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MACCs - Mobilisation and Administration of Credit Claims - Version 1.0

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</table>
Overview

1.1 Credit claims eligible for submission in MACCs

Credit claims whose contracts are governed by German law can be submitted in MACCs. The debtor’s domicile is irrelevant. The General Terms and Conditions of the Deutsche Bundesbank as last amended shall apply along with any supplementary special terms and conditions.

Credit claims governed by another euro area country’s legal system can only be submitted via MACCs if there is a bilateral agreement between the Bundesbank and the respective national central bank.
1.2 Required application forms

1.2.1 ExtraNet user management

**Requirement**
The requirement for participating in MACCs is the creation of relevant users in ExtraNet, the Bundesbank’s e-business platform.

**ExtraNet documentation**
The ExtraNet documentation, Part III “Basic services”, Chapter 3 “User management” describes in detail how to:
- create a new user;
- change user data;
- block a user;
- unblock a user;
- reset a password;
- delete a user.

**Creating a new user**
New users in ExtraNet are created online. The application form, complete with a legally binding signature, can be submitted to the Bundesbank as an original document by post or scanned and sent as a PDF file via email to maccs@bundesbank.de.
1.2.2 Domestic participants

Forms

The following forms are necessary in order to participate in the MACCs specialised procedure.

- For participation in MACCs
  - To be submitted by all participants
    - Application for participation in the electronic MACCs procedure (Form 5500)
    - General declaration of consent to assign credit claims to the Deutsche Bundesbank (Form 5501)
    - Notification of credit assessment procedure used (Form 5500-1)
    - One-off confirmation prior to start of participation in the electronic MACCs (Mobilisation and Administration of Credit Claims) procedure to use credit claims as eligible collateral (Form 5507)
  - Where necessary
    - Notification of rating grades and probabilities of default of an IRB decision (Form 5500-2)
    - Application for information about eligible obligors of assets posted as collateral (Form 5509)
    - Application for participation in the file transfer procedure (Form 5508)
    - Report on the results of the annual audit by the external auditors (Form 5506)
  - For creating users in ExtraNet
    - Application for admission

Note: All of the forms listed here can be downloaded from the Bundesbank’s website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/Forms.
1.2.3 Foreign participants (Bundesbank as correspondent central bank – CCB)

Forms

The following forms are necessary in order to participate in the MACCs specialised procedure.

- For participation in MACCs
  - To be submitted by all participants
    - Application for participation in MACCs with Bundesbank as CCB (Form 5500 (INT-engl.))
    - General declaration of assignment of credit claims with Bundesbank as CCB (Form 5501-1 (INT-engl.))
    - Notification of credit assessment procedure used (Form 5500 a-1 (INT-engl.))
  - Where necessary
    - Notification of rating levels and PDs of an IRB decision (Form 5500 a-2 (INT-engl.))
    - Application for information about eligible obligors of assets posted as collateral (Form 5509-1 (INT-engl.))

- For creating users in ExtraNet
  - Application for admission

Note: All of the forms listed here can be downloaded from the Bundesbank’s website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/Forms.
1.3 Access

1.3.1 Basic features

Access to MACCs

MACCs offers two regular access procedures (an online procedure and a file transfer procedure) for submitting and administering credit claims. The regular access procedures in MACCs are designed exclusively as electronic access procedures.

If one participant is experiencing problems accessing MACCs electronically via ExtraNet, there are various backup procedures for the regular access procedures (online/file transfer). These are outlined in detail in the chapter 4 Backup procedure – user instructions, page 66.

If all participants are experiencing problems accessing MACCs electronically via ExtraNet due to technical difficulties or failure, the Bundesbank will notify participants as to how to proceed.
1.3.2 Online procedure

**Individual submissions**  MACCs makes it possible to submit and administer credit claims interactively. Credit claims, debtor key data and IRB ratings are recorded individually and consecutively generally using the dual control principle.

It is possible to use the single control principle (the same user creates and releases the entries); however, this should only be used in exceptional cases and requires the participant to have suitable internal procedures in place with corresponding warnings and risk notifications. Users require special user roles if they are to use the single control principle.

Numerous system-based aids and plausibility checks ensure that the relevant credit claim data are recorded quickly and conveniently.

The technical requirements for the online procedure are outlined under chapter 1.6 Technical platform, page 15.
1.3.3 File transfer procedure

Large volume of submissions

Particularly for participants submitting large volumes, MACCs offers the option of bundling numerous credit claims, debtor key data and IRB ratings into a single file and transferring them to the Bundesbank in bulk. This has the additional advantage of enabling automated transfers.

The customer generates files on debtors, IRB ratings or credit claims to be submitted in MACCs from their internal system. These XML files have to follow the data structure stipulated by the Bundesbank for the MACCs procedure.
1.3.4 Intentionally left blank
### 1.3.5 Role concept

MACCs uses a role concept, which means that individual users may be assigned various access rights (roles). Roles are assigned via the user’s user ID in ExtraNet. When a user calls up MACCs, they can select only those functions which they are authorised to use. All other functions are not displayed.

**MACCs roles – ExtraNet online procedure**

A user ID may be assigned the following roles with the corresponding functions.

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Capture debtors (dual control principle)</td>
<td>Capture submissions for debtors and ratings (IRB)</td>
</tr>
<tr>
<td>02. Release debtors (dual control principle)</td>
<td>Release all processes captured for debtors and ratings (IRB)</td>
</tr>
<tr>
<td>03. Capture/release debtors (single control principle)</td>
<td>Capture and release all processes for debtors and ratings (IRB)</td>
</tr>
<tr>
<td>04. Capture credit claims (dual control principle)</td>
<td>Capture submissions for credit claims (monetary policy pool, ACC pool and T2 contingency pool)</td>
</tr>
<tr>
<td>05. Release credit claims (dual control principle)</td>
<td>Release credit claims (monetary policy pool, ACC pool and T2 contingency pool)</td>
</tr>
<tr>
<td>06. Capture /release credit claims (single control principle)</td>
<td>Capture and release credit claims (monetary policy pool, ACC pool and T2 contingency pool)</td>
</tr>
<tr>
<td>07. Credit claims analyst</td>
<td>Evaluate submitter, submissions and stock of credit claims (monetary policy pool, ACC pool and T2 contingency pool)</td>
</tr>
</tbody>
</table>
| 08. Debtors analyst | Evaluate individual debtors including their key data  
  - Display ICAS eligibility for ICAS participants  
  - Display own IRB rating for IRB participants |
| 19. Central Bank analyst | Evaluate debtors and ratings for other Eurosystem national central banks (role is not relevant for MACCs participants) |

**Other roles**

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. User Manager MACCs</td>
<td>Display all users and their roles for the participating credit institution</td>
</tr>
</tbody>
</table>

**MACCs roles – ExtraNet file transfer (upload/download authorisation for each mailbox)**

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>09. Submission debtors – including IRB ratings (file upload)</td>
<td>Upload files with submissions for debtors and IRB ratings using the file transfer procedure</td>
</tr>
<tr>
<td>10. Submission credit claims (file upload)</td>
<td>Upload files with submissions for credit claims (monetary policy pool, ACC pool and T2 contingency pool) using the file transfer procedure</td>
</tr>
<tr>
<td>11. Submission IRB ratings (file upload)</td>
<td>Upload files with submissions for IRB ratings using the file transfer procedure (rating data only)</td>
</tr>
</tbody>
</table>
### Assignment of roles

The following points should be considered when assigning roles:

- A user ID may be assigned multiple roles.
- Each necessary role should be assigned to at least four users so that enough staff members are present to operate MACCs even when users are off sick or on annual leave.

The following roles are to be assigned as a minimum for participation in MACCs.

If only the online procedure is used, the roles

- “Capture debtors (dual control principle)”,
- “Release debtors (dual control principle)”,
- “Capture credit claims (dual control principle)”,
- “Release credit claims (dual control principle)” as well as
- “Credit claims analyst” and
- “Debtors analyst”.

If the file transfer procedure is used, the roles

- “Submission debtors – including IRB ratings (file upload)”,
- “Submission credit claims (file upload)”,
- “Submission IRB ratings (file upload)”,
- “Receipt reports/partial receipts for debtors (file download)”,
- “Receipt reports for credit claims (file download)”,
- “Receipt reports for IRB ratings (file download)” and

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Receipt reports/partial receipt reports debtors</td>
<td>Download receipt reports for debtors using the file transfer procedure (including partial receipts)</td>
</tr>
<tr>
<td>(reports download)</td>
<td></td>
</tr>
<tr>
<td>13. Receipt reports credit claims</td>
<td>Download receipt reports for credit claims using the file transfer procedure</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>14. Receipt reports for IRB ratings</td>
<td>Download receipt reports for IRB ratings using the file transfer procedure (rating data only)</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>15. Stock report for credit claims</td>
<td>Download stock report for credit claims</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>16. Info file eligibility ICAS</td>
<td>Download info files with debtors that the Bundesbank has classified as eligible in ICAS</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>17. Info file PSE</td>
<td>Download info files for public sector debtors that are registered in MACCs</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>18. Notifications</td>
<td>Download notifications/information on debtor key data and the conclusion of credit assessments</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
<tr>
<td>20. Central bank evaluations</td>
<td>Download evaluations on debtors and ratings for other Eurosystem national central banks (role is not relevant for MACCs participants)</td>
</tr>
<tr>
<td>(file download)</td>
<td></td>
</tr>
</tbody>
</table>
• “Credit claims analyst” and
• “Debtors analyst”

To ensure that the online procedure can also be used for submissions as an alternative if there are problems with the file transfer procedure, the following roles
• “Capture debtors (dual control principle)”,
• “Release debtors (dual control principle)”,
• “Capture credit claims (dual control principle)”

and
• “Release credit claims (dual control principle)"

should be additionally assigned. If both submission procedures are used alternatively or simultaneously, the minimum requirements for both submission procedures should be observed.

The following restrictions apply to the assignment of roles.

The roles
• “Submission debtors – including IRB ratings (file upload)”,
• “Submission credit claims (file upload)”,
• “Submission IRB ratings (file upload)”,
• “Receipt reports/partial receipts for debtors (file download)”,
• “Receipt reports for IRB ratings (file download)”

and
• “Receipt reports for credit claims (file download)”

are requirements for using the file transfer procedure to submit credit claims in MACCs. These roles can be assigned for file transfer only if an application for participation in the MACCs file transfer procedure has been received by the Bundesbank.

The role
• “Debtors analyst”

can be requested by any participant.

The role
• “Info file eligibility ICAS (file download)”

can be assigned only if the MACCs participant uses the Bundesbank’s internal credit assessment system (ICAS/BBk), has submitted a declaration of confidentiality for using the data exclusively for the purposes of securing lending business with the Bundesbank, and the application for participating in MACCs includes an application for the provision, for every business day, of the info file with the debtors classified as eligible by the Bundesbank.

The role
• “Stock report credit claims (file download)”

can be assigned only if the application for participating in MACCs includes an application for the provision, for every business day, of the stock file with the current stock of claims.
The role
• “Info file PSE (file download)”
can be requested by any participant.

The role
• “Notifications (file download)”
should be requested by each submitter, since this mailbox provides information about
whether a new debtor previously submitted is eligible for submissions following the eligibil-
ity check. Furthermore, this mailbox contains information about changes to debtor key
data, information about stocks with a zero rating as well as notifications about ECAI rating
changes for which the submitter has a stock in MACCs.

The roles
• “Central bank analyst”
and
• “Central bank evaluations (file download)”
are not relevant for participants in MACCs and can therefore not be selected.

The role
• “User Manager MACCs”
is reserved for employees with special duties. There is a list that can be used to check which
staff members have registered for MACCs and which roles these staff members have. For
further details, see the ExtraNet documentation.

File transfer services
The file transfer services (file downloads)
• “Stock report”,
• “Information about stocks with a zero rating”,
• “Information about eligible ICAS debtors”,
• “Information about public debtors”
and
• “Provision of information”
are available for participants using both the online and the file transfer procedures – subject
to the restrictions listed above.

For further details on the individual services, see Chapter 3.3.

Please note the following:

Those roles that are also available in the single control principle can be selected separately as well as
in addition to the corresponding roles in the dual control principle. The role “Capture/release single
control principle” does not allow users to release entries made by another user with the role “Cap-
ture dual control principle”. This means that there must be at least two users with the dual control
principle role in addition to any users with a single control principle role.

When MACCs participants use the dual control principle, it is essential that at least four users have
the necessary dual control principle roles.
### 1.4 Functionalities

Different functionalities are available in MACCs depending on the access procedure.

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Online procedure</th>
<th>File transfer procedure</th>
<th>Back-up procedure online</th>
<th>Back-up procedure file transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission/change of debtors</td>
<td>X</td>
<td>X</td>
<td>not as a rule; for exceptions, see Chapter 4</td>
<td>X</td>
</tr>
<tr>
<td>Submission of credit claims without guarantors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Submission of credit claims with guarantors</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Update of credit claims</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Returns of credit claims</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Submission of IRB ratings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Update of IRB ratings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Receipt files for submissions</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Individualised evaluations</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Standardised evaluations</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

For a detailed description of the functionalities, see Chapters 2 to 4.
1.5 Operating and support hours

On business days, MACCs has the following operating and support hours.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours (Frankfurt time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to MACCs</td>
<td>08:00-18:00</td>
</tr>
<tr>
<td>Specialist support</td>
<td>08:00-16:00</td>
</tr>
<tr>
<td>Submissions for same-day acceptance</td>
<td>up to 11:00</td>
</tr>
</tbody>
</table>

MACCs is open to participants for online entries and evaluations on every business day between 8:00 and 18:00. Uploads and downloads per file transfer are not tied to these access times but can be made at any time during ExtraNet operating hours. The Bundesbank saves the files until they can be processed.

The Support team credit claims provides specialist support from 08:00 to 16:00. If a problem arises in MACCs between 16:00 and 18:00 and the Support team credit claims is not available for support, the user may send an e-mail to maccs@bundesbank.de. The Support team credit claims will then immediately contact the participant the following morning.

Submissions of credit claims made by 11:00 are processed on the same day. Should same-day processing not be possible for an important reason (e.g. the debtor is domiciled abroad), the participant will be informed immediately. Submissions not completely processed in one business day will be carried over to the next business day.

Detailed information

Further details on the operating and support hours are available on the Bundesbank’s website (www.bundesbank.de) under Services/Banks and companies/MACCs/Customer information/Operating and support hours.
1.6 Technical platform

1.6.1 Basic features

The MACCs web application is based on state-of-the-art IT technology; all components have redundant backups. The high availability standards are met by means of load balancing and data mirroring in two fire sections/data centres. Further security-specific integrity, confidentiality and authenticity standards have been implemented appropriately. There are also measures in place to ensure unique, audit-compliant traceability and electronic archiving.

There are two channels for accessing MACCs via the Bundesbank’s e-business platform ExtraNet: the online procedure and the file transfer procedure, both of which are based on state-of-the-art internet technology. Maintaining user IDs (creating, changing, deleting) as well as authentication for MACCs are also performed via ExtraNet.

Detailed information on the Bundesbank’s ExtraNet can be found on the Bundesbank’s website (www.bundesbank.de) under Service/ExtraNet or by calling up the following link:

https://www.bundesbank.de/en/service/extranet/documentation
1.6.2 Online procedure

The use of a standard internet browser is generally sufficient for the online procedure. For detailed information on browser type and client, see the ExtraNet documentation, Part II “Infrastructure requirements”, Chapter 2 “Customer’s PC – system requirements”.

File transfer procedure

The file transfer procedure is used to transfer files between customers and MACCs. Files can be transferred:

- manually, from a browser;
- automatically, from the customer’s software application (direct connection).

For information on the technical connection via the file transfer procedure, see the ExtraNet documentation, Part IV “Technical specifications”.

Data are usually transferred to MACCs in XML format. The Bundesbank provides file transfer participants with one XML schema for each submitted item – debtor, IRB rating and credit claim. This schema prescribes the data structure for the submission file and for the corresponding receipt file.

The latest versions of the specifications for the respective XML schemas as well as of the “Explanatory notes on the files in the MACCs file transfer procedure” can be downloaded from the Bundesbank’s website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/File transfer.
1.7 Costs

Running costs
The participant only has to bear their own costs (e.g. internet connection fees).

XML implementation routine
To use the file transfer procedure, it is necessary to transfer the required data from the participant’s databases into an XML data structure that complies with the Bundesbank’s schema requirements. Because each participant has different individual requirements, the Bundesbank is unable to provide the necessary implementation routines. The one-off fees for developing such a routine and the maintenance costs are to be borne by the participant.
2 Online procedure - user instructions

2.1 Login to MACCs

URL
To log in to MACCs, enter the following URL into your browser:
https://extranet.bundesbank.de/maccs

Security components
The following security components are required to log in to MACCs.

<table>
<thead>
<tr>
<th>Security component</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>User ID</td>
<td>Issued by the Bundesbank (usually in the registration form) upon initial registration in ExtraNet (where it is termed &quot;user name&quot;).</td>
</tr>
<tr>
<td>Password</td>
<td>After initial registration in ExtraNet, the Bundesbank will send the user a start password in a PIN letter. The start password must be converted into a personal password when the user logs in for the first time.</td>
</tr>
</tbody>
</table>

Login process
You can log in to MACCs by following these steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Launch the browser.</td>
</tr>
</tbody>
</table>
| 2    | Call up the login screen by entering the above-mentioned URL.  
Result: The ExtraNet login screen is displayed. |
| 3    | Enter the user ID. |
| 4    | Enter the password.  
Result: The MACCs home page is displayed. |
2.2 Design of MACCs

2.2.1 General instructions for use

Navigation

The functions are selected via the menu. All screens and selection options can be operated by a single mouse click.

If screens are arranged in multiple layers, the user can navigate backwards via the path bar above the application screen.

In input screens, the user can generally use the tab key to move to the next field.

Plausibility checks

The entry and release processes are subject to plausibility checks. The specific plausibility checks are explained in detail for each individual function. In addition, there are general plausibility checks, such as the input formats for amount and date, the length of an input field, etc., which derive from the context and the error message and are not explained any further. An asterisk * behind the field name indicates that the field is mandatory.

Error mode

If an entry fails plausibility checks, the affected fields are highlighted in red and the respective error message is issued above the input screen:

❌ Invalid Post code.

Correct entries are confirmed via a receipt message:

ℹ️ The entry for registration of a new debtor was released successfully.
Print functions

The displayed information can be printed using the internet browser’s print function. Evaluations are generally also generated as printable PDF or Excel documents.
2.2.2 MACCs user interface

Structure

The user interface is comprised of the following sections.

- Header bar
- Menu area
- Application area

Header bar

The header bar contains the following information and options.

<table>
<thead>
<tr>
<th>Information/option</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application name</td>
<td>The name and logo of the MACCs application and the application operator “Deutsche Bundesbank Eurosystem” are displayed.</td>
</tr>
<tr>
<td>Language selection</td>
<td>The user can set the language to either German or English.</td>
</tr>
<tr>
<td>Contact information</td>
<td>The central point of contact for any questions concerning MACCs is the Support team credit claims. The telephone number, address, email address and support hours can be found by clicking on the “Contact” link.</td>
</tr>
<tr>
<td>Help</td>
<td>Clicking the “Help” link will take you to the current version of the user handbook.</td>
</tr>
<tr>
<td>Logout</td>
<td>To log out correctly from MACCs, please use the “Logout” button. Always use the “Logout” button to exit MACCs, as an unauthorised party may otherwise gain access to the MACCs application by calling up the URL on the same PC.</td>
</tr>
</tbody>
</table>

Menu area

Menu bar

The menu bar on the left side of the screen contains all of the available menu items depending on the roles assigned to the user. The MACCs functions/screens can be called up via the menu selection (maximum of three levels). The functions are displayed in the application area.

The current version with version number and date, user ID and system time is displayed below the menu bar.

Path bar

The path bar, which is located directly above the application area and is highlighted in colour – blue for the production environment and yellow for the test environment – shows the menu path up to the screen displayed. Every path element is designed as a link. Clicking on a path element will return you to a previous screen.

Application area

In the application area, the user can see the relevant display or input screens.
2.3 Captures, changes and releases

2.3.1 Captures

2.3.1.1 Basic features

Basic features

The following entries can be made via the online functions, which will be discussed in detail in the chapters below:

- Submission of debtors (with the corresponding IRB rating, as appropriate) – Create only. Changes to debtor key data – i.e. in the case of a change of legal form, relocation of registered office or change of address – cannot be entered via MACCs but instead are to be sent to maccs@bundesbank.de as soon as they are known.
- Submission of IRB ratings – either first-time entries or updates – for debtors already existing in MACCs (this function is available only to participants that use IRB ratings)
- Submission of credit claims, broken down by business type: new submission, update and return

Alongside the option of online entry, the aforementioned functions can, in principle, be performed using the file transfer procedure. Only the special case of “New submission of credit claims with guarantors” cannot be performed using the file transfer procedure.

The file transfer procedure will be explained in detail in the file transfer user-instructions.

The available functions in the respective access procedures depend on the options regarding type of rating and available cover pool that are selected in the application to participate in MACCs and listed below.

Type of rating

The following types of rating (credit assessment procedure) are available.

<table>
<thead>
<tr>
<th>Type of rating</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAS</td>
<td>Internal Credit Assessment System (of the individual central banks in the Eurosystem). An ICAS procedure is currently provided by the Deutsche Bundesbank, the Banque de France, the Oesterreichische Nationalbank, the Banca d’Italia, the Banco de Portugal, the Banka Slovenije and the Banco de España.</td>
</tr>
<tr>
<td>IRB</td>
<td>Internal Rating Based (Approach) – the participant’s internal rating, which is used as the basis for calculating regulatory capital requirements but which must undergo an additional approval procedure for use for monetary policy purposes.</td>
</tr>
<tr>
<td>ECAI</td>
<td>External Credit Assessment Institution – summarised rating by those agencies authorised by the ECB. This type of rating also includes an implied rating (IM) for public sector entities (PSEs) that are rated directly or indirectly through an external assessment according to the conditions for receiving a credit rating. Also applies to multilateral institutions.</td>
</tr>
</tbody>
</table>
Applicability of types of rating

The types of rating can be applied to the various types of debtors (sectors) as follows.

<table>
<thead>
<tr>
<th>Type of debtor (sector)</th>
<th>Types of rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICAS</td>
</tr>
<tr>
<td>Enterprises</td>
<td>X</td>
</tr>
<tr>
<td>Multilateral institutions</td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td></td>
</tr>
</tbody>
</table>

Pool

In MACCs a “pool” (including pool ID, pool class and collateral account) is assigned to each type of rating of a participant that is selected. One purpose of the pool is to book turnover to the specified collateral account and, where necessary, to separate stocks of credit claims.

Initially, only one monetary policy pool will be available for each participant.

Further developmental stages will envisage the creation of further pool classes for ACCs, T2-Contingency and for the use of DECCs. A decision on whether or not to set up additional monetary policy pools will be taken by the ECB.

Note: If the user enters an impermissible combination of the following properties: type of rating, pool class and type of debtor (sector), an error message will ensue (see the plausibility checks for “General input screen”).

2.3.1.2 Capture of debtors

2.3.1.2.1 Basic features

Basic features

This input function can be used by a participant to issue an order to create a debtor in MACCs in order to submit credit claims for this debtor. If the participant uses IRB as the type of rating, the capture of a debtor can be combined with the capture of a corresponding IRB rating.

Role

One of the two roles below is necessary to capture debtors:

- Capture debtors (dual control principle)
- Capture /release debtors (single control principle)

Debtor ID/debtor proxy ID

The system assigns each debtor domiciled in Germany a unique debtor ID. The debtor ID for a debtor domiciled in Germany always begins with the letters DES. It is returned in the MACCs evaluations and can/should be imported to the participant’s database.

Each debtor domiciled outside of Germany (including international and supranational institutions, which should be entered as the country “International” (XX)) is assigned a debtor proxy ID. A debtor proxy ID always begins with the letters DEX. At a later point in time, such debtors are assigned a debtor ID by the responsible national central bank; this ID is communicated to the Bundesbank and entered into the debtor master data record. Each respective debtor ID begins with the abbreviation of the debtor’s country of domicile (e.g. “FR” for France).
For international and supranational institutions, no debtor ID will be assigned for the foreseeable future; in MACCs, therefore, they will exclusively be reported using a debtor proxy ID.

Approach/menu navigation

If the menu item “Submission>Debtor>Capture” is called up, an input screen for creating a debtor will appear. The fields for creating an IRB rating will appear only if an IRB rating system has been set up for the participant.

2.3.1.2.2 Input screen

The input screen is divided into the “Debtor” and “IRB rating” sections. The latter is displayed only for participants with an IRB rating system, who can enter not only the debtor data but also the debtor’s IRB rating. An IRB rating can also be provided at a later point in time. This entry is optional when inputting a debtor.

Entry fields

Debtor:
- Name (entry field/required)
- Street address (entry field/required)
- Post code (entry field/required)
- Town/city (entry field/required)
- Country (selection field/required – pre-populated with “DE”)
- Sector (selection field/required – pre-populated with “Corporate”)
- RIAD code (entry field/optional)
- LEI (entry field/optional)
- Register number (entry field/optional)
- Register town/city (entry field/optional)
- Joint and several debtor (control field/optional – unchecked by default)

IRB rating (only for participants with an IRB rating system):
- Rating grade (selection field/optional)
- PD (entry field/optional)
- Valid until (date field/optional)

Name
Enter the complete and official name of the debtor (according to the commercial register entry, statutes, etc.) here.

Street address
Enter a street name and house number here; post office box addresses are not permitted.

Post code
Enter the post code in this field; if entering a German post code, this must always be a five-digit number.
Town/city
Enter the official and complete name of the town/city in the business address here.

Country
This field can be populated with any of the following countries:
- AT (Austria)
- BE (Belgium)
- CY (Cyprus)
- DE (Germany)
- EE (Estonia)
- ES (Spain)
- FI (Finland)
- FR (France)
- GR (Greece)
- IE (Ireland)
- IT (Italy)
- LT (Lithuania)
- LU (Luxembourg)
- LV (Latvia)
- MT (Malta)
- NL (Netherlands)
- PT (Portugal)
- SI (Slovenia)
- SK (Slovakia)
- XX (international – use only in connection with multilateral institutions)

Credit claims to debtors domiciled in a Eurosystem country may be submitted in MACCs if they were granted under German law.

Credit claims to a multilateral institution may be submitted in MACCs even if this institution is not domiciled in a Eurosystem country. Multilateral institutions are listed in MACCs under the notional country “XX”. The credit contract of the underlying credit claim must be governed by German law.

Sector
This field can be populated with any of the following sectors:
- Corporate
- Public sector
- Multilateral institutions

Only those institutions published on the Bundesbank’s website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/Documentation/Downloads are eligible to be entered as multilateral institutions.

RIAD code
This field can be populated with the debtor’s RIAD code.
**LEI (Legal Entity Identifier)**
The LEI can be entered in this field to complete the data.

**Register number**
This field can be populated with the number of an official register; for German enterprises, enter the register number assigned to the debtor, generally the number of the commercial register.

**Register town/city**
Enter the register town/city corresponding to the register number (see above) here.

**Joint and several debtor**
If the debtor is being registered merely as a joint and several debtor, click on the control field to activate it.

**Rating grade**
A rating grade can be selected from the IRB rating system set up for the participant. The additional fields that go with the IRB rating (PD, valid until) are then released for input and become required fields.

**PD (Probability of Default)**
Enter the current probability that the debtor will default over a one-year horizon in the “PD” field.

**Valid until**
Enter the date up until which the current rating is valid in the “Valid until” field.

### Plausibility checks

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post code Country</td>
<td>If the country code = DE, the post code must be a 5-digit number.</td>
<td>Invalid post code.</td>
</tr>
<tr>
<td>Country Sector</td>
<td>If Country ≠ XX, the type of debtor is not allowed to be multilateral institutions.</td>
<td>Invalid combination of country/sector.</td>
</tr>
<tr>
<td>Country Sector</td>
<td>If Country = XX, the type of debtor must be multilateral institutions.</td>
<td>Invalid combination of country/sector.</td>
</tr>
<tr>
<td>Name Street address Town/city</td>
<td>No entry record for a debtor with the same data is permitted to exist for the same participant.</td>
<td>Entry record already exists.</td>
</tr>
<tr>
<td>RIAD code LEI Register number Register town/city</td>
<td>No open submission for a debtor with the same data is permitted to exist for the same participant.</td>
<td>RIAD code, LEI, register number or register town/city already exists.</td>
</tr>
<tr>
<td>PD (IRB rating)</td>
<td>The PD must be within the range of rating grades.</td>
<td>PD is not within the rating grade.</td>
</tr>
</tbody>
</table>
2.3.1.3 Capture of IRB ratings

2.3.1.3.1 Basic features

Basic features

An IRB rating can be captured only if a participant uses the IRB type of rating as their credit assessment procedure and the respective debtor already exists in MACCs. This function may be used to submit an IRB rating for the first time for an existing debtor or to update an existing IRB rating.

An IRB rating update must be performed immediately any time the rating decision or credit assessment of the debtor or guarantor of a credit claim assigned to the Bundesbank changes.

A rating update must be performed at least once a year in MACCs for each debtor/guarantor to demonstrate that the decision is up to date. If the validity date of an IRB rating has expired, the credit claim values of the affected credit claims are set to zero and the participant is requested to withdraw these credit claims.

Should an IRB rating be deleted prior to the expiry of the validity date, the rating is to be updated, with the validity date reset to the current date. This means that, on the next business day, the debtor ceases to be eligible upon the loss of the rating/ if the debtor has lost their rating, they cease to be eligible.

Whenever an IRB rating update is being entered or revised, it is not possible to update or return credit claims of the debtor in question during the update.

Role

One of the two roles below is necessary to enter IRB ratings:

- Capture debtors (dual control principle)
- Capture/approve debtors (single control principle)

Approach/menu navigation

An IRB rating is captured in two process stages:

- After calling up the menu item “Submission>IRB rating>Capture”, the participant – possibly after conducting a search – selects a debtor for rating capture.
- The new or updated rating data are then captured in the input screen that subsequently appears.

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid until (IRB rating)</td>
<td>The date must fall after the current day.</td>
<td>The validity date must fall after the current day.</td>
</tr>
<tr>
<td>Date must not fall after current day + 1 year - 1 day. (Example: entered on 12 Oct 2019 and valid until 11 Oct 2020)</td>
<td></td>
<td>The maximum period is one year.</td>
</tr>
</tbody>
</table>
2.3.1.3.2 Selection and input screens

Debtor list selection screen

The debtor list that can be called up from the menu lists the available debtors. Use the search function to find, via the attributes, the debtor ID/debtor proxy ID, RIAD code, LEI, name and town/city of the debtors for which an IRB rating is to be captured. Click on the "Rating" button of the relevant debtor to open the input screen for the IRB rating.

IRB rating input screen

The input screen is divided into two sections. In the "Debtors" section, the key data of the selected debtor are displayed in read-only mode; in the "Rating" section, an IRB rating for the debtor can be created or modified. Enter the new rating in row 1 of the rating section under "New". In row 2, the current rating is displayed in read-only mode (remains empty if new rating is created).

The following items of rating information need to be captured:
- Rating grade (selection field/required)
- PD (entry field/required)
- Valid until: (date field/required)

Rating grade

The available rating grades are pre-populated for every IRB participant in line with the submitted IRB rating scale. The debtor’s correct rating grade is to be chosen from the list of possible rating grades. Each rating grade consists of the following information: PD from – to -- grade name -- CQS (credit quality step).

PD (Probability of Default)

Enter the current probability that the debtor will default over a one-year horizon in the “PD” field.

Valid until

Enter the date up until which the current rating is valid in the “Valid until” field. If an existing rating is to be deleted, enter the current business day as the validity date.

Plausibility checks

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtor list</td>
<td>No previous entry of an IRB rating for this rating system and this debtor may exist.</td>
<td>Capture record already exists.</td>
</tr>
<tr>
<td></td>
<td>No previous open Submit IRB ratings may exist for this rating system and this debtor.</td>
<td>Submission already exists.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td>The PD must be within the range of rating grades.</td>
<td>PD is not within the rating grade.</td>
</tr>
</tbody>
</table>
2.3.1.4 Capture of credit claims

Basic features
When capturing credit claims, a distinction is made by business type: new submission, update and voluntary return. Separate entry is offered for each business type.

Role
One of the two roles below is necessary to capture credit claims (capture new submission, capture update and capture return):

- Capture credit claims (dual control principle)
- Capture/release credit claims (single control principle)

2.3.1.4.1 New submission of credit claims

2.3.1.4.1.1 Basic features

Basic features
The participant can use this function to submit a new credit claim for a debtor that already exists in MACCs.

Approach/menu navigation
The process of submitting a new credit claim encompasses several steps.

- The participant calls up the menu item “Submission>Credit claim>Capture new submission”.
- The input screen for submitting a new credit claim then appears in the background, and in the foreground a search window named “Debtor search” appears.
- After conducting a search (entering the search term and optionally town/city), the participant selects a debtor from the results list.
- Once a debtor has been selected from the results list, the system closes the search window and opens the input screen so that a credit claim can be newly submitted. Data on the pool and the credit claim are entered or selected in the input screen.

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid until</td>
<td>The date must fall on or after the current day.</td>
<td>Invalid date</td>
</tr>
<tr>
<td></td>
<td>Date must not fall after current day + 1 year - 1 day.</td>
<td>The maximum period is one year.</td>
</tr>
<tr>
<td>Rating grade, PD,</td>
<td>At least one value must be changed.</td>
<td>No changes.</td>
</tr>
<tr>
<td>Valid until</td>
<td>(Only if update)</td>
<td></td>
</tr>
</tbody>
</table>
2.3.1.4.1.2 Selection and input screens

Debtor search
First, a debtor search screen opens up in a modal window after being called up from the menu. The search window offers two search fields: search term (required field) and town/city (optional). Once the search term and optionally town/city have been entered, MACCs searches the current debtor data for matches with the search criteria, with the search term encompassing data on debtor ID/debtor proxy ID, RIAD ID, LEI and name. Debtors matching the search criteria are returned in a debtor list. The list is arranged in ascending alphabetical order by debtor ID. Clicking on the debtor ID enters the desired debtor and corresponding key data into the input screen in read-only mode and closes the debtor search. If more than 100 matches (debtors) are found, this produces an error message requesting the user to refine the search.

Pool selection
Various pools – depending on the business purpose – can be maintained for participants in the MACCs specialised procedure. The pools are for administering stocks of credit claims. If only exactly one pool is maintained for the participant, this is displayed in the input screen along with the corresponding collateral account in read-only mode. Where multiple pools exist, the system returns the pool selection specified for the MACCs participants with the following attributes: pool ID, pool class and pool name. Once a pool has been selected, the selection window closes and the selected pool data are imported to the input screen along with the corresponding collateral account in read-only mode.

Claims information
The following information is displayed or to be entered/selected in the input screen – in the “Claims information” section:

- Internal reference number (entry field/required)
- Reference known by debtor (entry field/required)
- Value date (date field/required)
- Law governing credit claim (selection field pre-populated with “DE”/required)
- Nominal amount (entry field/required)
- Currency (selection field pre-populated with “EUR” and read-only)
- Maturity date (date field/required)
- Type of credit claim (selection field/required)
- Consortium loan (control field/required)
- Collateral assets posted for the credit claim (control field/required)
- Joint and several debtors (control field/required – default set to “no”)
- Guarantor (control field/required – default set to “no”)

Internal reference number
The internal reference number is assigned by the participant himself for the purpose of uniquely identifying that participant’s credit claims.
Reference known by debtor

Reference known by debtor is assigned by the participant themselves for the purpose of uniquely identifying that participant’s credit claims against the debtor, guarantor or joint and several debtor.

Value date

The value date gives the point in time at which the amount of the credit has been disbursed.

The value date given does not impact on the applicable haircut. For calculating the haircut, only the residual maturity of the credit claim starting from the current business day is relevant.

For a claim against borrowers’ notes, the value date is the date on which the claim against borrowers’ notes is disbursed to the debtor, not, for instance, the date on which the participant acquired the claim against borrowers’ notes and added it to their own book.

Single-clicking the “Value date” field opens a calendar function where the date can be chosen. The calendar function is limited to +/- 10 years. However, any given date can be entered manually.

Law governing credit claim

Law governing credit claim is pre-populated with “DE” (contract governed by German law).

The use of additional countries’ jurisdictions and thus the expansion of the country list is predicated on a bilateral agreement between the Bundesbank and that country’s national central bank.

Nominal amount

Enter the amount outstanding of the credit claim at the time it was submitted. The submission of partial credit claims is not permitted.

In domestic transactions, there is no minimum submission amount; in cross-border CCBM business, the amount must be at least €500,000.00.

The standard input format is commas as thousand separators and two decimal places. Entries in a different format are automatically converted to the standardised format.

Examples:
- 100000 ==> 100,000.00
- 100000.1 ==> 100,000.10

Currency

Credit claims must be denominated in euro. The “Currency” field is therefore pre-set to “EUR” and read-only.

Maturity date

Specify the credit claim’s maturity date.

If this is a credit claim which is regularly repaid in instalments, i.e. in roughly equal amounts and at roughly equal intervals (e.g. annuity loans), the date on which the last increment is due is given as the maturity date. If this date is not clearly defined, it shall be calculated based on the originally agreed interest and repayment rate. Agreed call rights are irrelevant here. If, after the interest rate fixation period has expired, the interest and/or repayment
rate change, the maturity date (see chapter entitled “Entry of updates”) must be immediately updated to the due date of the last incremental amount newly calculated using these parameters.

If, in the credit contract, no maturity date is given and the credit has been granted indefinitely (“perpetual” credit claim), give 31 December 2099 as a notional maturity date. The maturity date must be after the date of submission.

Single-clicking the “Maturity date” field opens a calendar function where the date can be chosen. The calendar function is limited to +/- 10 years. However, any given date can be entered manually.

**Type of claim**

The user may choose from among the following types of claims:

- Credit claim
- Claim against borrowers’ notes

The selection field is pre-populated with “Credit claim”.

**Consortium loan**

If the submitted credit claim is a consortium loan or a permissible percentage share in a consortium loan, activate the (non-pre-populated) control field “yes”. Sub-participations in consortium loans are generally not eligible for submission.

**Collateral assets posted for the credit claim**

If credit collateral for the submitted credit claim has been posted, activate the (non-pre-populated) control field “yes”. Activate the field if, for instance, the following credit collateral has been posted:

- Sureties/guarantees if they are not applicable (for applicable guarantees and sureties, see “Guarantor code”)
- Binding letters of comfort
- Liens on property
- Assignment of receivables (e.g. trade receivables or receivables from rental and leasing)
- Ownership transfers (e.g. of machinery)
- Attachments (e.g. of shares in private limited companies)

**Joint and several debtors**

If joint and several debtors exist for the submitted credit claim, activate the control field “yes” (the pre-set is “no”). In this case, the system will open up the “Joint and several debtors” block at the end of the input screen, containing a button “Add joint and several debtors”. Clicking on this field will open up the debtor search. Once a debtor has been selected, this debtor will be imported to “Joint and several debtors”.

The number of joint and several debtors is unlimited and can be expanded as needed.
Guarantor

If a relevant guarantor exists for the submitted credit claim, activate the control field “yes” (the pre-set is “no”). In this case, the system will open up the block to enter the guarantor at the end of the input screen. Once a debtor has been selected via the “Select debtor” button shown in this block, this debtor is imported to “Guarantor”. When saving or releasing a credit claim with a guarantor, the following security query will be displayed.

**Confirmation**

If eligibility is to be based on the eligible rating of the guarantor did Deutsche Bundesbank check the loan agreement, the written guarantee and the related legal confirmation and did you get a positive response?

- Yes
- No

If the security query is confirmed by answering “yes”, the input record is saved (dual control principle) or released (single control principle). If the security query is rejected by answering “no”, the user will be returned to the input screen for processing and, as appropriate, changing the input.

**Note:** If the “Joint and several debtors” and “Guarantor” control fields are both activated for the submitted credit claim, the two blocks will appear for entry one after another. The procedure for entry in the blocks is similar to the procedure mentioned above.

Structure of interest payments and repayments

Structure of interest payments and repayments forms an independent section in the input screen and encompasses the following fields:

- Type of interest payment (selection field/required)
- Repayment (selection field/required)
- Reference interest rate (selection field/conditional field)
- Explanation reference interest rate (selection field/conditional field)
- Resetting period interest rate (selection field/conditional field)
- Flag Cap (selection field/conditional field)
- Cap (%) (entry field/optional)
- Floor (%) (entry field/optional)

Type of interest payment

Select one of the following types of interest payment:

- Fixed
- Floating

A credit claim will be assessed as floating only if it meets the following conditions:

- the type of interest payment is floating;
- the resetting period interest rate is less than or equal to one year;
- no cap has been set.

If the resetting period interest rate is greater than one year, the credit claim is treated identically to a fixed-interest credit claim. It is given as “floating” and “> 1 year”. The credit claim value is calculated based on the type of interest payment and residual maturity.
Information on the term structure

For credit claims with floating interest repayment, provide information on the cap code, resetting period interest rate and reference interest rate.

Credit claims which are originally floating at the beginning of their lifetime but are later fixed-interest (floating-to-fixed) are entered over their entire lifetime as fixed-interest credit claims.

<table>
<thead>
<tr>
<th>Term structure</th>
<th>Type of interest payment</th>
<th>Cap code</th>
<th>Interest rate reset interval</th>
<th>Reference interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Fixed</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Mixed (floating-to-fixed)</td>
<td>Fixed</td>
<td>Information required (required field)</td>
<td>Information required (required field)</td>
<td>Information required (required field)</td>
</tr>
<tr>
<td>Floating</td>
<td>Floating</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Repayment

The following options are available:

- Monthly
- Quarterly
- Semi-annually
- Annually
- Repayment at final maturity
- Other

Reference interest rate and explanation of reference interest rate

If the type of interest payment is floating, this information is mandatory. A euro money market rate (such as EURIBOR), a constant maturity swap rate (such as CMS, EIIS-DA or EUSA) or the yield on a government bond issued by a euro area Member State with a maturity of not more than one year (or an index containing several such bonds) are permitted to be used as the reference interest rate.

For credit claims with a reference rate not contained in the pick list, select “OTHER” as the reference interest rate and, in the “Explanation of reference interest rate” field, additionally give the name of the current underlying reference interest rate (required if OTHER has been chosen). In this case, the Bundesbank will initially reject the submission of the credit claim. At the same time, a review of the permissibility of the new reference interest rate will be triggered at the ECB.

If a reference interest rate contained in the pick list has been chosen, the “Explanation of reference interest rate” field is read-only (greyed out).
Resetting period interest rate

If the type of interest payment is floating, this information is mandatory. The following options are available:

- > 1 year
- Annually
- Semi-annually
- Quarterly
- Monthly
- Fortnightly
- Weekly
- Irregular < 1 year

Flag Cap

If the type of interest payment is floating, this information is mandatory. The following options are available:

- Cap available
- Cap not available

Cap (%) and floor (%)

The values for a cap and/or a floor can be optionally entered into these two fields (percentage value, two decimal places)

Example: 1.00

The standard input format is two decimal places. Entries in a different format are automatically converted to the standardised format.

Example:

- 1 ==> 1.00
- 10.1 ==> 10.10

Plausibility checks

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility checks</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pool ID</td>
<td>A current rating system must be assigned for the selected pool.</td>
<td>Rating system not assigned to the selected pool.</td>
</tr>
<tr>
<td>Assigned rating system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debtor ID and/or debtor proxy ID of the debtor</td>
<td>A rating system must be assigned to the debtor’s country/sector combination if no guarantor exists.</td>
<td>No rating system has been assigned to this country/sector combination of the debtor/guarantor.</td>
</tr>
<tr>
<td>Assigned rating system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data attributes</td>
<td>Plausibility checks</td>
<td>Error message</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Internal reference number</td>
<td>The internal reference of a new submission may • not be in any credit claim in the stock and • not be in any still open entry or submission of the participant.</td>
<td>Internal reference number already exists.</td>
</tr>
<tr>
<td>Reference known by debtor</td>
<td>The loan account/reference number may • not be in any credit claim in the stock and • not be in any still open entry or submission of the participant.</td>
<td>Loan account/reference number already exists for credit claim/submission of credit claim.</td>
</tr>
<tr>
<td>Value date</td>
<td>The credit disbursement date must fall after the system date.</td>
<td>Invalid date of credit disbursement.</td>
</tr>
<tr>
<td></td>
<td>The date of the credit disbursement may not fall more than 100 years before the system date.</td>
<td>Invalid date of credit disbursement.</td>
</tr>
</tbody>
</table>
| Nominal amount                      | The nominal amount must be ≥ the minimum nominal amount.  
  (Currently €0.00 domestic / €500,000 cross-border)                                                                                                                                                                                                                                           | Less than minimum amount.                                                                          |
| Maturity date                       | The date must fall after the system date.                                                                                                                                                                                                                                                                                                               | Invalid maturity date.                                                                            |
|                                     | The date may not fall more than 100 years after the system date.                                                                                                                                                                                                                                                                                      | Invalid maturity date.                                                                            |
| Type of interest payment            | If the type of interest payment is “floating”, give a reference interest rate, resetting period interest rate and the cap code.                                                                                                                                                                                                                              | Invalid combination of type of interest payment, resetting period interest rate and cap code.    |
| Reference interest rate             |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Resetting period interest rate      |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Flag Cap                            |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Cap (%)                             |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Floor (%)                           |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Type of interest payment            | If the type of interest payment is “fixed”, reference interest rate, resetting period interest rate, cap code, cap and floor cannot be entered.                                                                                                                                                                                                         | Invalid combination of type of interest payment, resetting period interest rate and cap code.    |
| Reference interest rate             |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Resetting period interest rate      |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Flag Cap                            |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Cap (%)                             |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Floor (%)                           |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |
| Reference interest rate “Other”     | If reference interest rate is “Other”, enter a text.                                                                                                                                                                                                                                                                                                  | Invalid combination of reference interest rate and explanation.                                  |
| Explanation of reference interest rate |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |
### Data attributes

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility checks</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flag Cap</td>
<td>If, for cap code, “Cap does not exist”, no cap may be given. (It is possible to enter a floor, if “Cap exists”, it is possible to enter a cap and/or floor)</td>
<td>Invalid combination of cap code and cap.</td>
</tr>
<tr>
<td>Cap (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country of participant</td>
<td>For country of debtor, country of joint and several debtor, country of guarantor, law governing credit claim and country of participant, in principle, only two different euro area country codes can occur. The pseudo-code XX can additionally be used for country of debtor, country of joint and several debtor and country of guarantor.</td>
<td>Number of maximum permitted rights within credit claim exceeded.</td>
</tr>
<tr>
<td>Country of debtor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law governing credit claim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country of joint and several debtor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country of guarantor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Guarantor input screen

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility checks</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtor ID and/or debtor proxy ID of the guarantor</td>
<td>A rating system must be assigned to the guarantor’s country/sector combination.</td>
<td>No rating system has been assigned to this country/sector combination of the debtor/guarantor.</td>
</tr>
<tr>
<td>Assigned rating system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarantor code</td>
<td>If “yes” has been chosen for guarantor code, enter a guarantor.</td>
<td>Invalid combination of guarantor code and guarantor.</td>
</tr>
<tr>
<td>Debtor ID and/or debtor proxy ID of the guarantor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Joint and several debtors input screen

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility checks</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint and several debtors</td>
<td>If “yes” has been chosen for joint and several debtors code, enter at least one joint and several debtor.</td>
<td>Invalid combination of joint and several debtors code and joint and several debtor.</td>
</tr>
<tr>
<td>Debtor ID and/or debtor proxy ID of the joint and several debtor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Continuing entry of new submissions

Following successful capture/release, MACCs provides two options for continuing the capture of new submissions for the current participant and the currently selected pool.

- Option 1 “Capture submission for same debtor” (pool and debtor information from previous entry is carried over).
- Option 2 “Capture submission for a different debtor” (only the pool information from previous entry is carried over).

If there are no further submissions to be captured, processing can be ended or continued by selecting any menu item.
2.3.1.5 Capture of credit claims in HCB business

It is possible, in principle, to enter credit claims in HCB business in MACCs, yet this is contingent on a bilateral agreement between the Bundesbank and the relevant national central bank.

The description of the attendant functionalities and differences relative to previous versions will be added here at a later date.

2.3.1.6 Updating capture of credit claim

2.3.1.6.1 Basic features

Basic features

The MACCs stock data of the credit claims transferred to the Bundesbank must be updated immediately in the event of any change, especially if this leads to a change in the outstanding amount of the credit claim, e.g. due to (partial) repayments.

The relevant point in time for changing the data in MACCs is the day the change occurred, but shall be no later than the business day following the relevant point in time.

There can always be only one open entry record (update or return) for each credit claim in the MACCs stock. Until this record has been conclusively processed by the Bundesbank, no update or return can be entered for this credit claim. For submitters using IRB as the type of rating, this examination also includes entry records from the update of the rating.

Role

One of the two roles below is necessary to capture updates of credit claims:

• Capture credit claims (dual control principle)
• Capture/release credit claims (single control principle)

Approach/menu navigation

The process of entering an update encompasses several steps.

• The participant calls up the menu item “Submission>Credit claim>Capture Update”.
• The system then displays the “Credit claim” selection screen with the credit claim stocks of the participant pool. If multiple pools exist, the participant will first be prompted to select a pool.
• Then the participant – possibly after conducting a search – selects a credit claim for which an update is to be captured.
• A “Capture Update credit claim” input screen will subsequently appear, which contains not only the read-only information on the pool and the debtor for the claims information and the information on the structure of interest payments and repayments but also separate areas named “Current” and “New”. Whereas the current information is displayed in read-only mode under “Current”; under “New”, the user can add data to the editable fields, modify existing data or delete data. The capture of the update then has to be confirmed (if applying the single control principle, the update is thereby released).
2.3.1.6.2 Selection and input screen

“Credit claim” selection screen

The “Credit claim” selection screen comprises two areas: “Pool” and “Credit claim stock”. What shows up in the “Pool” display depends on the number of pools for that participant. If exactly one pool exists, its pool data are displayed directly with the corresponding collateral account in read-only mode. If multiple pools exist, the system presents to the user a selection of pools to choose from.

Depending on the pool selected or already displayed, a list of credit claims existing for this pool will be displayed. By searching for any of the following attributes – credit claim ID, internal reference number, debtor ID/debtor proxy ID and name of debtor, the credit claim to be modified can be found and selected. Selecting the credit claim will take the user to the “Update credit claim” input screen.

“Update credit claim” input screen

Read-only information on the pool and debtor of the credit claim will display in the upper section of the input screen. This will be followed by sections on the credit claim and on the structure of interest payments and repayments; it is generally always possible to change information for these two items.

Changeable data

The following fields for credit claim information and structure of interest payments and repayments can be changed or entered anew in the “New” area.

- Loan account/reference number
- Nominal amount
- Maturity date
- Credit collateral posted code
- Type of interest payment
- Repayment
- Reference interest rate
- Explanation of reference interest rate
- Resetting period interest rate
- Flag Cap
- Cap (%)
- Floor (%)

At least one change to the existing credit claim data must be made. Should existing field content be removed without replacement, delete the content or – if this is a selection field – choose “Blank” from the dropdown menu.

Credit claim stock information displayed in read-only mode cannot be changed. Should this still be necessary, withdraw the credit claim from MACCs and re-submit it with the changed data.

If joint and several debtors or a guarantor exist for a credit claim, their key data are displayed below the information on the structure of interest payments and repayments in read-only mode but, if necessary, can be hidden by pressing the appropriate buttons.
Reference known by debtor

Give the new loan account/reference number here. Its purpose is to uniquely identify the participant’s credit claims against the debtor, the guarantor or the joint and several debtor and must therefore be immediately updated in the event of any changes.

Nominal amount

The new credit claim amount is to be given here; the key factor is the amount outstanding of the credit claim at the time of the update. It is not permissible to assign part of a credit claim.

The updated credit claim amount may be smaller than the minimum amount for the submission.

The amount may be changed to zero only if the credit claim has been completely repaid. If the amount is equal to zero, the credit claim is then immediately deleted from MACCs.

If, by contrast, a submitter intends to rescind the assignment of collateral to the Bundesbank – with the credit claim still existing – the collateral is to be released via the menu item “Return” (see chapter 2.3.1.7 Capture of voluntary returns, page 45).

The following input formats are allowed.

- The standard input format is with commas as thousand separators and with a decimal point as a decimal separator.
  Example: 10,000.00
- It is not necessary to enter the thousand separator; however, a decimal point must be entered before any decimal places. Such entries are then converted to the standardised format.
  Examples:
  - 100000 ==> 100,000.00
  - 100000.1 ==> 100,000.10

Maturity date

The maturity date must be after or on the business day.

If the maturity date is the same as the business day, the credit claim is then immediately deleted from MACCs.

Single-clicking the ”Maturity date” field opens a calendar function where the date can be chosen. The calendar function is limited to +/- 10 years. However, any given date can be entered manually.

Credit collateral posted

If there are any changes regarding the submitted credit claim in the credit collateral area, this must be documented by activating or deactivating the appropriate control field in MACCs.

Type of interest payment

Select the type of interest payment to be changed (fixed>floating or floating>fixed).

A change in the type of interest payment generally requires changes to the corresponding data on the term structure (resetting period interest rate, reference interest rate, etc.). The same plausibility checks are performed here as when creating a new credit claim.
For floating-rate credit claims, the usual rules for evaluating them are explained under chapter 2.3.1.4.1 New submission of credit claims, page 30 at “Type of interest payment”.

### Overview of information on the term structure

<table>
<thead>
<tr>
<th>Term structure</th>
<th>Type of interest payment</th>
<th>Cap code</th>
<th>Resetting period interest rate</th>
<th>Reference interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Fixed</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Mixed (floating-to-fixed)</td>
<td>Fixed</td>
<td>Information required (required field)</td>
<td>Information required (required field)</td>
<td></td>
</tr>
<tr>
<td>Floating</td>
<td>Floating</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Resetting period interest rate

The following information can be changed:

- > 1 year
- Annually
- Semi-annually
- Quarterly
- Monthly
- Fortnightly
- Weekly
- Irregular < 1 year

Note that, if the resetting period interest rate is changed, the corresponding reference interest rate may have to be changed as well.

### Repayment

The following information can be changed:

- Monthly
- Quarterly
- Semi-annually
- Annually
- Repayment at final maturity
- Other

### Reference interest rate and explanation of reference interest rate

Select the new permissible reference interest rate from the dropdown menu.

If a reference interest rate contained in the pick list has been chosen, the “Explanation of reference interest rate” field is read-only (greyed out).

If a credit claim has been assigned a reference interest rate thanks to a contractual change not contained in the existing selection list, further procedure must be coordinated with the Support team credit claims. If the requested interest rate is declared permissible, select “OTHER” as the reference interest rate and additionally list the requested reference interest
rate in the “Explanation of reference interest rate” field. (Required field if OTHER has been selected.) For as long as the requested interest rate has not been declared permissible, remove the credit claim from the stock.

**Flag Cap**

The following data can be changed (required field for floating-rate credit claims)

- Cap available
- Cap not available

**Cap (%) and floor (%)**

The values for a cap and/or a floor can be entered into these two fields (percentage value, two decimal places)

Example: 1.00

**Plausibility checks**

When entering the data into the input screen, the following plausibility checks need to be run.

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility check</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit claim general New loan account number New nominal amount New maturity date</td>
<td>No open capture (update or return) for this credit claim may exist.</td>
<td>Entry record already exists.</td>
</tr>
<tr>
<td></td>
<td>No open submission (update or return) for this credit claim may exist.</td>
<td>Submission already exists.</td>
</tr>
<tr>
<td></td>
<td>The new value may be changed, but not deleted, for these required fields of a credit claim.</td>
<td>Input required.</td>
</tr>
<tr>
<td>Changeable values for domestic or CCB transactions (country of governing law = DE): New loan account number New nominal amount New maturity date New code Credit collateral posted New type of interest payment New resetting period interest rate New credit collateral posted New reference interest rate New explanation of reference interest rate (only in combination with reference interest rate “Other”) New flag cap New cap % New floor %</td>
<td>At least one of the values entered must be different from that in the existing credit claim.</td>
<td>At least one change must be entered.</td>
</tr>
<tr>
<td>New nominal amount</td>
<td>The new nominal amount must be greater than or equal to zero.</td>
<td>Invalid nominal amount.</td>
</tr>
</tbody>
</table>
### Data attributes | Plausibility check | Error message
--- | --- | ---
New loan account number | The new loan amount number may not exist in any of the counterparty’s current credit claims. | Loan account number already exists.
New maturity date | The maturity date may not fall more than 100 years after the system date. The date must fall on or after the system date. | Invalid maturity date.
New type of interest payment New reference interest rate New resetting period interest rate New flag cap | If the type of interest payment is “floating”, give a reference interest rate, resetting period interest rate and the cap code. | Invalid combination of type of interest payment, reference interest rate, resetting period interest rate and cap code.
New type of interest payment New reference interest rate New resetting period interest rate New flag cap New cap % New floor % | If the type of interest payment is “fixed”, reference interest rate, resetting period interest rate, flag cap, cap % and floor % cannot be captured. | Invalid combination of type of interest payment, reference interest rate, resetting period interest rate and cap code.
New reference interest rate “Other” Explanation of new reference interest rate | If reference interest rate is “Other”, enter a text. | Invalid combination of reference interest rate and explanation of reference interest rate.
New flag cap New cap % New floor % | If, for flag cap, “Cap not available”, no cap may be given. (It is possible to enter a floor; if “Cap available”, it is possible to enter cap % and/or floor %.) | Invalid combination of cap code and cap %.

**Note:** Domestic participants are permitted to change all data simultaneously. In CCBM business, only the amount or other information can be changed.

### Continuing capture of updates
Following successful capture/release, MACCs provides the option of continuing the capture of updates for the current participant and pool.

The receipt message is accompanied by the appearance of the “Capture submission for same pool” button.

If there are no further submissions to be captured, processing can be ended or continued by selecting any menu item.
2.3.1.7 Capture of voluntary returns

2.3.1.7.1 Basic features

A submitter can use this function to request the return of a credit claim assigned to the Bundesbank as collateral for their credit utilisation.

The Bundesbank examines every request for the return of collateral to determine whether the participant has enough other forms of collateral to cover their borrowing from the Bundesbank.

For credit claims with a zero rating in the MACCs stock, every participant receives a request to return the credit claim (PDF file). Maturing credit claims are disregarded. The PDF file is posted in ExtraNet for the respective participant to download.

There can always be only one open entry record (update or return) for each credit claim in the MACCs stock. Until this record has been conclusively processed by the Bundesbank, no return or update can be entered for this credit claim.

Role

One of the two roles below is necessary to enter returns of credit claims:

- Capture credit claims (dual control principle)
- Capture/release credit claims (single control principle)

Approach/menu navigation

The process of capturing a voluntary return encompasses several process stages.

- The participant calls up the menu item “Submission>Credit claim>Capture voluntary return”.
- The system then displays the “Credit claim” selection screen with the credit claim stocks of the participant pool. If multiple pools exist, the participant will first be prompted to select a pool.
- Then the participant – possibly after conducting a search – selects a credit claim for which the voluntary return is to be captured.
- They then confirm the captured of the voluntary return after verifying the credit claim information in the “Return of credit claim” input screen that subsequently appears (if applying the single control principle, the return is hereby released).

2.3.1.7.2 Selection and display screen

The “Credit claim” selection screen comprises two areas: “Pool” and “Credit claim stock”. What shows up in the “Pool” display depends on the number of pools for that participant. If exactly one pool exists, its pool data are displayed directly with the corresponding collateral account in read-only mode. If multiple pools exist, select a pool by pressing the “Select pool” button.

Depending on the pool selected or already displayed, a list of credit claims existing for this pool will be displayed. The user can search for credit claims by providing credit claim ID, internal reference number, debtor ID/debtor proxy ID and name of debtor and then select the
corresponding credit claim. Selecting the credit claim will take the user to the subsequent “Credit claim return” input screen, which consists of a read-only single-view screen of credit claim data.

“Credit claim voluntary return” display screen

The data for the credit claim to be returned are displayed in read-only mode. The upper area contains information on the pool and debtor. This will be followed by sections on the credit claim and on the structure of interest payments and repayments.

Plausibility checks

<table>
<thead>
<tr>
<th>Data attributes</th>
<th>Plausibility checks</th>
<th>Error message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit claim</td>
<td>No open entry (update or voluntary return) for this credit claim may exist.</td>
<td>Entry record already exists.</td>
</tr>
<tr>
<td>General</td>
<td>No open submission (update or voluntary return) for this credit claim may exist.</td>
<td>Submission already exists.</td>
</tr>
</tbody>
</table>

Continuing capture of voluntary returns

Following successful capture/release, MACCs provides two options for continuing the entry of returns for the current participant and pool.

The receipt message is accompanied by the appearance of the “Capture submission for same pool” button.

If there are no further submissions to be captured, processing can be ended or continued by selecting any menu item.
2.3.2 Changing and deleting entries

2.3.2.1 Basic features

**Basic features**

All entries made under the dual control principle can be changed or deleted prior to release or after rejection (see chapter 2.3.3 Release of capture, page 49).

Entry records that have not yet been processed for release (record status is “entered”) can be changed or deleted by any user.

Entry records that have been rejected (record status is “rejected”) can likewise be changed or deleted by any user, i.e. also by the inputting party.

**Role**

The following roles are necessary to change/delete entries (debtor, IRB rating, credit claim):
- Capture debtors (dual control principle)
- Capture credit claims (dual control principle)

**Approach/menu navigation**

The process of changing/deleting entries encompasses several steps.

- Depending on the item to be entered, the user calls up one of the following menu items:
  - Submission>Debtor>Change/Deletion
  - Submission>IRB rating>Change/Deletion
  - Submission>Credit claim>Change/Deletion
- The system then outputs a contextual selection list which contains all its own entry records with the status of “entered” and all entry records with the status of “rejected”.
- The user chooses an entry record from the list.
- The user can then change the entry record or delete the entire record. Entry records of returns cannot be changed.

2.3.2.2 Selection and change screens

**Selection screens**

MACCs provides the user with a list of entry records in the selection screen which they can examine and process.

**Change screens**

After an entry record is selected, it can be changed or deleted.

After changing an entry record, confirm this by clicking on the “Save” button. If this record was rejected, the status is reset from “rejected” to “entered”.

If the user leaves the change mask by selecting another menu item, the process is reset to its original status without any changes being made.

However, if the user wishes to delete the entry record, it is sufficient to press the “Delete” button.
Entry records for the return of a credit claim cannot be changed. These can only be deleted.

**Plausibility checks**
The plausibility checks for the changeable fields are similar to entries of debtors, IRB ratings and credit claims.

### 2.3.2.3 Conflicting user access to an entry record

**Conflicting user access**
If two or more users are simultaneously processing an entry record for change/deletion, the entry record of that user who confirmed it first will save successfully.

Any other user saving entries will receive an error message saying that the entry record has already been changed or deleted.
2.3.3 Release of capture

2.3.3.1 Basic features

Basic features

All entry records captured under the dual control principle require approval. The rule here is that the approving user must be different from the user that captured the record. MACCs supports this principle by only displaying to the releaser entry records with a different user ID from release processing.

Role

The following roles are necessary to release captures (debtor, IRB rating, credit claim):

- Approve debtors (dual control principle)
- Approve credit claims (dual control principle)

Approach/menu navigation

The process of approving entries encompasses several steps.

- Depending on the entry item to be approved, the user calls up one of the following menu items:
  - Submission>Debtor>Release
  - Submission>IRB rating>Release
  - Submission>Credit claim>Release
- The system then outputs a selection list with all entry records set to the status of “entered” which the current user can then approve.
- The user chooses an entry record from the list.
- The subsequently displayed read-only entry record can then be released or rejected by the user.

2.3.3.2 Selection and release screens

Selection screens

In the selection screens, MACCs lists the entry records that can be released by the user.

Release screens

Once an entry record is selected, an approval screen is displayed for a visual check and the record can then be released or rejected. Released entry records are then available for further processing by the Bundesbank. Rejected entry records are given the status of “rejected” and then sent back to the “Change/Deletion” menu item for renewed processing, depending on the type of submission.

For releases of updates (only IRB ratings and credit claims), the fields changed by the enterer of the update are highlighted in yellow.

The status of processing at the Bundesbank can be seen via the evaluation functions.
2.3.3.3 Conflicting user access to an entry record

**Conflicting user access**  If two or more users are simultaneously processing an entry record for release, the record of that user who confirmed it first will save successfully.

Any other user confirming the processing will receive an error message saying that the entry record has already been released or rejected.
2.4 Evaluations

A description of the evaluation functions will be added here in due course.
2.5 Troubleshooting

Basic features

All disruptions should be reported immediately to the Bundesbank's Support team credit claims.

Deutsche Bundesbank
Directorate General Markets
Credit Claims Management (Kreditforderungsmanagement)
60329 Frankfurt am Main
Tel.: +49 (0)69 2388 1470
Fax: +49 (0)69 2388 1460,
Email: maccs@bundesbank.de

In addition, the provisions contained in chapter 4 Backup procedure – user instructions, page 66 must be observed.
3 File transfer – user instructions

3.1 Basic principles

3.1.1 Basic features

Participation in the MACCs file transfer procedure is based on the ExtraNet documentation, which presents the general rules for file transfer, as well as the MACCs-specific document “Explanatory notes on the files in the MACCs file transfer procedure”, which defines the structure of XML files that can be used, including the XSD schemes (XML schema definition). Moreover, it is necessary to have active ExtraNet users with the relevant authorisations as well as the correct links for uploading and downloading files in ExtraNet.
3.1.2 ExtraNet documentation

Link
The ExtraNet documentation can be downloaded from the Bundesbank’s website (www.bundesbank.de) under Service/ExtraNet/Documentation.

Relevant chapters
The following chapters are particularly relevant for the file transfer procedure.

• Chapter 2 “File transfer” in Part III “Basic services”
• Chapter 3 “User management” in Part III “Basic services”

The Support team credit claims will answer any queries you may have about the ExtraNet documentation.
3.1.3 ExtraNet user administration

Basic features

The relevant active ExtraNet users are necessary for uploading and downloading files for MACCs in ExtraNet. The procedure for creating users in ExtraNet is explained in detail in the ExtraNet documentation in Chapter 3 “User management” in Part III “Basic services”.

Roles

For the MACCs file transfer, the following roles are available in ExtraNet for the relevant users.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>09</td>
<td>Submission debtors – including IRB ratings (file upload)</td>
</tr>
<tr>
<td>10</td>
<td>Submission credit claims (file upload)</td>
</tr>
<tr>
<td>11</td>
<td>Submission IRB ratings (file upload)</td>
</tr>
<tr>
<td>12</td>
<td>Receipt reports/partial reports for debtors (file download)</td>
</tr>
<tr>
<td>13</td>
<td>Receipt reports for credit claims (file download)</td>
</tr>
<tr>
<td>14</td>
<td>Receipt reports for IRB ratings (file download)</td>
</tr>
<tr>
<td>15</td>
<td>Stock reports for credit claims (file download)</td>
</tr>
<tr>
<td>16</td>
<td>Info file eligibility ICAS (file download)</td>
</tr>
<tr>
<td>17</td>
<td>Info file PSE (file download)</td>
</tr>
<tr>
<td>18</td>
<td>Notifications (file download)</td>
</tr>
<tr>
<td>20</td>
<td>Central bank evaluations (file download) – not relevant for MACCs participants</td>
</tr>
</tbody>
</table>

The roles assigned to a user include access rights to the relevant electronic mailbox. Once a user has registered for the ExtraNet file transfer procedure, access to the relevant electronic mailboxes is provided as a link. The user automatically receives email notification to the registered email address via the inbox. It is possible to deactivate email notification.

Special features

In addition, the following special features need to be observed in MACCs.

- The application to create users for MACCs contains not only the General Terms and Conditions for ExtraNet but also Supplementary Terms and Conditions for MACCs, which are likewise accepted by means of a legally binding signature by the applicant credit institution. These, in particular, expressly forbid the use of functional users – which is generally permitted in ExtraNet.

- The application for authorisation of users in ExtraNet for MACCs is to be directed to the Support team credit claims.
3.1.4 XSD schema files

**XSD**

The XSD of the XML files is the basis for creating the XML files; a detailed description may be found in the “Explanatory notes on the files in the MACCs file transfer procedure”.

The “Explanatory notes on the files in the MACCs file transfer procedure” can be downloaded from the Bundesbank’s website ([www.bundesbank.de](http://www.bundesbank.de)) under Service/Banks and companies/MACCs/Customer information/File transfer/Downloads.

**Queries**

The Support team credit claims will answer any queries you may have about the XSD of the XML files.
3.2 Requirements for participation

3.2.1 Application

Basic features

The submitter needs to apply for participation in the MACCs file transfer procedure. The application should be placed early and with a sufficient lead-time prior to the intended launch of the file transfer procedure.

As part of migration from KEV to MACCs, it is essential to ensure that the application documents are submitted in good time before MACCs goes live.

Data

The application contains, in particular, the following data which are relevant for preparing the introduction.

- Planned launch date
- Planned testing period
- Contact person at the submitting institution

Procedure

Upon receipt of the application, the Support team credit claims will contact the submitter to coordinate the further procedure up until the launch.
3.2.2 Tests

Basic features

Mandatory testing is required prior to launching the MACCs file transfer procedure to ensure that the files submitted by the participant can be processed smoothly in MACCs. This also ensures that, under ordinary circumstances, no file or record errors occur when submitting a file.

Test environment

MACCs has a special, production-like test environment in which valid tests can be conducted in consultation with the Support team credit claims, irrespective of the production environment.

In consultation with the Support team credit claims, participants may use the test environment for further tests beyond the mandatory customer testing period up until MACCs goes live.
3.3 Procedure

3.3.1 Overview of procedure

The MACCs file transfer procedure can be broken down into the following steps.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Submitter creates and submits a file via ExtraNet.</td>
</tr>
<tr>
<td>2</td>
<td>Submission file is validated: Check against XSD schema.</td>
</tr>
<tr>
<td>3a</td>
<td>Validation error: File is not processed but corresponding receipt file is posted in ExtraNet for submitter to download.</td>
</tr>
<tr>
<td>3b</td>
<td>Validation is OK: File is split into individual submission records.</td>
</tr>
<tr>
<td>4</td>
<td>Complete processing of individual submission records from the file by Support team credit claims where records are either accepted or rejected.</td>
</tr>
<tr>
<td>5a</td>
<td>Receipt file created indicating whether each record has been accepted or rejected.</td>
</tr>
<tr>
<td>5b</td>
<td>Receipt file posted in ExtraNet for submitter to download.</td>
</tr>
<tr>
<td>6</td>
<td>End of day’s operations in MACCs; various customer files are created and posted in ExtraNet for submitter to download.</td>
</tr>
<tr>
<td>6a</td>
<td>One stock file posted per account.</td>
</tr>
<tr>
<td>6b</td>
<td>Info file on eligible ICAS debtors posted.</td>
</tr>
<tr>
<td>6c</td>
<td>Info file on public debtors posted.</td>
</tr>
<tr>
<td>6d</td>
<td>Receipt file for online submissions of credit claims posted.</td>
</tr>
<tr>
<td>6e</td>
<td>Notification about conclusion of credit assessments posted.</td>
</tr>
<tr>
<td>6f</td>
<td>Notification about change of debtor key data posted.</td>
</tr>
<tr>
<td>6g</td>
<td>Notification about change of ECAI ratings posted.</td>
</tr>
<tr>
<td>6h</td>
<td>Notification about stocks with a zero rating posted.</td>
</tr>
<tr>
<td>6i</td>
<td>Stock file for CCB stocks posted.</td>
</tr>
</tbody>
</table>
3.2  Explanation of the steps

3.2.1  Creation of the XML file by the submitter

The current versions of the XSD for creating an XML file to submit debtors, IRB ratings and credit claims can be downloaded from the Bundesbank’s website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/File transfer/Downloads. The submitter can use the XSD to create a syntactically correct file.

3.2.2  Posting a submission file in MACCs (upload)

Upload

The submitting credit institution can post XML files into the upload directory for the MACCs procedure in Extranet either manually via the browser or via a direct connection. The transferred file is displayed in the directory to confirm that upload was successful. The file with submission records uploaded by the credit institution is automatically made available to the MACCs specialised procedure in the intranet for further processing.

3.2.3  File check prior to acceptance

File check

In the automated processing procedure for incoming messages in the intranet by the Bundesbank’s MACCs specialised procedure, the data structure of a submitted file is initially cross-checked to ensure that it conforms with the valid XSD schema which defines the underlying structure of the data in the XML file (validation).

If an error is detected during this check, the submitted file is rejected on the grounds of schema violation and a receipt file is generated showing the type of validation error. The receipt file is posted in ExtraNet for the submitter to download.

3.2.4  Processing after acceptance

Record check

If the submitted file complies with the schema, it is accepted for processing. The individual data records (submissions) are initially checked to ensure they are plausible in terms of content. If a plausibility violation is detected during this check, the record is deemed to contain an error and the submission record is rejected. In this case, the receipt file that is generated for all submission records indicates the type of record error.

Expert processing

Once all data records in the submission file have been checked automatically, they are made available to the Support team credit claims for expert processing. Depending on the type of submission, the following results may occur.

Debtor

When a debtor is submitted, the debtor is either created or rejected. A debtor may be rejected because it is not admissible or not unique. It is also possible that a debtor may exist already.
IRB rating

If an IRB rating is submitted successfully, either a new rating is created or an existing rating is changed. If an IRB rating is updated to a non-eligible grade, the Bundesbank automatically reduces the credit claim value of all credit claims with this rating to €0. At the end of the day, the participant receives notification of a zero rating and a request to return credit claims that are no longer eligible from their stock in MACCs.

Credit claims

Expert processing of credit claims results in new submission of a credit claim, changes to an existing credit claim or a credit claim being returned or rejected.

Receipt file

Once expert processing has been completed for all data records in the submission file, a receipt file is automatically generated. The data records all have either the status “accepted” or “rejected”. Any data records that have been rejected also contain information about the type of record error.

The receipt file is posted in ExtraNet for the submitter to download.

Partial receipt file for debtors

At the participant’s request, a partial receipt can be created for debtor submissions and posted for download. A partial receipt contains all data records. Those that have not yet been fully processed are given the status “in processing”.
3.3.3 File transfer services for online and file transfer participants

Stock file
If agreed, every submitter receives an XML file for every account showing the current stock of credit claims individually and with their credit claim value. The file is posted in ExtraNet at the end of the day’s operations (at around 18:00) for download by the participant.

Information about stocks with a zero rating
At the end of the day’s operations in MACCs, every participant that has credit claims with a zero rating in their MACCs stock receives information as a PDF file requesting the return of these credit claims. Maturing credit claims are disregarded. The PDF file is posted in ExtraNet for the participant to download.

Information about eligible ICAS debtors
All monetary policy participants that use the ICAS rating system receive two files each business day (an XML file and an Excel file) with all eligible German ICAS debtors. The files are posted in ExtraNet for the respective MACCs participants to download. If a participant has had no stocks for more than one year, their role for accessing such files may be deleted.

Information about public debtors
All monetary policy participants receive two files each business day (an XML file and an Excel file) with all eligible public debtors. The files are posted in ExtraNet for the MACCs participants to download.

Provision of information
Once online submissions, changes to debtor key data and changes to ECAI ratings have been processed and the Bundesbank has completed the eligibility check, participants are notified by email that this information can be downloaded from their mailbox.
3.3.4 Change in credit line

Completion of processing

Once all data records of one submission type (new submission/update/return of credit claims or update IRB rating) have been processed, the new total credit claim value for the submitter is calculated, the collateral account is updated and the credit line is adjusted accordingly.

Voluntary returns

Credit claims are voluntary returned only if there is an available credit claim value in the collateral account that is larger than the credit claim value of the credit claims being returned. If a voluntary return is not possible because this would lead to undercoverage of the drawdowns by the submitter, this delays the final processing of the entire submission file and extends the time period until posting of the receipt file.

Period

The period until final processing of the submission file is complete is determined largely by the number of data records it contains as well as the general workload of the Support team credit claims. It is therefore not possible to say with certainty how long it will take from when a file is submitted until the receipt file is posted in ExtraNet.

Same-day processing of the submission file can be ensured only if the submission file has been posted in ExtraNet on time. The exact time can be found in the Special Terms and Conditions for MACCs.
3.4 Framework specifications

When creating and transmitting the submission files, the following framework specifications need to be taken into account.

- The file size must not exceed 50 MB.
- The number of data records in a file is generally unlimited as long as the volume remains below 50 MB.
- Several files can be transmitted to the Bundesbank on one business day. A condition for transmitting a file, however, is that the submitter has received a receipt (file error, record error, acceptance/rejection) from the Bundesbank for the previously transmitted file of the same submission type. This rule is necessary because the files may likely be based on one another in logical succession, which means that strict sequencing is essential to ensure proper processing.
### 3.5 Deletion procedure for downloads

**Receipt files**
The downloading of receipt files is to be confirmed in ExtraNet; the confirmation moves the receipt files to history. The receipt files are archived for 90 days and then automatically deleted. Receipt files whose download has not been confirmed are kept in ExtraNet for download indefinitely.

**Stock files/evaluations/info files**
It is not necessary to confirm the download of stock files, evaluations and info files with debtors classified by the Bundesbank as eligible. Stock files and evaluations are automatically deleted after 14 days and info files after 5 days.
4 Backup procedure – user instructions

4.1 Basic features

**Backup procedure**

These user instructions describe the backup procedures available for MACCs, broken down into the online and the file transfer procedure. These backup procedures are to be used if **one participant** is experiencing problems with electronic access to MACCs.

In the event of problems accessing MACCs via ExtraNet, inform the Support team credit claims immediately by telephone (+49 (0)69 2388 1470).

Should it prove impossible to fix the problems immediately, the backup procedure is then to be used.

If **all participants** are experiencing problems accessing MACCs via ExtraNet due to technical difficulties or failure, the Bundesbank will notify participants as to how to proceed.

Backup transactions that have not been notified by telephone and transmitted by 11 am may not be able to be processed on the same day.

**Backup forms**

Backup forms for the individual transactions can be downloaded from the Bundesbank’s website ([www.bundesbank.de](http://www.bundesbank.de)) under Service/Banks and companies/MACCs/Customer information/Backup procedure.
4.2 Backup procedure for the MACCs online procedure

Email procedure

The email procedure is used as the backup procedure if one participant is experiencing problems accessing the MACCs online procedure via ExtraNet. The transactions to be made should be transferred using the corresponding forms. If the forms cannot be sent by email either, these can be sent by fax (+49 (0)69 2388 1460) to the Support team credit claims.

Transactions in the backup procedure

In the backup procedure for MACCs online participants, it is possible to submit new credit claims, update and return existing credit claims, submit new IRB ratings and update existing IRB ratings.

However, it is only possible to submit new debtors in the backup procedure for MACCs online participants following prior consultation with the Support team credit claims.

Changes to debtor key data – i.e. in the case of a change of legal form, relocation of registered office or change of address – are neither part of the backup procedure nor the regular MACCs procedures; instead, they are to be sent to maccs@bundesbank.de as soon as they are known.

Procedure

The following points need to be observed when using the backup procedure.

• The intended transactions (submissions of IRB ratings, submissions of new credit claims as well as updates and returns of existing credit claims) are to be notified by telephone (+49 (0)69 2388 1470) to the Support team credit claims, along with the number of transactions of each type.

• The appropriate backup form needs to be completed in full.

• A name and telephone number for a user registered in MACCs are necessary for queries.

• The user ID (user name) in ExtraNet also needs to be given for authentication purposes.

• The entry fields in the backup form must be completed in a similar fashion to the online procedure. An explanation of the entry fields can be found in the appropriate chapters of the “Online procedure – user instructions”.

• The entry fields in the backup forms marked in yellow can be completed using options from a drop-down menu.

• A clearly readable scanned copy of the backup form, completed in its entirety, is to be sent via email (maccs@bundesbank.de) to the Support team credit claims (in the case of disruptions, the form can also be faxed to +49 (0)69 2388 1460).
4.3 Backup procedure for the MACCs file transfer procedure

**Backup procedure**

There are three backup procedures for the file transfer procedure and these are to be used in the following order.

1. **File transfer backup procedure**

   The first backup procedure in cases where one participant has access problems when using the file transfer procedure is to send the XML file in question (prepared in line with the XSD schema for the submitted item) by email (maccs@bundesbank.de) to the Support team.

   The Bundesbank returns the corresponding receipt file by email as well.

2. **MACCs online procedure as backup procedure**

   If the file transfer backup procedure cannot be used, the MACCs online procedure is to be used (see Chapter 2 “Online procedure – user instructions”).

3. **Email procedure**

   If the MACCs online procedure cannot be used either, the email procedure described under 4.2 is to be used instead.

**Transactions in the backup procedure**

All items that can be submitted in the regular file transfer procedure (new submission of a credit claim, update an existing credit claim, return an existing credit claim, submit debtors and submit IRB ratings) can also be submitted in the file transfer backup procedure.

For information regarding changing debtor key data, see 4.2.

**Transactions in the backup procedure**

This can be used for submitting all items (relating to debtors, IRB ratings and credit claims).

For information regarding changing debtor master data, see 4.2.

**Procedure**

The following points need to be observed when using the file transfer backup procedure.

- The backup procedure to be used should be coordinated with the Support team credit claims.
- The intended transactions are to be notified by telephone (+49 (0)69 2388 1470) to the Support team credit claims, along with the number of transactions of each type.
- When using the file transfer backup procedure, the XML files are to be sent via email (maccs@bundesbank.de) to the Support team credit claims.
- When using the MACCs online procedure, the “Online procedure – user instructions” apply.
- When using the email procedure, the provisions under 4.2 apply.
MACCs
Mobilisation and Administration of Credit Claims