Header Data

Released On	26.11.2012 12:09:04
Release Status	Released for Customer
Component	XX-CSC-JP-FIAA Asset Accounting
Other Components	FI-AA Asset Accounting
Priority	Correction with high priority
Category	Legal change

Symptom

There is a legal change in the Corporate Tax Law 2011 for Japan.
(Due to the earthquake on March 11th, 2011, the revised rule will be effective on April 1st, 2012.)

Regarding "Declining-Balance Method" for assets acquired after April 1st 2012, the depreciation rate will be changed to "Straight-Line Method (1/Useful Life)" * 2.0.
Not only the depreciation rate of "Declining-Balance Method" but also the revised depreciation rate and the guarantee rate have been revised.

Reference:
http://www.cao.go.jp/zei-cho/news/2010/__icsFiles/afieldfile/2010/12/25/221216taikou.pdf
(P. 80)

20120125g000160091.pdf
20120125g000160092.pdf

Other Terms

Corporate tax law revision Japan, Asset Accounting, Depreciation Calculation, Declining-Balance Method, HEISEI23, 2011, HEISEI24, 2012

Reason and Prerequisites

Legal Change 2011:
Revision of Corporate Tax Law 2011 affecting the depreciation calculation.

Solution

Change History (dd/mm/yyyy):

26.11.2012
Depending on the value(BASRND)and the method(METRND)used for the determination of the changeover value, the rounding conditions have been modified for changeover logic Z taking into account all the parameters (value, method, currency)and is available in the latest attachment Changeover_code_files_v04.ZIP.

The prerequisite that this changeover logic returns the rounding result as we expect is that,the rounded amount (T093B-BASRND) is not explicitly selected, or "Automatically calculated depreciation" is explicitly selected.
If "NBV" is explicitly selected as the rounded amount, only in case that the rounding method is "Arithmetic Rounding", the rounding result becomes expected.

03.09.2012
In the changeover logic Z for new depreciation engine, logic is added to avoid system error when calculating the Net Book Value percentage.

27.08.2012
In the changeover logic Z for new depreciation engine, the type of the net book value percentage is changed from type ANLBZW-BZWPRZ' to type 'f' to avoid any system error.The modified code is included in the "Changeover_code_files_Z_v04.zip"

27.04.2012
Regarding the changeover logic Z for new depreciation engine, it was found that the parameter exported to METHOD cl_faa_ee=>_correct_rounding was wrong. We should export l_abs_dbm_calc and l_abs_guar_calc, however, before the correction, l_abs_dbm_calc and l_abs_dbm_calc were exported. The modified code is included in the "Changeover_code_files_Z_v04.zip".

05.04.2012
Regarding the change-over logic Z for new depreciation engine, the short dump "GETWA_NOT_ASSIGNED" occurs if you do not define the rounding method for "Automatically calculated depreciation" (T093B-BASRND is not 1). If you define the rounding method for "Net book value" (T093B-BASRND is 0.), both

the depreciation amount before adjustment and the guaranteed depreciation amount do not go through the rounding process of depreciation. The modified code is included in the file "Changeover_code_files_Z_v03.zip".

04.04.2012
Directly updated and solved the syntax error which is included in NDE_Active_DEFINE_CHANGEOVER_YR_Z_20120402.txt.

02.04.2012
For the rounding issue described in "caution", the modified code is included in the file "Changeover_code_files_Z_v02.zip"

14.02.2012
Initially release for customers

Solution:

The ppt material is available via SAP Service Market Place.
https://service.sap.com/jp-financials
Documentation(Customer/Partner)
  Legal Change 2011

http://service.sap.com/~form/sapnet?_SHORTKEY=01100035870000736411&
_SCENARIO=01100035870000000112&_OBJECT=011000358700000181462012J

http://service.sap.com/~form/sapnet?_SHORTKEY=01100035870000736411&
_SCENARIO=01100035870000000112&_OBJECT=011000358700000181282012E

CAUTION:

The new columns and rates for table T097JP will be available as part of the Support Package.

For immediate use of these values, please use the attachment "Z_T097JP_update_2011" attached to this note. This report uses the rates given in the file 'Rates_for_Legal_Change2011.zip' which is attached to this note.
After activation and execution of the report, the table T097JP will contain the new values.

I) SAP ERP 6.0 (New Depreciation Engine)

Ia) Depreciation Rates, Table T097JP Extension

The following rates, which are for assets acquired after April 01, 2012, are newly defined by law.

1. 200% DBM rate
2. Revised depreciation rate for 200% DBM
3. Guarantee depreciation rate for 200% DBM

You have two possibilities to extend the content of the system table T097JP.

1) Updating the SP level of your SAP system
2) Follow the manual steps provided in the attchment 'T079JP_enhancements.pdf'.

The table T097JP has been extended with three new data fields:

Field	Key	Init	Data Element	Data Typ	Len	Dec
PROZ_TW3			AA_PROZJP9	DEC	4	3
PROZ_REV3			AA_PROZJP10	DEC	4	3
PROZ_GR3			AA_PROZJP11	DEC	6	5

Field	Description
PROZ_TW3	Declined Balance Method Rate for 200% DBM
PROZ_REV3	Revised Depreciation Rate for 200% DBM
PROZ_GR3	Guarantee Rate for 200% DBM

After enhancing the table, you should also enter the new rates into the table.

Ib) Implement Customer-Specific BAdI for Change-over Method "Z"

Implement the change-over method "Z" used for the first depreciation phase in the depreciation keys. The method should be defined in customer namespace by using the BAdI builder (transaction SE19):

    -BAdI definition: FAA_DC_CUSTOMER
    -Method: DEFINE_CHANGEOVER_YR

If you already use the change-over method "Z", you should enhance the change-over method "X" to cover 200% DBM as well.

The coding for this method is attached to this note as a *.zip archive "Changeover_code_files_Z_vxx.zip"(xx means version.).
After the creation of the BAdI's implementations, activate the methods and the implementations.

* If you have to implement the change-over logic for 200% DBM into the change-over logic X, you can use, for example, <LS_HLPSEG>-DEPR_KEY (depreciation key) as the condition.

The method is created for deciding the change-over year and NBV %.

o At the fiscal year-start, if 200% DBM depreciation amount is less than the guarantee depreciation

amount, this fiscal year is the change-over year.
o From the change-over year, a switch to the second phase of depreciation key is performed.
o NBV% which is necessary for the second phase is calculated. The formula is "(NBV at year-start + Revaluation (Impairment) at year-start) / APC at year-start".

When the change-over year becomes open by the transaction AJRW, the change-over year and NBV% are automatically set in the asset master record, ANLB-UMJAR and ANLBZW, respectively. Once they are set in the asset master record, they will not be automatically removed, therefore if you need to remove them, you should manually remove them.

Ic) New Depreciation Key - In case that you use Country-Specific Depreciation Methods

A new depreciation key will be delivered with the default chart of depreciation OJP in the client 000. This will be delivered with a support package. To create the new depreciation key manually, follow the steps described below.

1)Create two country-specific base methods JPD1 and JPS1, which use the country-specific depreciation methods 7 and 8, respectively,

```
-----------------------------------------------------
|Depr.    |Description         |Dep. Method      |
|method   |                    |T090NR-AFAMET    |
|-------------------------------------------------|
|JPD1     |Ordinary: JAPAN     |      7          |
|         |Decl.Bal.met.       |Country-speficic |
|         |from 01.04.2012     |method           |
|-------------------------------------------------|
|JPS1     |Ordinary: JAPAN     |      8          |
|         |Str.Line met.from   |Country-specific |
|         |01.04.2012          |method           |
-----------------------------------------------------
```
and set the indicators as follows:
   - Dep.after plnd.lide end - Yes
   - **Dedp.below NBValue zero** - No
   - Curb - No

2)Create a depreciation key that uses the base methods above:

      DEP.KEY   DESCRIPTION
      DB11   **Declining**-Balance Method Japan from 01.04.2012

The customizing setting for these keys is the following:
```
-------------------------------------------------------------
|Dep.K |SVK|Base Meth. |Phase |DBM|PCM|MLM|BVK|PER|RL|Red|CoM|*
|      |   |/Dep.Meth. |      |   |   |   |   |   |  |   |   |
-------------------------------------------------------------
|DB11  |   |JPD1 / 7   |  1   |001|006|130| 24| 0|  |   | Z|
|      |   |JPS1 / 8   |  2   |001|006|128| G1| 0|  |   |  |
-------------------------------------------------------------
```
* SVK - Scrap Value Key, DBM = Declining-Balance Method, PCM = Period-Control Method, MLM = Multi-Level Method, BVK = Base Value Key, PER-Percentage, RL - Remaining Life, Red - Reduction %, CoM - Change-over Method

The multi-level method 130 is defined like below.
```
-----------------------------------------------------
|Acq.yr Years Per  Base    Percent    Rem.  Reduct. |
|                  Val.               life          |
-----------------------------------------------------
| 9999   999   12   24        0          0        0 |
-----------------------------------------------------
```

The multi-level method 128 is defined like below.
```
-----------------------------------------------------
|Acq.yr Years Per  Base    Percent    Rem.  Reduct. |
|                  Val.               life          |
-----------------------------------------------------
| 9999   999   12   G1        0          0        0 |
-----------------------------------------------------
```

Here, the example of the period control method is 006.
The period control method 006 uses the following period controls for posting transactions with the attributes "Acquisition", "Additional Acquisition", "Retirement", "Transfers", and"Revaluation (Impairment)":

      Acq   Add   Ret   Trn   Rev
      01   01   11   11   11

You should define and use the period control method based on your requirement.

Also, "0 Consideration is controlled by cutoff value key" is assigned to "Scrap value" of the 1st phase and the 2nd phase.

3)Apply code corrections from the instructions below

Id) New Depreciation Key - In case that you do NOT USE Country-Specific Depreciation Methods

In case that you do NOT USE country-specific depreciation method, you should use the depreciation method P (Percentage stated) which needs explicit depreciation rates in multi-level methods. By using the example (Here, useful life is 10 years), how to newly create 200% DBM depreciation keys is

explained.

1)For each useful life, create new multi-level methods for the first phase to have explicit 200% DBM rate

For example, in case of 10 years, it is defined like below.

```
-------------------------------------------------------
|Acq.yr Years Per  Base     Percent      Rem.  Reduct. |
|                  Val.                   life         |
-------------------------------------------------------
| 9999   999   12   24      20.0000             0   |
-------------------------------------------------------
```

2)For each useful life, create new multi-level methods for the second phase to have explicit revised rate for 200% DBM

For example, in case of 10 years, it is defined like below.

```
-------------------------------------------------------
|Acq.yr Years Per  Base     Percent      Rem.  Reduct. |
|                  Val.                   life         |
-------------------------------------------------------
| 9999   999   12   28      25.0000             0   |
-------------------------------------------------------
```
* Either base value 28 or G1 can be used.

3)Create depreciation keys

```
    DEP.KEY    DESCRIPTION
    XB10       DBM 10 years Japan from 01.04.2012
```

The customizing setting for these keys is the following:

```
---------------------------------------------------------------
|Dep.K |SVK|Base Meth. |Phase |DBM|PCM|MLM|BVK|PER|RL |Red|CoM|*
|      |   |/Dep.Meth. |      |   |   |   |   |   |   |   |   |
---------------------------------------------------------------
|XB10  |   |0014 / P   | 1    |001|006| **| **| **| **| **|  Z|
|      |   |0014 / P   | 2    |001|006|***|***|***|***|***|   |
---------------------------------------------------------------
```
* SVK - Scrap Value Key, DBM = Declining-Balance Method, PCM = Period-Control Method, MLM = Multi-Level Method, BVK = Base Value Key, PER-Percentage, RL - Remaining Life, Red - Reduction %, CoM - Change-over Method

    ** You should set the one defined in the step Id)-1).
    *** You should set the one defined in the step Id)-2).

Here, the example of the period control method is 006.
The period control method 006 uses the following period controls for posting transactions with the attributes "Acquisition", "Additional Acquisition", "Retirement", "Transfers", and"Revaluation (Impairment)":

```
        Acq   Add   Ret   Trn   Rev
        01    01    11    11    11
```

You should define and use the period control method based on your requirement.

Also, "0 Consideration is controlled by cutoff value key" is assigned to "Scrap value" of the 1st phase and the 2nd phase.

II) SAP R/3 4.6C, SAP R/3 Enterprise, SAP ERP 5.0 (Old Depreciation Calculation Program)

IIa) Implement Customer-Specific Project for Change-over Method "Z"

Implement the change-over method "Z" used for the first depreciation phase in the depreciation keys. The project should be defined in customer namespace by using the customer exit (transaction CMOD):

    -Enhancement: AFAR0003 External changeover method
    -Function Exit: EXIT_SAPLAFAR_003
    -Include: ZXAFAU03

If you already use the change-over method "Z", you should enhance the change-over method "X" to cover 200% DBM as well.

The coding for this function exit is attached to this note as a *.zip archive "Changeover_code_files_Z_vxx.zip"(xx means version.).
After the creation of the project and the function, activate the project and the function.

* If you have to implement the change-over logic for 200% DBM into the change-over logic X, you can use, for example, i_anlb-afasl (depreciation key) as the condition.

The function is created for deciding the change-over year and NBV %.

o **At the fiscal year**-start, if 200% DBM depreciation amount is less than the guarantee depreciation amount, this fiscal year is the change-over year.
o **From the change**-over year, a switch to the second phase of depreciation key is performed.
o **NBV% which is necessary for the second phase is calculated. The formula is "(**NBV at year-start + Revaluation (Impairment) at year-start) / APC at year-start".

When the change-over year becomes open by the transaction AJRW, the change-over year and NBV% are automatically set in the asset master record, ANLB-UMJAR and ANLBZW, respectively. Once they are set

in the asset master record, they will not be automatically removed, therefore if you need to remove it, you should manually remove them.

IIb) New Depreciation Keys - Use the depreciation method P (Percentage stated)

You should use the depreciation method P (Percentage stated) which needs explicit depreciation rates in multi-level methods. By using the example (Here, useful life is 10 years), how to newly create 200% DBM depreciation keys.

1)For each useful life, create new multi-level methods for the first phase to have explicit 200% DBM rate

For example, in case of 10 years, it is defined like below.

```
------------------------------------------------------
|Acq.yr Years Per  Base     Percent     Rem.  Reduct. |
|                  Val.                  life         |
------------------------------------------------------
| 9999   999   12  24     20.0000              0  |
------------------------------------------------------
```

2)For each useful life, create new multi-level methods for the second phase to have explicit revised rate for 200% DBM

For example, in case of 10 years, it is defined like below.

```
------------------------------------------------------
|Acq.yr Years Per  Base     Percent     Rem.  Reduct. |
|                  Val.                  life         |
------------------------------------------------------
| 9999   999   12  28     25.0000              0  |
------------------------------------------------------
```

3)Create depreciation keys

```
    DEP.KEY    DESCRIPTION
    XB10       DBM 10 years Japan from 01.04.2012
```

The customizing setting for these keys is the following:

```
------------------------------------------------------------------
|Dep.K |SVK|Base Meth. |Phase |DBM|PCM|MLM|BVK|PER|RL |Red|CoM|*
|      |   |/Dep.Meth. |      |   |   |   |   |   |   |   |   |
------------------------------------------------------------------
|XB10  |   |0014 / P   | 1    |001|006| **| **| **| **| **|  Z|
|      |   |0014 / P   | 2    |001|006|***|***|***|***|***|   |
------------------------------------------------------------------
```
* SVK - Scrap Value Key, DBM = Declining-Balance Method, PCM = Period-Control Method, MLM = Multi-Level Method, BVK = Base Value Key, PER-Percentage, RL - Remaining Life, Red - Reduction %, CoM - Change-over Method

    ** You should set the one defined in the step IIb)-1).
    *** You should set the one defined in the step IIb)-2).

Here, the example of the period control method is 006.
The period control method 006 uses the following period controls for posting transactions with the attributes "Acquisition", "Additional Acquisition", "Retirement", "Transfers", and"Revaluation (Impairment)":

```
    Acq   Add   Ret   Trn   Rev
    01    01    11    11    11
```

You should define and use the period control method based on your requirement.

Also, "0 Consideration is controlled by cutoff value key" is assigned to "Scrap value" of the 1st phase and the 2nd phase.

Validity

Software Component	From Rel.	To Rel.	And Subsequent
SAP_APPL	46C	46C	☐
	470	470	☐
	500	500	☐
	600	600	☐
	602	602	☐
	603	603	☐
	604	604	☐
	605	605	☐
	606	606	☐
EA-APPL	600	600	☐
	602	602	☐
	603	603	☐
	604	604	☐

	605	605	☑	

Correction Instructions

Correction Instructions			
Software Component	Valid from	Valid to	Number
EA-APPL	600	605	968862

Support Packages & Patches

Support Packages		
Software Component	Release	Support Package
SAP_APPL	600	SAPKH60020
	600	SAPKH60022
	602	SAPKH60210
	602	SAPKH60212
	603	SAPKH60309
	603	SAPKH60311
	604	SAPKH60412
	604	SAPKH60410
	605	SAPKH60504
	605	SAPKH60509
	605	SAPKH60512
	606	SAPKH60604
EA-APPL	600	SAPKGPAD22
	602	SAPK-60210INEAAPPL
	603	SAPK-60309INEAAPPL
	604	SAPK-60410INEAAPPL
	605	SAPK-60505INEAAPPL

References

This document refers to:

SAP Notes

1835248	FAQ: Remark on the changes affecting the result of Depr.Calc
1705691	JP: Incorrect depreciation when asset useful life < 1 year
1673771	JP: Changeover year incorrcetly set due to rounding issue.
1565855	Shortdump COMPUTE_FLOAT_ZERODIVIDE in AJRW
1549398	JP : Changeover not calculated for Post-Capitalized assets
1541117	Japan: Corporate Tax Law 2011 Revision (FIAA)
1527567	JP : Rounding issue affects Changeover for assets
1093591	Incorrect rounding for a currency without decimal places
1078301	JAPAN: Base Value Percentage in Tax Law Revision 2007
1077695	Technical changes for processing the table ANLBZW
1057539	JAPAN: Corporate Tax Law 2007 Revision (FIAA)

This document is referenced by:

SAP Notes (10)

1565855	Shortdump COMPUTE_FLOAT_ZERODIVIDE in AJRW
1835248	FAQ: Remark on the changes affecting the result of Depr.Calc
1705691	JP: Incorrect depreciation when asset useful life < 1 year
1077695	Technical changes for processing the table ANLBZW
1078301	JAPAN: Base Value Percentage in Tax Law Revision 2007
1527567	JP : Rounding issue affects Changeover for assets
1673771	JP: Changeover year incorrcetly set due to rounding issue.
1549398	JP : Changeover not calculated for Post-Capitalized assets
1057539	JAPAN: Corporate Tax Law 2007 Revision (FIAA)
1541117	Japan: Corporate Tax Law 2011 Revision (FIAA)

Attachments

File Name	File Size (KB)	Mime Type
T097JP_enhancements_JA.pdf	493	application/pdf
20120125g000160092.PDF	28	application/pdf
Z_T097JP_update_2011.zip	10	application/x-zip-compressed
v3_EN_Rounding.pdf	564	application/pdf
T097JP_enhancements.pdf	473	application/pdf
Rates_for_Legal_Change2011.zip	7	application/x-zip-compressed
v3_JA_Rounding.pdf	602	application/pdf
Changeover_code_files_Z_v05.zip	14	application/x-zip-compressed
20120125g000160091.PDF	27	application/pdf