 -> Business Functions (SAP Enhancement Package 5 for SAP ERP 6.0) -> Business Functions in SAP ERP -> Industry Business Function Sets -> Utilities -> Utilities, Invoicing 1*.

## Invoicing (New)

### Use

#### *Invoicing Function: Set Installment Plan to Due*

To be able to take the total receivable of an installment plan into account in the final invoice amount, until now you had to manually cancel the installment plan before invoicing. As of SAP enhancement package 5 for SAP ERP 6.0, you can now use the **Set Installment Plan to Due** invoicing function. Using this invoicing function, you can have the system automatically set all installments of an installment plan, which are not yet due at the time of invoicing, to have the same due date as the invoice.

In this way, you can, for example, set all receivables of an installment plan to have the same due date as the final invoice when you create the final invoice.

#### *Invoicing Function: Writing Off Receivables and Credits in Invoicing*

You can write off amounts in invoicing, for example if it is clear that the business partner will not be paying the amount, or if the costs of collection are greater than the amount to be collected. You can also use this procedure to write off credits, if it is not possible to pay them to the customer.

#### *Definition of Billing Cycles*

As of SAP enhancement package 5 for SAP ERP 6.0, you can define **billing cycles** in invoicing.

#### *Discounts at Invoice Level*

As of SAP enhancement package 5 for SAP ERP 6.0, you can calculate **discounts at the invoice level** in invoicing.

#### *Integration with Sales and Distribution (SD): Transfer of SD Billing Documents*

Up to now, you could integrate Sales and Distribution (SD) with Contract Accounts Receivable and Payable (FI-CA) by:

- o Activating direct posting of SD billing documents in FI-CA based on the customer account groups
- o Transferring SD billing documents to invoicing of the industry component Utilities (IS-U) or to invoicing in Contract Accounts Receivable and Payable  
This transfer is made using sample documents that are based on billing category **U** (billing request) of the billing type.

As of SAP enhancement package 5 for SAP ERP 6.0, the integration of Sales and Distribution (SD) with Contract Accounts Receivable and Payable (FI-CA) has been extended. You can now transfer billing documents directly to invoicing in Contract Accounts Receivable and Payable. You activate this enhanced integration in Customizing.

The transfer is based on both the customer account group and the billing type; the accounting interface in Sales and Distribution (SD) is still processed during the transfer, but no direct postings are made.

Instead of creating posting documents, the system generates special invoicing orders that can be processed by Invoicing in Contract Accounts Receivable and Payable. During invoicing, the system derives postings in FI-CA for the SD billing documents, and – as necessary – clears down payments.

The enhanced integration also offers the following functions:

- o You can print the invoicing order for an SD billing document together with the invoicing orders of other source processes in one common invoice.
- o You can use the central functions of Contract Accounts Receivable and Payable on open items that were created in invoicing from SD billing documents.  
That means that you can include open items arising from SD billing documents in various processes of Contract Accounts Receivable and Payable: dunning, interest calculation, and

automatic and manual account maintenance. The system treats open items that were created in Invoicing from SD billing documents the same as all other open items of a contract account.

*Integration with Sales and Distribution (SD): Reconciliation*

As of SAP enhancement package 5 for SAP ERP 6.0, a report is available for reconciling FI-CA documents and SD billing documents, as part of the integration of Contract Accounts Receivable with Sales and Distribution. On the SAP Easy Access screen, choose **Periodic Processing -> Reconciliation of Documents with Source Data -> Reconciliation with SD Billing Documents**.

The report determines the differences between SD billing documents and FI-CA documents, and displays an overview of the SD billing documents and the print documents and FI-CA documents generated from them.

### Effects on Customizing

*Integration with Sales and Distribution (SD): Transfer of SD Billing Documents*

You make specifications for the transfer to invoicing in Customizing for Contract Accounts Receivable and Payable under **Integration -> Sales and Distribution -> Define Posting to FI-CA for Customer Account Groups** and under **Define Settings for Transfer to Invoicing**. As an alternative, you can make these settings in Customizing for Sales and Distribution under **Billing -> Billing Documents -> Integration with Contract Accounts Receivable and Payable (FI-CA)**.

You make specifications for the derivation of controlling values from SD billing documents in Customizing for Contract Accounts Receivable and Payable under **Integration -> Invoicing in Contract Accounts Receivable and Payable -> Transfer of SD Billing Documents -> Derive Main/Sub-Transaction from SD Information** and **Derive Document Type from SD Billing Doc Data**.



## ***Business Function Billing in Contract Account receivable and payable***

### **ISU\_INV\_PP\_1: Business Function: Utilities, Billing in Contract Accounts Receivable and Payable**

#### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension Utilities (IS-UT 605), the business function ***Utilities, Billing in Contract Accounts Receivable and Payable*** (ISU\_INV\_PP\_1) is available.

You can use this business function to do the following:

- o Import billable items from various external systems into Billing in Contract Accounts Receivable and Payable and then manage, process, and bill these items in Billing.  
You use the billing process to control how the system selects the billable items and groups them into billing units. For each billing unit, the system creates a billing document for further processing in Invoicing in Contract Accounts Receivable and Payable. You use the grouping variant of the billing process to control the aggregation of billable items into billing document items.
- o Integrate Billing in Contract Accounts Receivable and Payable with SAP Convergent Charging  
SAP Convergent Charging handles the pricing of services as well as the determination of bill recipients. Billing takes on the priced items in Contract Accounts Receivable and Payable. In the subsequent processing steps, the postings necessary for creating a bill for a customer are generated in Billing and Invoicing in Contract Accounts Receivable and Payable.
- o Integrate Billing in Contract Accounts Receivable and Payable with SAP Customer Relationship Management (SAP CRM)  
You can define one-off charges in SAP CRM and transfer them to Billing in Contract Accounts Receivable and Payable as billable items. You can bill the charges in Billing and then continue processing in Invoicing in Contract Accounts Receivable and Payable.

For more information, see the following release notes:

- o **Billing**
- o **Integration of SAP Convergent Charging**
- o **One-Off Charges**

#### **See also**

SAP Library for SAP ERP on SAP Help Portal at <http://help.sap.com/erp> under ***SAP ERP Enhancement Packages -> ERP Central Component Enhancement Package 5 -> Business Functions (SAP Enhancement Package 5 for SAP ERP 6.0) -> Business Functions in SAP ERP -> Industry Business Function Sets -> Utilities -> Utilities, Billing in Contract Accounts Receivable and Payable.***

## Billing (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, you can use new enhancements in Billing for Contract Accounts Receivable and Payable. You can now import, bill, and manage billable items from various external systems.

You can continue to use the existing processes in Billing in Contract Accounts Receivable and Payable for EDR management and management of billing accounts. The new billing process is completely compatible with the solution as delivered up to now. However, to improve transparency, the structures for Customizing settings and transactions in the SAP Easy Access menu for the solution have been changed, as compared to their structure up to and including SAP enhancement package 4. The previously existing functions now appear under the heading **Billing-Account-Based Billing**.

### Import and Management of Billable Items

The following functions are available for importing and managing billable items:

- o Configuration of billable item classes  
For the configuration of the interface for the data import, a **billable item class** describes the technical attributes of the billable items.  
You define these attributes step-by-step in Customizing for Contract Accounts Receivable and Payable under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Classes -> Maintain Billable Item Classes**.
- o Generating interfaces for billable item classes  
In Customizing for Contract Accounts Receivable and Payable, you generate the objects that are necessary for the data transfer and the storage of data for a billable item class (under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Classes -> Generate Interfaces for Billable Item Classes** ). In addition to the generation itself and the log of the generation, the system creates a generation history in this Customizing activity. You can also display the generated objects.
- o Saving billable items  
By means of your configuration of the billable item class, you can have the system store billed items and simulated billed items separately on the database.  
To optimize data storage for billed items, you can define the data storage in Customizing as time-dependent (under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Management -> Make Settings for Data Storage** ).  
By entering residence times, you can delete billed items in database tables that are no longer used. On the SAP Easy Access screen, choose **Invoicing -> Delete Data -> Billed Items**.
- o Monitoring billable items  
There are functions for monitoring billable items based on their **status group**. On the SAP Easy Access screen, choose **Billing -> Monitoring**.  
In addition, you can change the status of individual billing transactions by excepting billable items from processing, or by restoring them so they can be processed.  
You can display billed items. On the SAP Easy Access screen, choose **Billing -> Document Display -> Billing Document**, and then choose the **Source Data** tab page.  
The following sample reports assist you in transferring raw data into billable items, as well as in creating test data for billable items:
  - **RFKKBIXBITSAMPLE** (generation of test data)
  - **RFKKBIXBITUPLOADSAMPLEFILE** (generation of a test file for the transfer of billable items)
  - **RFKKBIXBITUPLOAD** (transfer of billable items from a file)

To **transfer raw data into billable items** (for both test purposes and for productive

data), on the SAP Easy Access screen, choose **Processing of Raw Data**.

### Processing Billable Items

In billing, you bill the billable items of contract accounts.

The **billing process** controls billing by specifying the rules used for selecting billable items and for automatically grouping them into **billing units**. For each billing unit, the system creates a billing document with a new **origin process 007 (Billing in Contract Accounts Receivable and Payable)**.

You invoice billing documents with origin process **007** (Billing in Contract Accounts Receivable and Payable) later in Invoicing in Contract Accounts Receivable and Payable.

You can enter a **grouping variant** for the billing process. This grouping variant allows you to decide how billable items are aggregated in the items of the billing document during billing. The grouping characteristics of the grouping variant control the aggregation of billable items into billing document items.

Using the system settings for scheduling, you can specify a **target date for billing**. You enter **rules for calculating the target date for billing** in Customizing.

You can have the system execute billing automatically, or you can perform billing in dialog mode (on the SAP Easy Access screen, choose **Billing -> Automated Billing** or **Billing in Dialog**).

You can reverse billing documents. On the SAP Easy Access screen, choose **Billing -> Billing in Dialog -> Reverse Billing Document**.

In addition, billing offers **integration with SAP Convergent Charging**, as well as functions for processing **one-off charges**.

### Effects on Customizing

You make system settings for Billing in Contract Accounts Receivable and Payable in Customizing for Contract Accounts Receivable and Payable under **Integration -> Billing in Contract Accounts Receivable and Payable in these activities**:

- o **Billable Item Classes**  
You can make settings for generating the interface for the data import from another system.
- o **Basic Data**  
You can enter settings that are globally valid for billing.
- o **Billable Item Management**  
You can make settings for data storage.
- o **Billable Item Transfer**  
You can enter specifications for deriving required account assignments.
- o **Billing Processes**  
You can enter settings for how the system processes billable items in billing.
- o **Reversing Billing Documents**  
You can make settings for the reversal of billable items.

You can enter a residence time for billed items in Customizing for Contract Accounts Receivable and Payable under **Invoicing in Contract Accounts Receivable and Payable -> Archiving**.

## Integration with SAP Convergent Charging (New)

### Use

*Integration with SAP Convergent Charging and SAP Customer Relationship Management*

As of SAP enhancement package 5 for SAP ERP 6.0, you can use SAP Convergent Invoicing with SAP Convergent Charging and/or SAP Customer Relationship Management (SAP CRM). For the integration in each case you use the appropriate following interface components that you have to activate during the **configuration** of the given **billable item class**:

- o **SAP Convergent Charging**
- o **CRM Order**

*Change Mode for Raw Data Monitor*

In the **raw data monitor** you can now:

- o Change individual field contents
- o Change multiple field values for multiple items at the same time using a mass change

For more information, see the documentation of the **Analysis of Raw Data** report. In Customizing, you can define which fields can be changed.

### Note

These functions are only available in the raw data monitor.

*Upload Rules for Billable Items*

A feeder system that determines charges and prices for billable items (such as SAP Convergent Charging) sends these items to the ERP system. In the ERP system you can now specify:

- o If items with errors should also be imported to the ERP system
- o Which **status** (raw data, billable) the imported items should receive in the ERP system

For more information about the settings for this, see the documentation for the **upload rules**.

*Prevention of Multiple Transfer of Billable Items*

To prevent the feeder system from sending billable items more than once to the ERP system, you can define a unique secondary key for the affected tables in the **configuration** of the billable item class.

### Effects on Customizing

*Integration with SAP Convergent Charging and SAP Customer Relationship Management*

You activate the interface components for this in Customizing for Contract Accounts Receivable and Payable under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Classes -> Maintain Billable Item Classes**.

*Define Changeable Fields for Monitor*

In Customizing for Contract Accounts Receivable and Payable under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Management -> Define Changeable Fields of Billable Items**, you can specify for each **class** and **record type** which fields can be changed.

*Processing Rules for Billable Items*

In Customizing for Contract Accounts Receivable and Payable under **Integration -> Billing in Contract Accounts Receivable and Payable -> Billable Item Management -> Define**

**Processing Rules and Program Enhancements**, you can specify if items are added, and if they are, to which tables they are added.

## One-Off Charges (New)

### Use

*Transfer of one-off charges from SAP Customer Relationship Management (CRM) to Invoicing in Contract Accounts Receivable and Payable*

As of SAP enhancement package 5 for SAP ERP 6.0, you can:

- o Define one-off charges in CRM
- o Transfer one-off charges as billable items from the CRM system to Billing in Contract Accounts Receivable and Payable in the ERP system, bill them, and then process them further in Invoicing in Contract Accounts Receivable and Payable

### Effects on Customizing

You make system settings for transferring one-off charges in Contract Accounts Receivable and Payable in Customizing for Contract Accounts Receivable and Payable under **Integration -> Customer Relationship Management- > Transfer of One-Off Charges** in these activities:

- o **Define Billable Item Classes**  
Here you enter billable item classes for billing one-off charges.
- o **Define Account Assignments**  
Here you enter account assignment derivations for one-off charges.
- o **Define Main Transactions and Subtransactions**  
Here you enter main and subtransactions for one-off charges.

## ***Business Function Localization, Customer Feedback***

### **ISU\_LOC\_CI\_2: Localization, Customer Feedback (New)**

#### **Use**

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension ***Utilities Waste & Recycling (IS-UT 605)***, the business function ***Localization, Customer Feedback (ISU\_LOC\_CI\_2)*** is available.

If you activate this business function you are provided with a range of new country-specific functions, such as for the payment scheme (specifically for Great Britain and Northern Ireland), for billing and accounting principles (Italy), data about payment by debit memo procedure (Spain), and improved performance when displaying the print preview.

The new functions help utility companies conform to legal requirements and to increase the efficiency of country-specific business processes.

Benefit to business operations:

- o Improved performance, lower implementation costs, and less time needed
- o Reduction in operating costs and increase in productivity for the user
- o Compliance with country-specific requirements for Great Britain and Northern Ireland, Italy and Spain

Benefit to technical application:

- o Reduction in total cost of ownership
- o Improved system administration

The business function Localization, Customer Feedback (ISU\_LOC\_CI\_2) includes the following functions:

- o Direct debit master data update of cash payment files CSB57  
The new interface contains a report with an improved selection screen. This allows you to the direct debit master data in the business partner and in the contract account master data if the cash payment file CSB57, which is sent from the bank, contains parameters for updating direct debits.
- o Direct Debit Master Data Validation with CSB19 Annex 1 Files  
The new interface contains a report that collects direct debit data in a CSB 19.1 file to have it validated by the bank.
- o New Function for the Payment Scheme for Great Britain and Northern Ireland
- o The following new or changed interfaces are available:
  - Generation/Change and Display of Payment Scheme in E-Service (UCES) (New)
  - Generation/Change and Display of Payment Scheme in IC WebClient for Utilities (CRM) (New)
  - Customizing View (New)
  - Customizing View (Changed)
- o Other functions connected to the payment scheme:
  - Transfer of items at cost level in the payment scheme
  - Deactivation of payment scheme with a future end date (move-out notification) even if future requests have been deleted
  - Option to reactivate the payment scheme – the payment scheme is reversed
  - Option to synchronize the deletion of the payment scheme

Benefit to business transactions:

- Improved usability of payment scheme process and increased efficiency during cash payment
- Option to use payment schemes for e-services
- Option to use payment schemes in IC WebClient for Utilities

Benefit to technical application:

- Availability of function in the backend system (for professional users), on the Internet for customers (UCES) and agents (IC WebClient for Utilities) according to their requirements
- o New Rules for Billing and Accounting in Italy
  - Special calculation of taxes on gas for Italian customers
  - Special preparation of energy bill reversals for Italian customers

Benefit to technical application:

- Standard solution for special calculation of taxes on gas
- Support for new reversal logic according to Italian financial law and sales tax
- o Other Improvements

The following changed interfaces are available:

- Customizing view
- Display print document (EA40)
- Reduction in log entries based on customer feedback

Benefit to technical application:

- Efficient follow-up of warning and error messages from a KPI measurement point of view
- Reduced costs

Benefit to technical application:

- Improved system administration and optimization of background activities and dialog processes
- Integration of print layout from third party administrators in the simulation process

For more information on the *Localization, Customer Feedback 2* business function (ISU\_LOC\_CI\_2), see the following release notes:

**ISU\_LOC\_CI\_2: Reduction in Number of Messages in Application Log (New)**

**ISU\_LOC\_CI\_2: Bill Preview Using PDF in OMS (New)**

**ISU\_LOC\_CI\_2: Enhancements to the Payment Scheme (New)**

**ISU\_LOC\_CI\_2: Payment Scheme in IC WebClient (New)**

**ISU\_LOC\_CI\_2: Enhancements to the Payment Scheme for Unmeasured Customers (New)**

**Turbo Billing (New)**

**ISU\_LOC\_CI\_2: Changed Handling of Transfer Postings in Invoicing (New)**

**ISU\_LOC\_CI\_2 - IT: Handling Tax Amounts During Bill Reversal (New)**

**ISU\_LOC\_CI\_2 - ES: CSB Bank Validation (New) (English only)**

**ISU\_LOC\_CI\_2: IS-U Retrofit for Seal Management - India (New) (English only)**





## ISU\_LOC\_CI\_2: Reduction in Number of Messages in Application Log (New)

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you can significantly reduce the number of messages written to the application log for different IS-U processes, thus freeing up capacity in the database.

The system usually writes an EMMA-011 message and an EMMA-012 message for each processed object. For some processes, the system also writes a process-specific success message in the application log if the enhanced message management (BPEM) is active for the business process area. These messages are needed by the BPEM to prepare the application log in transaction EMMA.

If you are only interested in errors in the application log and you do not want to view the statistics for successful cases in transaction EMMA, you can specify that the messages EMMA-011, EMMA-012, and process-specific success messages are not written for successful cases. As a result, you can greatly reduce the size of the application logs in productive mass runs, as they mainly consist of success messages.

If, between the EMMA-011 and EMMA-012 message, no other message is written to the application log, apart from any process-specific success messages, the system values the object as successful and suppresses the messages. In other words, if any other messages arise, they are not suppressed. If you want additional messages to be ignored, you can do this using event *R567*.

### Effects on Customizing

You can activate the suppression of EMMA-011 and EMMA-012 messages and the process-specific success messages in the application log in Customizing for *SAP Utilities* under *Tools -> Monitoring of Mass Runs -> Suppress EMMA Messages if No Errors Occur*.

This is only intended for the following business process codes (entries provided by SAP):

- o EBI00001 Automatic Billing
- o EIN00001 Invoicing
- o EIN00003 Bill Printout
- o EMR00001 Enter Meter Reading Result as Plausible

You cannot include any other SAP-defined business process codes.

**ISU\_LOC\_CI\_2: Bill Preview Using PDF in OMS (New)****Use**

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you no longer have to use an extra application form for the bill preview of certain IS-U processes to reproduce the layout of the external system if the bill printout in the IS-U system is realized by the layout formatting of a raw data stream in the output management system (OMS) of a third party service provider. Instead, when previewing a bill, you can use the application form itself to generate the raw data stream and send it to the OMS in the usual way. The OMS must send the generated PDF file back to the IS-U system by calling the RFC-enabled (inbound) function module ISU\_IMPORT\_PDF, where it is received by the initiating process.

**Effects on Customizing**

To use this function, you have to select the *Activation: Bill Preview Using PDF from OMS* checkbox in Customizing for *SAP Utilities* under *Invoicing -> Bill Printout -> Override Application Form for Bill Simulation*.

## ISU\_LOC\_CI\_2: Enhancements to the Payment Scheme (New)

### Use

As of SAP ECC 6.0 Industry Extension Utilities, Waste & Recycling, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2, the following enhancements to the payment scheme are available:

- o **Suppress automatic reactivation of a payment scheme during reversal of a move-out**  
Previously, payment schemes were automatically reactivated when a move-out was reversed. You can now use the Customizing settings to stop this from happening automatically.
- o **Suppress clearing of future payment scheme requests**  
Previously, all existing payment scheme due dates were included in automatic clearing, regardless of their due date. Now, you can use the Customizing settings to prevent payment scheme requests with a future due date from being cleared.
- o **Immediate clearing of included open items**  
Previously, open items were not cleared directly during clearing of a payment scheme request. Now you can use the Customizing settings to clear open items immediately.
- o **Hide included open items in account balance display**  
Previously, the payment scheme request and the included open items were displayed at the same time in the account balance display. Now, you can use the Customizing settings to prevent included open items from being displayed if payment scheme requests are available.
- o **Include open items at contract account level**  
Previously, you could only include open items in a payment scheme at contract level. Now you can also include open items at contract account level.
- o **Automatic adjustment of payment schemes**  
You can use transaction E61PSM to automatically adjust payment schemes. Payment scheme amounts can be increased or decreased by one percent, or they can be extrapolated again.

### Effects on Customizing

You can find the new settings in Customizing for SAP Utilities under *Invoicing -> Budget Billing Plan -> Payment Scheme -> Basic Settings -> Define Control Parameters for Payment Scheme*.

## **ISU\_LOC\_CI\_2: Payment Scheme in IC WebClient**

### **Use**

As of SAP ECC 6.0 Industry Extension Utilities, Waste & Recycling, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you can create or change a payment scheme in the Interaction Center Web Client of a connected CRM system.

### **Effects on Customizing**

You can find the settings in Customizing for SAP Utilities under *Invoicing -> Budget Billing Plan -> Payment Scheme -> Basic Settings -> Define Control Parameters for Payment Scheme in IC WebClient*.

## ISU\_LOC\_CI\_2: Enhancements to the Payment Scheme (New)

### Use

As of SAP ECC 6.0 Industry Extension Utilities, Waste & Recycling, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2, the following enhancements to the payment scheme are available:

- o **Suppress automatic reactivation of a payment scheme during reversal of a move-out**  
Previously, payment schemes were automatically reactivated when a move-out was reversed. You can now use the Customizing settings to stop this from happening automatically.
- o **Suppress clearing of future payment scheme requests**  
Previously, all existing payment scheme due dates were included in automatic clearing, regardless of their due date. Now, you can use the Customizing settings to prevent payment scheme requests with a future due date from being cleared.
- o **Immediate clearing of included open items**  
Previously, open items were not cleared directly during clearing of a payment scheme request. Now you can use the Customizing settings to clear open items immediately.
- o **Hide included open items in account balance display**  
Previously, the payment scheme request and the included open items were displayed at the same time in the account balance display. Now, you can use the Customizing settings to prevent included open items from being displayed if payment scheme requests are available.
- o **Include open items at contract account level**  
Previously, you could only include open items in a payment scheme at contract level. Now you can also include open items at contract account level.
- o **Automatic adjustment of payment schemes**  
You can use transaction E61PSM to automatically adjust payment schemes. Payment scheme amounts can be increased or decreased by one percent, or they can be extrapolated again.

### Effects on Customizing

You can find the new settings in Customizing for SAP Utilities under *Invoicing -> Budget Billing Plan -> Payment Scheme -> Basic Settings -> Define Control Parameters for Payment Scheme*.

## **ISU\_LOC\_CI\_2: Payment Scheme in IC WebClient**

### **Use**

As of SAP ECC 6.0 Industry Extension Utilities, Waste & Recycling, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you can create or change a payment scheme in the Interaction Center Web Client of a connected CRM system.

### **Effects on Customizing**

You can find the settings in Customizing for SAP Utilities under *Invoicing -> Budget Billing Plan -> Payment Scheme -> Basic Settings -> Define Control Parameters for Payment Scheme in IC WebClient*.

## ISU\_LOC\_CI\_2: IT: Handling Tax Amounts During Bill Reversal (New)

### Use

As of SAP ECC 6.0 *Industry Extension Utilities, Waste & Recycling*, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you can use a special procedure for Italy for non-reversal of sales tax amounts during reversal of a bill or re-invoicing of an adjustment reversal in the following situations:

- o If the (adjustment) reversed bill is older than a certain number of days at the time of (adjustment) reversal
- o If the (adjustment) reversed bill tax amounts show a receivable for the customer
- o If the company code is an Italian company code.
- o If a reversal reason with reversal category 05 (reversal due to customer fault) or 06 (reversal due to fault of company) is used.

From a posting perspective, an adjustment posting is made to the G/L account for the sales tax to reproduce the balance from before the reversal of the bill or re-invoicing of the adjustment reversal. Depending on the reversal category used, the offsetting entries are for the account of the company (G/L account for unexpected revenues) or the end customer (new open items to amount of original tax amounts on contract account of end customer).

The respective tax lines of the reversal printout document or of the new bill printout document, the system creates the new document line type TXRETN instead of SUBT to enable the tax amounts to be displayed as “not reversed” with the corresponding explanation during bill printout.

In the case of a reversal reason with reversal category 05, document lines to the amount of the original tax amounts are created in the contract account with the new document line type TXCORR based on the new open items. These original tax amounts are charged to the end customer in the final bill amount.

Event R562 is available for the bill display to allow you to adjust certain tax-relevant fields in the corresponding lines.

If the bill is old enough, the system prevents the use of a reversal reason with a reversal category other than 05 or 06.

The system cannot recognize whether a reversal reason was chosen with reversal category 05 instead of 06, or vice versa. In this case, for an adjustment reversal, you have to reverse the new invoicing run of the reversal adjustment and correct the adjustment reversal billing document using the database. For the billing document reversal, you have to generate a manual adjustment posting using transaction FPE1 to adjust the incorrect posting; you have to use the database to adjust the reversal billing document.

### Current Restrictions for Using These Functions

The following restrictions apply regarding the use of this function:

- o It is only valid for bills generated by IS-U invoicing with creation reason 01 (Print Consumption Billing).
- o It is only valid for the main posting document (with document ID “A”) - that is, not for other tax-relevant postings generated by IS-U invoicing.
- o It is only valid for bills at individual customer level, not for collective bills.
- o It is not valid for grid usage bills in the deregulated scenario.
- o It is only valid if Funds Management is not active.

As of SAP ECC 6.0 *Industry Extension Utilities, Waste & Recycling*, enhancement package 5, Business Function *Localization, Customer Feedback* (ISU\_LOC\_CI\_2), you can also include open items of the contract account in the payment form of the bill (independent of the function described



above). These open items are only printed on the bill and are not included in the final bill amount.

The new field *Total Amount of Bill Items in Payment Form* (ERDK-ZSBRT) in the header data of the bill printout document displays the difference, if any, between the payment form amount and the final bill amount.

### **Effects on Customizing**

You make the settings for the special procedure for Italy for non-reversal of sales tax amounts during reversal or re-invoicing of an adjustment reversal in Customizing for *SAP Utilities* under *Invoicing* -> *Basic Settings* -> *Define Basic Settings for Italy* -> *Define Settings for Reversal and Account for Unexpected Revenues During Reversal*.

The new internal main transaction 1140 with the new internal subtransactions 0010 and 0020 is available for any new open items equal to the original tax amounts in the contract account of the end customer. You can allocate your own external transactions to these transactions in Customizing for *Financial Accounting* under *Contract Accounts Receivable and Payable* -> *Basic Functions* -> *Postings and Documents* -> *Document* -> *Maintain Document Assignments* -> *Maintain Transactions for IS-U*.

You can include items that are not relevant to the final amount in the payment form of the bill in Customizing for *SAP Utilities* under *Invoicing* -> *Invoice Processing* -> *Define Control of Additional Invoicing Functions* by selecting the *Include Items in Payment Form* checkbox.

## ISU\_LOC\_CI\_2 - ES: CSB Bank Validation (New)

### Use

As of SAP enhancement package 5 for ERP 6.0 (SAP\_APPL 605), business function **Localization, Customer Feedback 2** ( ISU\_LOC\_CI\_2), you can use the following features in Industries (IS-U):

You can activate format CSB 57 to

- o send payments made at the cash desk to the supplying company and clear the related invoice
- o send new direct debit bank accounts to the supplying company registered at the cash desk

You can activate Format CSB 19.1 to

- o validate direct debits used for bank master data
- o avoid unnecessary direct debit returns because of wrong accounts or out-of-date bank accounts

### Note:

This process helps to exchange information between the utility system and the bank system. The enhancements to the system include the Transaction (S\_E5M\_75000002)

This program creates the outgoing file in the payment medium format CSB 19.1 for the housebank and account ID specified on the selection screen. Based on the selection criteria, the program updates the output file with details of the direct debit accounts of business partners with direct debit account in the specified housebank.

To access the customizing, choose *Utilities Industry -> Contract Accounts Receivable and Payable -> Periodic Processing -> For Contract Accounts -> Spain -> Output File for Bank Data Validation (CSB 19 Annex 1)*

### Events and Function Modules

The following new function modules are available with the events 20, 21, 30, 31 and 40 respectively:

20: Event for Submitter header record; FM: FKK\_VALIDATE\_ES\_DD\_20

21: Event for Issuer header record; FM: FKK\_VALIDATE\_ES\_DD\_21

30: Event for Compulsory individual record; FM: FKK\_VALIDATE\_ES\_DD\_30

31: Event for Issuer total record; FM: FKK\_VALIDATE\_ES\_DD\_31

40: Event for General total record; FM: FKK\_VALIDATE\_ES\_DD\_40

## ISU\_LOC\_CI\_2: IS-U Retrofit for India (New)

### Use

As of SAP enhancement package 5 for SAP ERP 6.0, Industry Extension **Utilities, Waste & Recycling (IS-UT 605)**, business function **Localization, Customer Feedback (ISU\_LOC\_CI\_2)** is available.

With this solution you can use the following functions:

- o Seal Management

With this function, you can process and manage seals in the SAP system. You can place one or more seals on an electricity meter (device) to prevent its misuse.

Seal Management is the process of tracking a seal as it moves through the different statuses in its life cycle.

- o ECS Mandate

With this function, you can process Electronic Clearing Scheme (ECS) Mandate in the SAP system. This is an India-specific enhancement to SAP Utilities.

The ECS mandate is customer-specific. Payments made by direct debit (in India called Electronic Clearing Scheme) have a limit on the maximum amount payable in a month or a period.

If the amount payable by the customer exceeds the amount given in the ECS mandate for that period, the system handles the billing processes according to preconfigured alternatives.

- o Security Deposits

This component describes the India-specific enhancements to the Standard SAP Security Deposit function.

In addition to the security deposit calculations in the standard system, the following enhancements are available for India localization:

- Mass Change of Security Deposit Amounts
- Enhanced Interest Calculation on Security Deposit
- o Late Payment Charges and Prompt Payment Incentives

With this function, you can configure the tolerance days outside of which, the system must either process late payment charges, or provide a prompt payment incentive to a customer. Customers can view this information on their invoice against the following:

- LPCINF  
Indicates that the customer is charged a late payment fee for delayed payment of the utility charges, for example, Due Date is November 22, and tolerance days is 5. In this case, the system charges a late payment fee from customers who pay their utility charges after November 27.
- PPINF  
Indicates that the customer is provided an incentive for paying the utility charges ahead of schedule, for example, Due Date is November 22, and tolerance days is 5. In this case, the system provides an incentive to customers who pay the utility charges before November 18.

### Effects on Customizing

You can make the following Customizing settings:

- o Seal Management:

In the IMG for Seal Management-India, choose SAP Utilities -> Device Management -> Technology -> Device -> Country Specific Settings for India -> Seal Management

- o Charges for Invoicing:

In the IMG for Charges for Invoicing, choose SAP Utilities -> Invoicing -> Invoice Processing -> Charges in Invoicing -> Country Specific Settings for India -> Charges in Invoicing

- o Incoming/ Outgoing Payment Creation

In the IMG for Interest Calculation-India, choose Financial Accounting (New) -> Contract Accounts Receivable and Payable -> Business Transactions -> Payments -> Incoming/Outgoing Payment Creation -> Country Specific Settings for India -> Incoming/Outgoing Payment Creation

- o Security Deposits:

In the IMG for Security Deposits-India, choose Financial Accounting (New) -> Contract Accounts Receivable and Payable -> Business Transactions -> Security Deposits -> Country Specific Settings for India -> Security Deposits

- o Interest Calculation:

In the IMG for Interest Calculation-India, choose Financial Accounting (New) -> Contract Accounts Receivable and Payable -> Business Transactions -> Interest Calculation -> Country Specific Settings for India -> Interest Calculation

## ***Business Function Flexibilization of IDE***

### **ISU\_MCOMM\_2: Flexibilization of IDE 2 (New)**

#### **Use**

As of enhancement package 5 for SAP ECC 6.0, Industry Extension **Utilities, Waste & Recycling**, the business function **Flexibilization of IDE 2** is available.

After the business function **Flexibilization of IDE** (ISU\_MCOMM\_1), this business function provides additional enhancements to the IDE infrastructure. You can more flexibly implement your business processes in the liberalized energy market and set yourself up as an independent market participant. You can track changes to the service provider at point of delivery level and communicate these changes within the market. You can also access technical master data in order to process customer transactions.

For more information about the scope of the individual functions, see the following release notes:

- o **Supply Scenario Generator**
- o **Registering of External Metering Companies**
- o **New BAdI for Point of Delivery Display**
- o **New Kernel-Based BAdI for the Supply Scenario Generator**
- o **New Enterprise Services for SAP Industry Solutions Utilities**
- o **Changed Enterprise Services for SAP Industry Solutions Utilities**
- o **Connection of Grid Usage Processing to Enhanced Message Management**

#### **See also**

For more information, see the business function documentation in SAP Library under *SAP ERP -> SAP ERP Central Component -> SAP ERP Enhancement Packages -> Business Function Sets and Business Functions -> Industry Business Function Sets -> Utilities*.

## MCOMM2: Proration of non-billable services (New)

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Flexibilization of IDE* (ISU\_MCOMM\_2), the proration of the non-billable PoD services can be controlled through the customizing setting on the supply scenario level.

A new field SCENNOPRORATE has been added to the database table EDEREGSCENSERV and the maintenance view V\_EDEREGSCENSERV, and is displayed as the *Do Not Prorate* checkbox on Change View *Services for Supply Scenario*.

For more details, use the following IMG path:

*SAP Utilities -> Intercompany Data Exchange -> Supply Scenarios -> Define Supply Scenarios*

By selecting this field for a service type in both old (affected) and new scenarios, the service of this type could be continued if the service provider remains the same upon changing the supply scenario.

In the standard system, the new field is not displayed in the customizing of the supply scenario and a new service is always created upon changing the supply scenario.

### Effects on Customizing

See **USE** section.

### See also

BAdI ISU\_IDE\_DRGSCEN\_GEN2 is a new kernel-based version of the original BAdI ISU\_IDE\_DRGSCEN\_GEN. The default implementation for both BAdIs is changed. For more information, see release note **New BAdI for Supply Scenario Generator**.

## MCOMM2: Registering of external metering company (New)

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Flexibilization of IDE* (ISU\_MCOMM\_2), the new DEx processes `EXPNBSE` and `IMPNBSE` for sending and receiving a notification about the creation, change, or cancellation of non-billable services are available. Communication takes place via asynchronous A2A Enterprise Services. Furthermore, a new *Metering Service* service category with corresponding service types *Metered Data Services* and *Meter Operation Services* is available.

On the sender side, outbound DEx process `EXPNBSE` is triggered by the creation of a new non-billable service, change of an existing non-billable service, or cancellation of an existing non-billable service, for example via the Supply Scenario Generator.

On the receiver side, upon receiving the notification, the system automatically identifies the relevant non-billable service and triggers inbound DEx process `IMPNBSE` that performs the corresponding creation, change, or cancellation. If a created or changed non-billable service overlaps in time with one or more already existing non-billable services of the same service type, the overlap is automatically resolved by prorating the already existing services.

The user can highlight the created or changed non-billable service and any prorated non-billable services in the *Supply Scenario* sub-screen of the *Point of Delivery* transaction by clicking on the *DtExTask Reference* in the data exchange task Monitor (transaction `EDATEXMON01`) of the receiver system.

Note that DEx processes `EXPNBSE` and `IMPNBSE` are specific to the service type provided as parameter in the customizing. It is possible to set up multiple DEx processes for different service types simultaneously.

### Additional Remarks:

As of the above mentioned release, if DEx processes `EXPNBSE` or `IMPNBSE` are configured in the customizing, the system behavior is different from earlier releases when changing the service provider of a non-billable service in the *PoD Service* sub-screen of the PoD transaction. In this case, the system first cancels the non-billable service, and then creates a new non-billable service with the same parameters as the cancelled non-billable service, except for the new service provider. The newly created service has a different contract number than the cancelled service. The reason is that it is not possible to change the service provider of a non-billable service from a business perspective. Note that this will result in two notification messages.

In case of a change of a non-billable service, the above mentioned identification procedure in the receiver system fails if the non-billable service after the change does not overlap in time with the non-billable service before the change.

### Effects on Existing Data

As of the above mentioned release, if the start or end date of a non-billable service is changed, the previous start and end date are stored. For this purpose, two new fields have been added to database table `ESERVICE`.

### Effects on Customizing

Service types based on the new service category *Metering Service* can be maintained in customizing activity *SAP Utilities -> Intercompany Data Exchange -> Services -> Define Service Types*.

DEx processes `EXPNBSE` and `IMPNBSE` can be maintained in customizing activity *SAP Utilities -> Intercompany Data Exchange -> Data Exchange Processes -> Define Data Exchange Processes*.

### See also

Communication takes place via asynchronous A2A Enterprise Services `UtilitiesContractRegistrationERPNotification_Out` and `UtilitiesContractRegistrationERPNotification_In` which are documented in the ES

Workplace (<https://www.sdn.sap.com/irj/sdn/esworkplace>).



## MCOMM2: New BAdI for PoD display (New)

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Flexibilization of IDE* (ISU\_MCOMM\_2), the *Display/Change of Point of Delivery* transaction EEDM10 or EEDM11 has been enhanced with a new title-definable tab strip that allows customers to display additional data in a corresponding subscreen.

More particularly, with business add-in (BAdI) ISU\_EDM\_POD\_ADDDATA, customers can now define the:

- Tab strip title (the text that appears on the new tab strip);
- Additional data to be displayed on the tab strip's subscreen.

**Note:** If no implementation of business add-in is provided, the new tab strip will not appear in the *Point of Delivery* transaction.

### See also

In the SAP menu, the *Point Of Delivery* transaction is located under: *Utilities industry -> Technical Master Data -> Point of Delivery*.

## MCOMM2: New BAdI for Supply Scenario Generator

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Flexibilization of IDE* (ISU\_MCOMM\_2), the methods of the original business add-in (BAdI) ISU\_IDE\_DRGSCEN\_GEN have been replaced with identical methods of kernel-based BAdI ISU\_IDE\_DRGSCEN\_GEN2. This enables individual methods in the new BAdI to be redefined.

With the activation of the business function, the methods of the kernel-based BAdI are called instead of the methods of the original BAdI. The new interface of the kernel-based BAdI includes the interface of the original BAdI so that the methods are fully compatible.

Due to the new flexible, non-billable service proration feature, two methods, SHIFT\_CONTRACT and STOP\_CONTRACT of the default implementation class, are changed by setting the *No-Defaulting* flag before the Move-in and Move-out processes to suppress PoD service changes. Thus, the handling of PoD services can be performed only through the Supply Scenario Generator.

Refer to the following release note for more information on the enhancement of the Supply Scenario Generator in enhancement package 5:

### **Proration of non-billable services.**

### Effects on System Administration

If you used the previous default implementation of the BAdI ISU\_IDE\_DRGSCEN\_GEN, you do not have to take any further action.

However, if you used the company-specific implementation, you have to create new objects and apply the same changes to the SHIFT\_CONTRACT and STOP\_CONTRACT methods as done in the default implementation class.

### See also

For more information, see the online documentation for the BAdI and its interfaces.

**MCOMM2: Enterprise Services for SAP Industry Solutions Utilities (Enhanced)****Use**

As of SAP ECC 6.0 Industry Extension **Utilities, Waste & Recycling**, enhancement package 5, Business Function Flexibilization of IDE (ISU\_MCOMM\_2), some service operations have been changed in a compatible manner.

An optional parameter has been added to the following service operations:

- o Process component Measurement Processing, Business Object Utilities Measurement Task (new attributes)
  - Service Interface Utilities Measurement Task Out
    - \* Service Operation Request Smart Meter Utilities Measurement Task Change: optional parameter `MeterReadingResultAdjustmentFactorValue` has been added
- o Process component Utilities Device Management, Business Object Utilities Device (new attributes)
  - Service Interface Utilities Device Out
    - \* Service Operation Request Utilities Device Smart Meter Register Creation: optional parameter `MeterReadingResultAdjustmentFactorValue` has been added
    - \* Service Operation Request Utilities Device Smart Meter Register Change: optional parameter `MeterReadingResultAdjustmentFactorValue` has been added

Forward Error Handling is available for the following service operations:

- o Process component Utilities Grid Usage Processing, Business Object Utilities Grid Usage Request
  - Service Interface Utilities Grid Usage Request Processing In
    - \* Service Operation Create Utilities Grid Usage Request: Forward Error Handling can be activated as described below.
    - \* Service Operation Change Request based on Utilities Grid Usage Request Creation Confirmation: Forward Error Handling can be activated as described below.
    - \* Service Operation Cancel Utilities Grid Usage Request: Forward Error Handling can be activated as described below.
    - \* Service Operation Change Request based on Utilities Grid Usage Request Cancellation Confirmation: Forward Error Handling can be activated as described below.
- o Process component Utilities Grid Usage Processing, Business Object Utilities Grid Usage Document
  - Service Interface Notify Utilities Grid Usage Document In
    - \* Service Operation Change based on Utilities Grid Usage Document Usage Enrollment Notification: Forward Error Handling can be activated as described below.
    - \* Service Operation Change based on Utilities Grid Usage Document Usage Termination Notification: Forward Error Handling can be activated as described below.
- o Process component Utilities Device Management, Business Object Utilities Device
  - Service Interface Notify Utilities Device In
    - \* Service Operation Change based on Utilities Device Smart Meter Registered Notification: Forward Error Handling can be activated as described below.
- o Process component Measurement Processing, Business Object Meter Reading Document
  - Service Interface Meter Reading Document In
    - \* Service Operation Create Meter Reading Document Result as Bulk: Forward Error Handling can be activated as described below.

### **Effects on Customizing**

You have to implement the BAdI `ISU_SE_FEH_EXCEPTION` to activate Forward Error Handling. Moreover you have to activate the Forward Error Handling for your current client within the IMG under the following path: *SAP Customizing Implementation Guide -> Cross-Application Components -> Processes and Tools for Enterprise Applications -> Enterprise Services -> Error and Conflict Handler -> Activate Error and Conflict Handler.*

## ISU\_MCOMM2: Connection of Grid Usage Processing to Enhanced Message Management (New)

### Use

As of SAP ECC 6.0 Industry Extension *Utilities, Waste & Recycling*, enhancement package 5, Business Function *Flexibilization of IDE* (ISU\_MCOMM\_2), the following three processes from grid usage processing are connected to Enhanced Message Management:

- o Send electronic bill, transaction REDISND1 or MEER
- o Create aggregated bill, transaction EA10\_AGGRBILL
- o Print aggregated bill, transaction EA29\_AGGRBILL

You can use transaction EMMA to analyze the application logs of these processes, and generate clarification cases.

The processes are assigned the following business process codes:

- o Transaction REDISND1 or MEER: EDER0003
- o Transaction EA10\_AGGRBILL: EIN00001
- o Transaction EA29\_AGGRBILL: EIN00003

### Effects on Customizing

If you are only interested in errors, you can choose to suppress the writing of messages EMMA 011/012 for successful cases, as well as the specific error messages. You make this setting in Customizing for *SAP Utilities* under *Tools -> Monitoring of Mass Runs -> Suppress EMMA Messages if No Errors Occur*.

