How to treat

the data received

in T2DIR files.

Table of contents.

1. PURPOSE.

This document aims at providing information on which Addressee to use in Fin messages for sending a payment to a participant BIC. The fields "Valid_From" and "Valid_Till" provide a possibility to compile data on historical bases. All other available fields in T2DIR can be seen as merely secondary information.

2. DIFFERENT TYPES OF T2DIR.

2.1. T2DIR SSP LEVEL.

The T2 directory on the SSP platform is derived from the static data definitions of the participants, the SSP BIC directory and the T2 wildcard rules. This set of data is used for the on-line check of payments.

2.2. T2DIR AS TRANSMISSION OF DATA.

The different record types in the files are based on the content of both fields "Type_of_Change" and "Valid_Till":

- "M", <> 99991231

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	M	20070920	**20070928**

Data related to this BIC will change on the next business day after the business day mentioned in the field Valid_Till. The values of the business days in the field Valid_From, in the received record and the one in the LAST record (highest value in the field Valid_From) in the local T2DIR might be different (details in paragraph 3.1).

The data (all fields except Valid_From) present in this type of record is identical to the equivalent record already received in a previous version of the T2DIR file. It only indicates that the record will be deactivated as from the business day after the date mentioned in the field Valid_Till. The relation to the local T2DIR is based only on the field BIC. Selection from the possible multiple records is made by using the LAST one (highest value in the field Valid_From).

- "M", 99991231.

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	M	**20070920**	99991231

This new data, related to this BIC, will effective starting from the business day mentioned in the field Valid_From of the received record. The relation to the local T2DIR is based only on the field BIC. Selection from the possible multiple records is made by using the LAST one (highest value in the field Valid_From).

- "D", 99991231

This combination is NOT expected.

- "D", <> 99991231

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	D	20070920	**20070928**

This type of record does not mean that a BIC has to be deleted from T2DIR. It is only an indication that one record from the local T2DIR will not be used after the business day mentioned in the field Valid_Till. Other records, related to the same BIC, can still persist in the local T2DIR.

The actual deletion of the record from the local data is not necessarily synchronised with the handling of the T2DIR files. It can even be postponed to obtain a local T2DIR containing all changes over a long (e.g. one year) period. The reception of this type of record is not necessarily preceded by an equivalent record containing "M" in one of the previous T2DIR file deliveries. This will only be the case if sufficient time persists, between the introduction of the underlying changes to the static data and the activation date, to allow publication of both modiflag values in different T2DIR files.

- "A", independent

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	A	20070920	20070928

Newly added data related to a BIC.

- "U", independent

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	U	20070920	20070928

This type of record appears only in the FULL version of the T2DIR files, indicating that the data (all fields except for Valid_From) related to a BIC didn't change since last distributed T2DIR file.

2.3. T2DIR LOCAL LEVEL.

Data derived from successive FULL and UPDA T2DIR files. This table should preferably contain a primary key composed of fields BIC and Valid_From.

2.4. T2DIR ON-LINE.

Data from the local T2DIR data valid for the current business day.

3. **T2DIR FILES.**

From the possible names (= T2DIRttttcyyyymmddss) to be used to download data, the following versions can be deduced:

3.1. TTTT (= "FULL" OR "UPDA")

The FULL version of the T2 directory contains the same records as the UPDATE file. In addition it contains also all records with value "U", in the field Type_of_change for those records which have not been changed (except for Valid_From) regarding the previous version of the T2 directory. As such the UPDATE file contains only the changes with respect to the PREVIOUS version of the T2 directory.

The changes to static data, having no influence on the effective data available in the T2DIR files, which would create a record with only a new business day in the field Valid_From; obtain a value "U" (and not necessarily "M") in the field Type_Of_Change. This results in a reduced number of records in the UPDATE files. Future effective changes, of T2DIR related data, are reported in records containing an "M" in the field Type_Of_Change, using a business day value in the field Valid_From, which might not be recorded in the local T2DIR data.

3.2. C (= "Z": COMPRESSED OR "N": TEXT).

A compressed file needs less transmission time, but must be decompressed into text file before further processing.

3.3. SS (= "NC": NOT CHECKED OR "VA": VALIDATED).

The "NC" files are created a day earlier than the official distribution date. The only purpose is to make a pre-release available to the central banks, to check the results, on T2DIR level, resulting from changes in the static data. Corrections to static data can still be made, by the central banks, to correct the T2DIR prior to a new delivery. In principle, a participant only downloads a validated file (a participant should never be able to download a NC version).

3.4. YYYYMMDD (= VALIDITY).

The day from which the data will become valid. This is always the MONDAY after its distribution and remains valid up to the following Friday, even if either of these days are holidays.

3.5. TRANSMISSION MODE (PUSH OR PULL).

In PUSH mode the only files that can be received are the UPDA versions. The received file is always checked and is either compressed or not, depending on what is entered in the static data. In PULL mode all type of T2DIR files can be downloaded.

4. MANAGEMENT T2DIR FILES.

In this algorithm, prior manual changes applied to the local data are NOT considered.

4.1 PRELIMINARY CHECKS
- UPDATE files can only be used if the local data contains data distributed from the LAST (= previous) file. In all other cases, a FULL T2DIR must be used after scratching local data.
- The only allowed values in the field Type_of_Change are: "A", "M", "D" and "U".
- The only allowed values in the field Participation_Type must be in the range: "01" to "09".
- No record, in the received file, may contain the combination of "D" in the field Type_of_Change and "99991231" in the field Valid_Till.

4.2 MANAGEMENT MODIFLAGS
4.2.1   MODIFLAG M

4.2.1.1 Modiflag M with Valid Till 99991231
The first type of records to be treated is those with the value "M" in the field Type_of_Change combined with the date value "99991231" in the field Valid_Till. Two actions must be performed as this type of record is the combination of two data records, with respective values "D" and "A" in the field Type_of_Change. The fact that only the modiflag "M" is indicated is due to a change in the static data in the previous week. Therefore the SSP had no time to report this change in a previous T2DIR.

The record from the file, without the field Type_of_Change, is added to the local T2DIR; resulting in the simulation of the assumed "A" option of the record.

To simulate the second option (= "D"), the last (= highest value in the field Valid_From and not necessarily containing the value 99991231 in the field Valid_Till) record, related to the same BIC, is selected from to the local T2DIR. In this record, the value of the field Valid_Till, is updated to the previous calendar day (is easier to determine and works just as well as previous business day), of the value in the field Valid_From from the previously stored record. This last update avoids multiple (on-line) data related to one BIC.

Available local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	99991231

Record in file:

AAAAAAAAXXX	DDDDDDDDXXX	EEEEEEEEXXX	....	M	20070920	99991231

Result in local data:

AAAAAAAAXXX	DDDDDDDDXXX	EEEEEEEEXXX	....		20070920	99991231
AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	20070919

4.2.1.2 Modiflag M and Valid_Till not equal to 99991231

The second, type of record from the received file to be treated are those with the value "M" in the field Type_of_Change combined with a date value different from "99991231" in the field Valid_Till.

Select from the local T2DIR the LAST (highest value in the field Valid_From) record with the same value in the field BIC. The value in the fields Valid_From and Valid_till are copied from the received record in the selected record.

Available local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	99991231

Record in file:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	M	20070920	20071115

Result in local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070920	20071115

4.2.2   MODIFLAG D

The third, type of record from the received file to be treated are those with the value "D" in the field Type_of_Change. The received record, without the field Type_of_Change is copied into the local T2DIR if the latter doesn't yet contain a record with the same BIC and date value in the field Valid_From.

Select from the local T2DIR the LAST (highest value in the field Valid_From) record with the same value in the field BIC. The value in the fields Valid_From and Valid_till are copied from the received record in the selected record.

Available local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	99991231

Record in file:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....	D	20070920	20071018

Result in local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070920	20071018

The deletion of the record is not executed here, because the data related to the BIC, in this type of record, might still be useful at the beginning of the validity period of the T2DIR file.

4.2.3   MODIFLAG A AND U

The received records with value "A" or "U[1]" in the field Type_of_Change are added to the local T2DIR.

Available local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	20071018

Record in file:

AAAAAAAAXXX	FFFFFFFFXXX	HHHHHHHHXXX	....	A	20071019	99991231

Result in local data:

AAAAAAAAXXX	BBBBBBBBXXX	CCCCCCCCXXX	....		20070831	20071018
AAAAAAAAXXX	FFFFFFFFXXX	HHHHHHHHXXX	....		20071019	99991231

4.3 FINAL CHECK

Delete from the local T2DIR all records containing a value in Valid_From that is larger than the value in the related Valid_Till, allowing an easy check in the next step.

Check if each date in the field Valid_From, of the local T2DIR data related to the same BIC, is always higher than the date in the field Valid_Till of the preceding (arranged according ascending values in field Valid_From) record.

.

---

[1] only if the FULL T2DIR is used; in the Update file the modiflag "U" is not present.