

MACCs Mobilisation and Administration of Credit Claims Documentation

Version 2.0

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Credit claims eligible for submission MACCs. The debtor's domicile is irrelevant. The General Terms and Conditions of the Deutsche Bundesbank and any other terms and conditions (in particular the *Bonitäts-Bedingungen*¹, the MACCs Terms and Conditions and the General Terms and Conditions for the Deutsche Bundesbank ExtraNet) 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 concluded between Deutsche Bundesbank and the respective national central bank.

¹ Only available in German.

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1.2 Required application forms1.2.1 ExtraNet user management

Requirement	Participation in MACCs requires the creation of relevant users in ExtraNet, Deutsche Bundesbank's e-business platform.	
ExtraNet- documentation	The <u>ExtraNet documentation</u> under Chapter 3.3 "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, completed with a legally binding signature, can be submitted to Deutsche Bundesbank as an original document by post or scanned and sent as a PDF file via email to maccs@bundesbank.de .	

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1.2.2 Domestic participants

Vordrucke

The following forms² are necessary for participation in the MACCs specialised procedure:

- to be submitted by all participants
 - Antrag auf Teilnahme am elektronischen Verfahren MACCs (Vordruck 5500)
 - Generelle Erklärung zur Abtretung von Kreditforderungen an die Deutsche Bundesbank (Vordruck 5501)
 - Mitteilung über verwendete Bonitätsbeurteilungsverfahren (Vordruck 5500-1)
 - Einmalige Bestätigung vor Beginn der Teilnahme am elektronischen Verfahren MACCs (Mobilisation and Administration of Credit Claims) zur Nutzung von Kreditforderungen als notenbankfähige Sicherheiten (Vordruck 5507)
 - Ansprechpartner(in) MACCs (Vordruck 5503)
- where necessary
 - Mitteilung über Rangstufen und Ausfallwahrscheinlichkeiten eines IRB-Ratings (Vordruck 5500-2)
 - Ergänzende Mitteilung über das Bonitätsbeurteilungsverfahren für multilaterale Entwicklungsbanken und internationale Organisationen (Vordruck 5500-3)
 - Antrag auf ICAS-Information über notenbankfähige Verpflichtete aus Sicherheiten (Vordruck 5509)
 - Antrag auf Teilnahme am File-Transfer-Verfahren für die IT-Anwendung MACCs (Vordruck 5508)
 - Bericht über das Ergebnis der jährlichen Prüfung durch den Wirtschafts-/ Verbandsprüfer (Vordruck 5506) including the
 - Verbindlichen Musterdarstellung für die Stichprobenliste (Anhang 1 zum Vordruck 5506)
 - Generelle Erklärung zur Abtretung von Kreditforderungen an die Deutsche Bundesbank für den TARGET-Störungsfall (hier: Zusatz-Sicherheitenkonto) (Vordruck 5501-2)
- for creating users in ExtraNet
 - Application for initial or secondary registration

Note: All of the forms for MACCs listed above can be downloaded from Deutsche Bundesbank's website (<u>www.bundesbank.de</u>) under Service/Banks and companies/MACCs/Customer information/Forms. The system generates the application for the authorization of users in the ExtraNet electronically once the application for initial or secondary registration is submitted.

² Only available in German.

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1.2.3 Foreign participants (Deutsche Bundesbank as correspondent central bank - CCB)

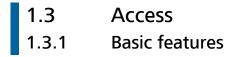
Forms

The following forms are necessary for participation in the MACCs specialised procedure:

- to be submitted by all participants
 - Application for participation in the electronic procedure MACCs for the submission and administration of credit claims as collateral with the BBk as CCB (form 5500 a (INT-engl.))
 - General declaration of assignment of credit claims with BBk as CCB (form 5501-1 (INT-engl.))
 - Notification of credit assessment systems used (form 5500 a-1 (INT-engl.))
 - Contact person for MACCs (form 5502 (INT-engl.))
- where necessary
 - Notification of rating levels and probabilities of default for an IRB-decision as credit assessment used (form 5500 a-2 (INT-engl.))
 - Application for ICAS-information about eligible obligors of collateral (form 5509-1 (INT-engl.))
- for creating users in ExtraNet
 - Application for initial or secondary registration

Note: All of the forms listed above can be downloaded from Deutsche Bundesbank's website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/Forms. The system generates the application for the authorization of users in the ExtraNet electronically once the application for initial or secondary registration is submitted.

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Access to MACCs MACCs MACCs offers two electronic access procedures (online procedure and file transfer procedure) for submitting and administering credit claims.

If a participant is experiencing problems accessing MACCs electronically via ExtraNet, there are various backup procedures for the access procedures (online/file transfer). These are outlined in detail in chapter 4 "Back-up procedure – user instructions" of this documentation.

If all participants are experiencing problems accessing MACCs electronically via ExtraNet due to technical difficulties or failure, Deutsche Bundesbank will notify participants of further steps.

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1.3.2 Online procedure

Individual submissions

MACCs offers the possibility to submit and administer credit claims interactively. Credit claims, debtor key data and IRB ratings are recorded individually and consecutively **generally** using the "four eyes" - principle.

It is possible to use the "two eyes" - 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 "two eyes" - principle.

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

The technical requirements for the online procedure are outlined under chapter 1.6.2 "Online procedure" of this documentation.

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1.3.3 File transfer procedure

Large volume of submissions

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

The participant 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 Deutsche Bundesbank for the MACCs procedure.

The latest versions of the specifications for the respective XML schemas as well as of the *"Erläuterungen zu den Dateien im File-Transfer von MACCs"*³ can be downloaded from Deutsche Bundesbank's website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/submission channels. The technical requirements for the file transfer procedure are outlined under chapter 1.6.3 "File transfer procedure" of this documentation.

³ Only available in German.

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1.3.4 Role concept

Basic featuresMACCs 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 accesses MACCs, they can only select those functions, which they are
authorised to use. The remaining functions are not displayed.

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

MACCs roles –	Role	Function
ExtraNet online procedure	01. Capture debtors - including IRB rating ("four eyes" - principle)	Capture submissions for debtors and ratings (IRB)
	02. Release debtors - including IRB rating ("four eyes" - principle)	Release all processes captured for debtors and ratings (IRB)
	03. Capture/release debtors - including IRB rating ("two eyes" - principle)	Capture and release all processes for debtors and ratings (IRB)
	04. Capture credit claims ("four eyes" - principle)	Capture submissions for credit claims (includes all pools set up for a MACCs participant)
	05. Release credit claims ("four eyes" - principle)	Release credit claims (includes all pools set up for a MACCs participant)
	06. Capture/release credit claims ("two eyes" - principle)	Capture and release credit claims (includes all pools set up for a MACCs participant)
	07. Debtors analyst	 Evaluation of all debtors recorded with their key data Debtors of a pool, Debtors with an individual IRB rating (only for IRB participants) Debtor search exactly for a specific debtor
	08. Credit claims analyst	Evaluate participant, submissions and stock of credit claims (includes all pools set up for a MACCs participant)
	19. Central bank analyst	Evaluate debtors and ratings for other Eurosystem national central banks (role is not relevant for MACCs participants)

Other roles		Function
	21. User Manager MACCs	Display all users and their roles for the
		participating credit institution

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MACCs roles – ExtraNet file transfer procedure (upload/downloadauthorisation for each mailbox)

Role	Function
09. Submission debtors - including IRB rating (file upload)	Upload files with submissions for debtors and IRB ratings using the file transfer procedure
10. Submission credit claims (file upload)	Upload files with submissions for credit claims (includes all pools set up for a MACCs participant) using the file transfer procedure
11. Submission IRB rating (file upload)	Upload files with submissions for IRB ratings using the file transfer procedure (rating data only)
12. Receipt reports/partial receipt reports debtors (file download)	Download receipt reports for debtors using the file transfer procedure (including partial receipts)
13. Receipt reports credit claims (file download)	Download receipt reports for credit claims using the file transfer procedure
14. Receipt reports IRB rating (file download)	Download receipt reports for IRB ratings using the file transfer procedure (rating data only)

MACCs roles – ExtraNet file transfer services for online- and file transferparticipants (downloadauthorisation for each mailbox)

Role	Function
15. Stock report credit claims (file download)	Download stock report for credit claims
16. Info file debtors (file download)	Download info files (xml- and excel-format) with all debtors in MACCs (all participants with ICAS rating assignment are additionally informed in the file about the debtors classified as eligible in ICAS Deutsche Bundesbank. IRB participants also receive information on their own IRB ratings in the file) Download info files (xml- and excel-format) for ICAS participants with debtors which are classified as eligible in ICAS Deutsche Bundesbank
17. Info file PSE (file download)	Download info files with public sector (xml- and excel-format) debtors that are registered in MACCs
18. Notifications (file download)	Download notifications (information on debtor key data, the conclusion of credit assessments, about stocks with a zero rating and change of ECAI ratings)
20. Central bank evaluations (file download)	Download evaluations on debtors and ratings for other Eurosystem national central banks (role is <u>not</u> relevant for MACCs participants)

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Assignment of roles

The following points should be considered when assigning roles

- A user ID may be assigned with 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 including IRB rating ("four eyes"- principle)",
- "Release debtors including IRB rating ("four eyes" principle)",
- "Capture credit claims ("four eyes" principle)",
- "Release credit claims ("four eyes" principle)"

as well as

- "Credit claims analyst" and
- "Debtors analyst".

If the file transfer procedure is used, the roles

- "Submission debtors including IRB rating (file upload)",
- "Submission credit claims (file upload)",
- "Receipt reports/partial receipts for debtors (file download)",
- "Receipt reports for credit claims (file download)"

as well as

- "Credit claims analyst" and
- "Debtors analyst"

If the file transfer procedure with IRB-rating is used, in addition the roles

- "Submission IRB rating (file upload)" and
- "Receipt reports for IRB rating (file download)".

To ensure that the online procedure can also be used as an alternative for submissions if there are problems with the file transfer procedure, the following roles

- "Capture debtors including IRB rating ("four eyes" principle)",
- "Release debtors including IRB rating ("four eyes" principle)",
- "Capture credit claims ("four eyes" principle)" and
- "Release credit claims ("four eyes" principle)"

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

For the assignment of the following roles, the listed notes must be observed:

The roles

- "Submission debtors including IRB rating (file upload)",
- "Submission credit claims (file upload)",
- "Receipt reports/partial receipts for debtors (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 the file transfer procedure only if an application for participation in the MACCs file transfer procedure has been received by Deutsche Bundesbank.

The roles

- "Submission IRB ratings (file upload)" and
- "Receipt reports for IRB ratings (file download)"

are requirements for submitting IRB ratings in the file transfer procedure.

The role

"Debtors analyst"

can be applied for any MACCs participant.

The role

- "Info file debtors (file download)"

can be applied for any MACCs participant. If the participant uses Deutsche Bundesbank's internal credit assessment system (ICAS/BBk) for MACCs, the participant has to submit a declaration of confidentiality for using the data exclusively for the purposes of securing credit claims assigned to Deutsche Bundesbank (Form 5509). Its application for participating in MACCs should include an application for the provision of the info file containing each debtor classified as eligible by Deutsche Bundesbank which is provided each business day. In the aforementioned case, the info file also shows the participant which debtors are classified as eligible. IRB participants also receive information on their own IRBratings in the info file.

ICAS participants additionally receive an info file with debtors which are classified as eligible in ICAS Deutsche 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 MACCs participant.

The role

- "Notifications (file download)"

should be requested by each MACCs participant, since the relevant mailbox provides information about whether a new debtor previously submitted is eligible for submissions following the eligibility check. Furthermore, the relevant 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 participant has a stock in MACCs.

The roles

- "Central bank analyst" and

- "Central bank evaluations (file download)"

are <u>not</u> relevant for MACCs participants and may therefore not be selected.

The role

- "User Manager MACCs"

is reserved for employees with special duties. A dedicated list can be used to check which staff members have registered for MACCs and which roles these staff members are assigned with. For further details, see the <u>ExtraNet documentation</u>, chapter 3.3.8 "Verifying user authorisations".

File transfer services The roles

- "Stock report credit claims (file download)",
- "Info file debtors (file download)",
- "Info file PSE (file download)" and
- "Notifications (file download)"

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 3.3.3 "File transfer services for online and file transfer participants" of this documentation.

Please note the following:

Those roles that are also available in the "two eyes" - principle can be selected separately as well as in addition to the corresponding roles in the "four eyes" - principle. The role "Capture/release "two eyes" - principle" does not allow users to release entries made by another user with the role "Capture "four eyes" - principle". This means that there must be at least two users with the "four eyes" - principle role in addition to any users with a "two eyes" - principle role. When MACCs participants use the "four eyes" - principle, it is recommended that at least four users are assigned with the necessary "four eyes" - principle roles.

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1.4 Functionalities

Functionalities

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

Functionalities	Online procedure	File transfer procedure	Back-up procedure online	Back-up procedure file transfer
Submission/change of debtors	Х	Х	not as a rule; for exceptions, see Chapter 4	Х
Submission of credit claims without guarantors	Х	Х	Х	Х
Submission of credit claims with guarantors	Х		Х	
Update of credit claims	х	х	Х	Х
Voluntary returns of credit claims	Х	Х	Х	Х
Submission of IRB ratings	х	х	Х	х
Update of IRB ratings	х	Х	Х	Х
Receipt files for submissions		Х		Х
Individualised evaluations	Х			
Standardised evaluations		Х		

For a detailed description of the functionalities, see the chapters 2 to 4 of this documentation.

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1.5

Operating and support hours

On business days, MACCs has the following operating and support hours: Operating and support hours Hours (Frankfurt time) 7:00 a.m. - 7:30 p.m. Access to MACCs Specialist support 8:00 a.m. – 4:00 p.m. Detailed MACCs is open to participants for online entries and evaluations on every business Information day between 7:00 a.m. and 7:30 p.m.. Uploads and downloads via file transfer are not tied to these access times but can be made at any time during ExtraNet operating hours. Deutsche Bundesbank saves the files until they can be processed. The Support team credit claims provides specialist support from 8:00 a.m. to 4:00 p.m.. If a problem arises in MACCs outside of the support hours and the Support team credit claims is not available for support, the user may send an email to maccs@bundesbank.de. The Support team credit claims will immediately contact the participant the following business day. Submissions of credit claims are generally processed on the same business day. The processing takes place within the above mentioned support hours. Should same day processing - irrespective of it being legally valid by submitting the relevant credit claim data - not be possible due to an important reason (e.g. the debtor being domiciled abroad), processing will occur on the next business day. Should a submission not have been processed within the aforementioned timeframe, the relevant participant will be informed immediately. There is no further claim to be made against Deutsche Bundesbank.

Further details on the operating and support hours are available on Deutsche Bundesbank's website (<u>www.bundesbank.de</u>) under Services/Banks and companies/MACCs (grey box on the right hand side).

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1.6 Technical platform 1.6.1 Basic features

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 Deutsche 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 Deutsche Bundesbank's ExtraNet can be found on Deutsche Bundesbank's website (<u>www.bundesbank.de</u>) under Service/ExtraNet or by calling up the following link: <u>ExtraNet.</u> MACCs - Mobilisation and Administration of Credit Claims - Version 2.0 1 Overview 1.6 Technical platform

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1.6.2 Online procedure

Online procedure The use of a standard internet browser is generally sufficient for the online procedure. In order for the application MACCs to be fully operational, a web browser should be used, as certain input validations are already processed via the browser. Tools and plug – ins for automation (such as Postman) are **not suitable** for the MACCs application as data consistency may not be guaranteed.

For detailed information about the browser type and client, see the <u>ExtraNet</u> <u>documentation</u>, chapter 2.2 "Customer's PC – system requirements".

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1.6.3 File transfer procedure

File transfer procedure

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

- manually, from a browser;

- automatically, from the participant's software application (direct connection).

For information on the technical connection via the file transfer procedure, see the <u>ExtraNet documentation</u>, chapter 4 "Technical specifications".

Data are usually transferred to MACCs in XML format. Deutsche 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 "*Erläuterungen zu den Dateien im File-Transfer von MACCs*"⁴ can be downloaded from Deutsche Bundesbank's website (<u>www.bundesbank.de</u>) under Service/Banks and companies/MACCs/Customer information/submission channels.

⁴ Only available in German.

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

XML implementation
routineTo 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
Deutsche Bundesbank's schema requirements. As each participant has different
individual requirements, Deutsche Bundesbank cannot provide the necessary
implementation routines. The one-off fees for developing such a routine and the
maintenance costs are borne by the participant.

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Online procedure – user instructions 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:

Security components	Source
User ID	Issued by Deutsche Bundesbank (usually in the registration form) upon initial registration in ExtraNet.
Password	After initial registration in ExtraNet, Deutsche Bundesbank will send the user a start password via email. The start password must be converted into a personal password when the user logs in for the first time.

Login process

You can log in to MACCs using the following these steps:

Step	Action
1	Launch the browser.
2	Call up the login screen by entering the above-mentioned <u>URL</u> . Result: The ExtraNet login screen is displayed.
3	Enter the user ID.
4	Enter the password. Result: The MACCs homepage is displayed.

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2.2 Design of MACCs2.2.1 General instructions for use

NavigationThe 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 displayed above the input screen:

Invalid Post code.	
Set	
- Debtor	
Name: *	
Test Debtor	
Street address: *	
Teststreet 2	
Post code: *	Town/City: *
1234	Testtown
Country : *	
DE	
Sector: *	
Private Sector	

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Correct entries are confirmed via a receipt message:

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

Print functionsThe displayed information can be printed using the internet browser's print
function. Evaluations are generally also provided as printable PDF or Excel
documents.

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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.

Information/ options	Meaning
Application name	The name and logo of the MACCs application and the application operator "Deutsche Bundesbank Eurosystem" are displayed.
Language selection	The user can set the language to either German or English.
Contact information	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.
Help	Clicking the "Help" link will take you to the current version of the documentation.
Logout	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.

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 user ID and system time is displayed below the menu bar.

Path bar

The path bar, which is located directly above the application area (highlighted in red in 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 the user to a previous screen.

Application area In the application area, the user can see the relevant display or input screens.

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2.3	Capture, change/deletion and release
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:			
	create form,	ssion of debtors (with the corresponding IRB rating, as appropriate) – only. Changes to debtor key data – i.e. in the case of a change of legal relocation of registered office or change of address – cannot be entered ACCs but instead are to be sent to <u>maccs@bundesbank.de</u> as soon as they own.		
	 Submission of IRB ratings – first-time entry or update – 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 voluntary return. 			
	be perform	the option of online entry, the aforementioned functions can, in principle, ned using the file transfer procedure. Only the special case of "New n of credit claims with guarantors" cannot be performed using the file rocedure.		
	The file transfer procedure will be explained in detail under chapter 3 "File transfer user-instructions" of this documentation.			
	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 follow	ring types of rating (credit assessment procedure) are available:		
	Type of rating	Explanation		
	ICAS	Internal Credit Assessment System (of the individual central banks in the Eurosystem). An ICAS procedure is currently provided by Deutsche Bundesbank, the Banque de France, the Oesterreichische Nationalbank, the Banca d'Italia, the Banco de Portugal, the Banka Slovenije, the Bank of Greece and the Banco de España.		
	IRB	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 to be used for monetary policy purposes.		
	ECAI	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 international and supranational institution.

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Applicability of types of rating

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

Type of debtor (sector)	Type of ratings		
	ICAS	IRB	ECAI
Private sector	Х	Х	Х
International and supranational institution			Х
Public sector		Х	Х

Pool

The pool (with pool-ID, pool - class and collateral account) is used to separate credit claim stocks in accordance with Deutsche Bundesbank's specifications. Each pool of a domestic counterparty is assigned to a collateral account. It is also possible to assign several pools to one collateral account. One rating type can be assigned to each pool for the valuation of stocks for each country-sector combination.

The Monetary Policy Pool (pool-ID 101) is available to each domestic participant.

The use of the **TARGET-Contingency-Pool (pool-ID 201)** requires a separate form. If you wish to use non-marketable assets for ECONS collateral, please contact the support team credit claims.

The temporary pool for additional credit claims called ACC (pool-ID 401) and the pool ACC reserve (pool-ID 402) are available in MACCs. The introduction of an ACC framework is announced by means of customer information. The use of ACC as collateral must be applied for separately.

The ECB decides whether to set up additional monetary policy pools.

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 appear (see the plausibility checks for "General input screen" of this documentation).

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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 - including IRB rating ("four eyes" - principle) - Capture/release debtors - including IRB rating ("two eyes" - principle) Debtor ID/ The system assigns each debtor domiciled in Germany a unique debtor ID. The debtor proxy ID debtor ID for a debtor domiciled in Germany always begins with the letters DES. It is provided through 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 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 if possible; this ID is communicated to Deutsche 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/ If the menu item "Submission>Debtor>Capture" is called up, an input screen for menu navigation 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.

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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)			
	 ID (Trade-)Register (entry field/optional) 			
	 ID (Trade-)Location (entry field/optional) 			
	 Join and several debtor (control field/optional – unchecked by default) 			
	IRB Rating (only for participants with an IRB rating system):			
	 Rating grade (selection field/ conditional field) 			
	 PD (entry field/ conditional field) 			
	 Valid to (date field/ conditional field) 			
Name	The complete and official name of the debtor of the business address (according to the commercial register entry, statutes, etc.) is to be entered.			
Street address	The street name and house number of the business address is to be entered; post office box addresses are not permitted.			
Post code	Enter the post code of the business address 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 of the business address here.			

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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)
- HR (Croatia)
- IE (Ireland)
- IT (Italy)
- LT (Lithuaia)
- LU (Luxembourg)
- LV (Latvia)
- MT (Malta)
- NL (Netherlands)
- PT (Portugal)
- SI (Slovenia)
- SK (Slovakia)
- XX (International use only in connection with international and supranational institution)

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

Credit claims to an international and supranational institution may be submitted in MACCs even if this institution is not domiciled in a Eurosystem country. International and supranational institutions are listed in MACCs under the national 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:

- Private Sector
- Public Sector
- International and supranational institution

Only those institutions which are published on the European Central Bank's website under the link (annexes: List of international organizations) can be created as <u>international and supranational institution</u>.

MACCs - Mobilisation and Administration of Credit Claims - Version 2.0 2 Online procedure – user instructions 2.3 Capture, change/deletion and release page 30 RIAD code This field can be populated with the debtor's RIAD code. LEI (Legal Entity The LEI can be entered in this field to complete the data. Identifier) ID (Trade-)Register 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 (Format: Abbreviation of register and number, e.g. HRA 123). ID (Trade-)Location Enter the register town/city corresponding to the register number (see above) here. Joint and several If the debtor is being registered merely as a joint and several debtor, click on the debtor control field to activate it. A rating grade can be selected from the IRB rating system set up for the Rating grade participant. The additional fields that go with the IRB rating (PD, valid to) are then become required fields. PD (Probability of IRB participants enter the debtor's current probability of default over a one-year Default) horizon in the "PD" field. Valid to Enter the date up until which the current IRB rating is valid in the "Valid to" field. Data attributes Plausibility checks Plausibility check Error message Post code If country = DE, the post code must be a Invalid post code. 5-digit number. Country Country If country \neq XX, the type of debtor is not Invalid combination allowed to be international and of country/sector. Sector supranational institution. Invalid combination Country If country = XX, the type of debtor must be international and supranational of country/sector. Sector institution.

No entry record for a debtor with the

same data is permitted to exist for the

same participant.

Entry record already

exists.

Name

Street address

Town/city

Data attributes	Plausibility check	Error message
RIAD code LEI ID (Trade-)Register ID (Trade-) Location	No open submission for a debtor with the same data is permitted to exist for the same participant.	RIAD code, LEI, ID (Trade-)Register or ID (Trade-)Location already exists.
PD (IRB rating)	The PD must be within the range of rating grade.	PD is not within the rating grade.
Valid to (IRB rating)	The date must fall after the current day.	The validity date must fall after the current day.
	Date must not fall after current day + 1 year - 1 day. (Example: if date of entry is 12 Oct 2019, "Valid until" may only be up until 11 Oct 2020.	The maximum period is one year.

2.3.1.3 Capture of IRB ratings

2.3.1.3.1 Basic features

Basic featuresAn 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 Deutsche 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 Euro 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 or if the debtor has lost their rating, they cease to be eligible.

Whenever an IRB rating update is being captured or revised, it is not possible to capture updates or voluntary returns for credit claims of the debtor in question during the update.

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	No updates to IRB rating data can be made to expired IRB rating data. The IRB rating must be re-captured in MACCs.
Role	One of the two roles below is necessary to capture IRB ratings:
	 Capture debtors - including IRB rating ("four eyes" - principle)
	 Capture/release debtors - including IRB rating ("two eyes" - principle)
Approach/ menu navigation	An IRB rating is captured in two process stages:
nienu navigation	 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.
	2.3.1.3.2 Selection and input screens
Debtorlist selection screen	The debtorlist that can be called up from the menu lists the available debtors. Use the search function to find, via the attributes "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 green "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 "Debtor" 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. Capture the new rating in row 1 of the rating section under "New". In row 2, the current rating is displayed under "Old" in read-only mode (does not appear if new rating is created).
	The following items of rating information need to be captured:
	 Rating grade (selection field/conditional field) PD (entry field/conditional field) Valid to (date field/conditional field)
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)	Capture the current probability of default of the relevant IRB debtor over a one- year horizon in the "PD" field.

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Valid to

Capture the date up until which the current IRB-rating is valid in the "Valid to" field.

Plausibility checks

Data attributes	Plausibility check Error message			
Debtorlist				
Debtor Rating	No previous entry of an IRB-rating for this rating system and this debtor may exist.	Capture record already exists.		
	No previous open submitted IRB-ratings may exist for this rating system and this debtor.			

Data attributes	Plausibility check	Error message	
IRB-rating input	screen		
PD	The PD must be within the range of rating grades.	PD is not within the rating grade.	
Valid to	The date must fall on or after the current day.	Invalid date.	
	Date must not fall after current day + 1 year - 1 day. (Example: if date of entry is 12 Oct 2019, "Valid until" may only be up until 11 Oct 2020)	The maximum period is one year.	
Rating grade, PD, Valid to (Only if update)	At least one value must be changed.	No changes made.	

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2.3.1.4 Capture of credit claims

Basis features	When capturing credit claims, a distinction is made by business type: new submission, update and voluntary return. A 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 voluntary return): Capture credit claims ("four eyes" - principle) Capture/release credit claims ("two eyes" - principle) 		
	2.3.1.4.1 New submission of credit claims2.3.1.4.1.1 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 the debtor from the results list. Once this 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 submitted. Data on the pool and the credit claim are entered or selected in the input screen. 		

2.3.1.4.1.2 Selection and input screens

- First, a debtor search screen opens up in a modal window after being called up Debtor search 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. Various pools – depending on the business purpose – can be maintained for Pool selection 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 "Collateral account". Once a pool has been selected, the selection window closes and the selected pool data are imported to the input screen in read-only mode. The following information is displayed or to be captured/selected in the input screen -Claims information in the "Credit claim data" 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 selection necessary)
 - Collateral assets posted for the credit claim (control field/required selection necessary)
 - 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 himself 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 does not impact the applicable haircut. Only the residual maturity of the credit claim starting from the current business day is relevant for the calculation of the haircut
	For a claim against borrowers' notes, the value date is the date on which the claim against borrowers' notes is disbursed to the debtor, but not 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 (cross-border use) and thus the expansion of the country list is predicated on a bilateral agreement between Deutsche Bundesbank and that country's national central bank.
Nominal amount	The amount of the outstanding credit claim at the time of submission is to be entered. The submission of partial credit claims is not permitted.
	In domestic transactions, the minimum submission amount is determined in accordance with the provisions of the General Terms and Conditions/BBk; 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	The contractual maturity date of the credit claim must be specified. Any provisions with regard to treatment, unless the maturity date is a TARGET business day, are not to be taken into account.
	If the credit claim 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 partial amount 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.
	Contractually agreed call rights are irrelevant in this context. If, after the interest rate fixation period has expired, the interest and/or repayment rate change, the maturity date (see chapter 2.3.1.6 "Updating capture of credit claims") must be immediately updated to the due date of the last incremental amount newly calculated using these parameters.
	If no maturity date is contractually agreed to and the credit claim has been granted indefinitely ("perpetual" credit claim), 31 December 2099 is to be captured 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 (when selecting this type of exposure, fields for entering a paying agent appear).
	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.
	Claims against borrower's notes which do not classify as consortium loans are to be captured as "consortium loan – no" in MACCs. Claims against borrower's notes where the contractual basis of a claim against borrower's notes is a consortium loan are to be captured with "consortium loan – yes" in MACCs. Consequently, there is an option to capture the address data of the facility agent.
	If the selection field "yes" is activated and a consortium credit is captured, additional fields will open and the relevant information is to be entered into (paying agent, consortium manager and collateral trustee).

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Collateral assets created for the credit claim	redit collateral for the submitted credit claim has been created, activate the n-pre-populated) control field "yes". Activate the field if, for instance, the owing credit collateral has been created or submitted/declared: Sureties/guarantees, if they are not applicable (for applicable guarantees and sureties, see "Guarantor code") Liability for Guarantors (<i>Gewährträgerhaftung</i>) "Hard" 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) Pledges (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 contr field "yes" (the pre-set is "no"). In this case, the system will open up the "Joint an several debtors" block at the end of the input screen, containing a button "Add additional joint and several debtors". Clicking on this field will open up the debto search. Once a joint and several debtor has been selected, this debtor will be imported to "Joint and several debtors". All related joint and several debtors for a credit claim are to be captured. In principle, the same eligibility requirements apply to joint and several debtors as to the principal debtor. 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 clair establish eligibility, activate the control field "yes" (the pro- the system will open up the block to enter the guarantor screen. Once a debtor has been selected via the "Select d this block, this debtor is imported to "Guarantor". When credit claim with a guarantor, the following security query Confirmation	e-set is "no"). In this case, at the end of the input ebtor" button shown in saving or releasing a
	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?	uu
	✓ Yes ¥ No	â
	If the security query is confirmed by answering "yes", the	input record is saved

If the security query is confirmed by answering "yes", the input record is saved ("four eyes" - principle) or released ("two eyes" - 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.

Structures of interest payments	Structures of interest payments and repayments form an independent section in the input screen and encompass the following fields:		
and repayments	 Type of interest payment (selection field/required) 		
	 Repayment (selection field/required) 		
	 Reference interest (selection field/conditional field) 		
	 Explanation reference interest (selection field/conditional field) 		
	 Resetting period interest rate (selection field/conditional field) 		
	 Flag Cap (selection field/conditional field) 		
	 Cap (%) (entry field/conditional field) 		
	 Floor (%) (entry field/required optional) 		
Type of interest	Select one of the following types of interest payment:		
payment	– Fixed – Floating		
	A credit claim will be assessed as having a floating coupon only if it meets the following conditions:		
	 the type of interest payment is floating, the resetting period interest rate is less or equal to one year, the interest rate on the credit claim cannot result in a fixed interest rate (irrespective of an agreement containing an interest rate floor and resulting in a fixed interest rate ,and no cap has been set. 		
	All other credit claims are classified as having a fixed coupon.		
	The credit claim value is calculated based on the type of interest payment and residual maturity, among other parameters.		
	Information on the term structure:		
	For credit claims with floating interest repayment, information on the cap code, resetting period interest rate and reference interest rate must be provided.		
	Credit claims which are originally floating at the beginning of their term but change to a fixed-interest during their term (floating-to-fixed) are entered as fixed-interest credit claims over their entire lifetime.		

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Overview of information on the term structure

Interest Structure	Type of interest payment	Flag Cap	Resetting period interest rate	Reference interest
Fixed	Fixed			
Mixed (floating- to-fixed)	Fixed			
Floating	Floating	Information required (required field)	Information required (required field)	Information required (required field)

Repayment

The following options are available:

- Monthly
- Quarterly
- Semi-annual
- Annual
- Repayment at final maturity
- Other

Reference interest and explanation of reference interest	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 and, in the "Explanation reference interest" field, additionally give the name of the current underlying reference interest (required if OTHER has been chosen). In this case, Deutsche 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 contained in the pick list has been chosen, the "Explanation of reference interest" field is read-only (greyed out).		
Resetting period interest	If the type of interest payment is floating, this information is mandatory. The following options are available:		
	 > 1 year Annual Semi-annual Quarterly Monthly Twice-monthly Weekly Irregular < 1 year 		

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Flag Cap	If the type of interest payment is floating, this information is mandatory. The following options are available:		
	 Cap available Cap unavailable 		
Cap (%) and floor (%)	If contractually agreed to, the values for a cap and/or a floor must be 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		
Information on the AnaCredit	The details of the three AnaCredit identifier form a separate section in the entry screen and comprise the following fields:		
identifier	 Observed agent identifier (entry field/technically optional/mandatory field) Contract identifier (entry field/technically optional/mandatory field) Instrument identifier (entry field/technically optional/mandatory field) 		
Observed Agent Identifier	The observed agent identifier is an identifier, not an attribute. The information can be found in the header of your organisation's AnaCredit reports, specified as the observed agent identifier (OBSRVD_AGNT_CD in the report file). The observed agent identifier is, in most cases, the bank sort code of the reporting institution.		
Contract Identifier	When entering data into MACCs, these values can be identical with the instrument identifier. The combination of contract and instrument identifier recorded for a given credit claim must be unique, i.e. distinct from that of any other credit claim you submit.		
Instrument Identifier	When capturing data into MACCs, these values can be identical with the contract identifier. The combination of contract and instrument identifier recorded for a given credit claim must be unique, i.e. distinct from that of any other credit claim you submit.		
Details on possible facility agents	A facility agent is a credit institution which takes on the administration of the loan, in particular the collection and transmission of payments.		
	In MACCs, in case of claims against borrower's notes, the facility agent means paying agent and consortium manager, paying agent and collateral trustee synonymously in case of consortium loans.		
	The details on possible facility agents is to be filled in depending on the type of claim and the consortium loan (see table).		

Type of credit claim	Consortium loan	Facility agent(s)
Credit claim	No	./.
Claims against borrowers' notes	No	Paying agent
Credit claim or Claims against borrowers' notes	Yes	Paying agent, consortium manager, collateral trustee

Paying agent/
consortium manager/
collateral trusteeThe details on the facility agent(s) block (paying agent, consortium manager and
collateral trustee) forms a separate section in the entry screen and comprises the
following fields:

- Name (entry field/required)
- Subunit (entry field/technically optional/technical mandatory field)
- Street address 1 (entry field/required)
- Street address 2 (entry field/technically optional/technical mandatory field)
- Post code (entry field/required)
- Town/City (entry field/required)
- Country (entry field/required)

It is possible to insert the address data of the paying agent via the "Counterparty of submission is paying agent" button if the participant is acting as a paying agent.

Unless a specific contact address is listed in the contract, the current business address of the institution is to be recorded in the Commercial Register.

In the case that a specific contact address of the paying agent is listed in the claim against borrowers' note, this must be captured in MACCS. An entry "attn: ..." can be ignored.

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General input screen

Plausibility checks	Data attributes	Plausibility check	Error message
	Pool ID Assignment rating system	A current rating system must be assigned for the selected pool.	Rating system not assigned to the selected pool.
	Debtor ID and/or debtor proxy ID of the debtor Assignment rating system	A rating system must be assigned to the debtor's country/sector combination if no guarantor exists.	No rating system has been assigned to this country/sector combination of the debtor/guarantor.
	Internal reference number	 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. 	Internal reference number already exists.
	Reference known by debtor	 The reference known by debtor may not be in any credit claim in the stock and not be in any still open entry or submission of the participant. 	Loan account/reference number already exists for credit claim/submission of credit claim.
	Value date	The credit disbursement date must fall after the system date.	Invalid date of credit disbursement.
		The date of the credit disbursement may not fall more than 100 years before the system date.	Invalid date of credit disbursement.
	Nominal amount	The nominal amount must be ≥ the minimum nominal amount (domestic in accordance with General Terms and Conditions/BBk/ cross-border €500,000).	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.	

Data attributes	Plausibility check	Error message
Type of interest payment Reference interest Resetting period interest rate Flag Cap	If the type of interest payment is "floating", give a reference interest, resetting period interest rate and the flag cap.	Invalid combination of type of interest payment, resetting period interest rate and flag cap.
Type of interest payment Reference interest Resetting period interest rate Flag Cap Cap (%) 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, resetting period interest rate and flag cap.
Reference interest "Other" Explanation of reference interest	If reference interest is "Other", enter a text.	Invalid combination of reference interest and explanation of reference interest.
Flag Cap Cap (%) Floor (%)	If, for flag cap, "Cap does not exist", no cap may be given. (It is possible to enter a floor; if "Cap available", it is possible to enter a cap (%) and/or floor (%).)	Invalid combination of flag cap and cap (%).
Observed agent identifier Contract identifier Instrument identifier	In case of a CCB – submission, the combination of the three AnaCredit – identifiers must not already exist in respect to the relevant counterparty and its – current credit claim or open capture or submission.	Entry already exists in another credit claim/open entry.
	In case of a domestic,- or HCB – submission the combination of contract identifier and instrument identifier must not already exist in relation to the relevant counterparty and its – current credit claim or open capture or submission.	
	If an AnaCredit identifier is entered, all three identifiers must be available.	Entry required.

Data attributes	Plausibility check	Error message
Address details per facility agent (observed agent, consortium manager, collateral trustee)	Address details of the existing facility agents (name, street 1, post code, town/city, country) must be entered.	Entry required.
Country of participant Country of debtor Law governing credit claim	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.	Number of maximum permitted rights within credit claim exceeded.
Country of joint and several debtor Country of guarantor	The pseudo-code XX can additionally be used for country of debtor, country of joint and several debtor and country of guarantor.	

Guarantor input screen

Data attributes	Plausibility check	Error message
Debtor ID and/or debtor proxy ID of the guarantor Assigned rating system	A rating system must be assigned to the guarantor's country/sector combination.	No rating system has been assigned to this country/sector combination of the debtor/guarantor.
Guarantor code Debtor ID and/or debtor proxy ID of the guarantor	If "yes" has been chosen for guarantor code, capture a guarantor.	Invalid combination of guarantor code and guarantor.

Joint and several debtors input screen

Data attributes	Plausibility check	Error message
Joint and several debtors Debtor ID and/or debtor proxy ID of the joint and several debtor	If "yes" has been chosen for joint and several debtors code, enter at least one joint and several debtor.	Invalid combination of joint and several debtors code and joint and several debtor.

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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 another 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.

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2.3.1.5 Capture of credit claims in HCB business

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 Deutsche Bundesbank and the relevant national central bank.
	Currently, there are no valid bilateral agreements in place with other Eurosystem central banks. There are no plans for negotiating any such agreements until the launch of the Eurosystem Collateral Management System (ECMS). Since the CCBM – business will be transferred to the ECMS platform, the submission of credit claims via the HCB - business will only be available once ECMS has been launched and a consolidation phase has passed.
	2.3.1.6 Updating capture of credit claims2.3.1.6.1 Basic features
Basic features	The MACCs stock data of the credit claims transferred to Deutsche 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 (as defined in the General Terms and Conditions of the Deutsche Bundesbank) following the relevant point in time.
	There can always be only one open entry record (update or voluntary return) for each credit claim in the MACCs stock. Until this record has been conclusively processed by Deutsche Bundesbank, no update or voluntary return can be captured for this credit claim. For participants 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 ("four eyes" - principle) and
	 Capture/release credit claims ("two eyes" - principle).

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Approach/ The process of ent menu navigation – The participant

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 stock of the participant pool. If multiple pools exist, the participant has to select a pool.
- Then the participant possibly after conducting a search selects a credit claim for which an update is to be captured.
- An "Update for a credit claim" input screen will subsequently appear, which contains not only the read-only information on the pool, the debtor and possibly for joint and several debtors/guarantor for the credit claim data, the structure of interest payments and repayments, the AnaCredit identifier and possibly to the paying agent, consortium manager and the collateral trustee, 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 "two eyes" 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 assigned to that participant. If exactly one pool exists, its pool data is 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 "Debtor name", the credit claim to be modified can be found and selected. Selecting the credit claim will take the user to the "Update for a credit claim" input screen.
"Update for a credit claim" input screen	Read-only information on the pool, the debtor and possibly on the joint and several debtors/guarantor of the credit claim will display in the input screen. This will be followed by sections on the credit claim data, on the structure of interest payments and repayments, on the AnaCredit identifier and possibly on the facility agents (paying agent, consortium manager as well as collateral trustee), it is generally always possible to change information for these items.

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Changeable data

The following fields for credit claim information, structure of interest payments and repayments, AnaCredit identifier and facility agent block can be changed or newly entered in the "New" area:

- Reference known by debtor
- Nominal amount
- Maturity date
- Collateral assets posted for the credit claim
- Type of interest payment
- Repayment
- Reference interest
- Explanation reference interest
- Resetting period interest rate
- Flag Cap
- Cap (%)
- Floor (%)
- Observed agent identifier
- Contract identifier
- Instrument identifier
- Facility agent(s) block:
 - If the field "consortium loan" is marked "yes": the block facility agent(s) and the address details in relation to the paying agent, the consortium manager and the collateral trustee may be changed.
 - If the field "consortium loan" is marked "no" and the loan type is "claims against borrowers's notes" the block facility agent and the address details in relation to the paying agent may be changed.
 - Other than that, the block facility agent is not available for an update.

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 Enter the changed reference known by debtor here. Its purpose is to uniquely debtor 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 Euro only if the credit claim has been completely repaid. The credit claim is then immediately derecognized in MACCs. If, by contrast, a participant intends to revoke the assignment of collateral to Deutsche Bundesbank – with the credit claim still existing – the collateral is to be released via the menu item "Capture voluntary return", (see chapter 2.3.1.7 "Capture of voluntary returns" of this documentation).
	The following input formats are allowed:
	 The standard input format contains commas as thousand separators and decimal points as decimal separators.
	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 falls on a 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.
Collateral assets posted for the credit claim	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 (repayment, reference interest, resetting period 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" of this documentation at "Type of interest payment".

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Overview of information on the term structure

Interest Structure	Type of interest payment	Flag Cap	Resetting period interest rate	Reference interest
Fixed	Fixed			
Mixed (floating- to-fixed)	Fixed			
Floating	Floating	Information required (required field)	Information required (required field)	Information required (required field)

Resetting period interest rate

The following information can be changed:

- > 1 year
- Annual
- Semi-annual
- Quarterly
- Monthly
- Twice-monthly Weekly
- Irregular < 1 year

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

Repayment The following information can be changed:

- Monthly
- Quarterly
- Semi-annual
- Annual
- Repayment at final maturity
- Other

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

and explanation reference interest

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

If a credit claim has been assigned a reference interest due to a contractual change not contained in the existing selection list, further steps must be coordinated with the Support team credit claims. Select "OTHER" as the reference interest and additionally list the requested reference interest in the "Explanation reference interest" field. (Required field if OTHER has been selected.) As long as the requested interest rate has not been declared permissible, it needs to be removed from the collateral pool.

Flag Cap	The following data can be changed (required field for floating-rate credit claims): – Cap available – Cap unavailable
Cap (%) and floor (%)	If contractually agreed to, the values for a cap and/or a floor must be entered into these two fields (percentage value, two decimal places). Example: 1.00
Observed agent identifier	The new observed agent identifier according to the credit data statistics guideline (AnaCredit) is to be reported.
Contract identifier	The new contract identifier according to the credit data statistics guideline (AnaCredit) is to be reported.
Instrument identifier	The new instrument identifier according to the credit data statistics guideline (AnaCredit) is to be reported.
Paying agent/ Consortium manager/Collateral trustee	 The following data can be changed: Name Subunit Street address 1 Street address 2 Post code Town/City Country If one of the facility agent block is deleted, all fields must be deleted.

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Plausibility checks

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

Data attributes	Plausibility check	Error message
Credit claim general New loan account number	No open capture (update or return) for this credit claim may exist.	Entry record already exists.
New nominal amount New maturity date	No open submission (update or return) for this credit claim may exist.	Submission already exists.
	The new value may be changed, but not deleted, for these required fields of a credit claim.	Input required.
Changeable values for domestic or CCB transactions (country of governing law = DE): New reference known by debtor New nominal amount New maturity date New collateral assets posted for the credit claim New type of interest payment New resetting period interest rate New reference interest	At least one of the values entered must be different from that in the existing credit claim.	At least one change must be captured.
New explanation of reference interest (only in combination with reference interest rate "Other") New flag cap New cap (%) New floor (%)		

Data attributes	Plausibility check	Error message
New nominal amount	The new nominal amount must be greater than or equal to zero.	Invalid nominal amount.
New reference known by debtor	The new reference known by debtor may not exist in any of the counterparty's current credit claims	Reference known by debtor 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 New resetting period interest rate New flag cap	If the type of interest payment is "floating", give a reference interest, resetting period interest rate and the flag cap.	Invalid combination of type of interest payment, reference interest, resetting period interest rate and flag cap.
New type of interest payment New reference interest New resetting period interest rate New flag cap New cap (%) New floor (%)	If the type of interest payment is "fixed", reference interest, resetting period interest rate, flag cap, cap (%) and floor (%) cannot be captured.	
New reference interest "Other" Explanation of new reference interest	If reference interest is "Other", enter a text.	Invalid combination of reference interest and explanation of reference interest.
New flag cap New cap (%) New floor (%)	If, for flag cap, "Cap unavailable", 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 flag cap and cap (%).

Data attributes	Plausibility check	Error message
Observed agent identifier Contract identifier Instrument identifier	In case of a CCB – submission the combination of the three AnaCredit – identifiers must not be already existing in respect to the relevant counterparty and its	Entry already exists in another credit claim/open capture.
	- current credit claim or	
	 open capture or submission. 	
	In case of a domestic,- or HCB – submission the combination of contract identifier and instrument identifier must not be already existing in relation to the relevant counterparty and its	
	 current credit claim or 	
	 open capture or submission. 	
	If an AnaCredit identifier is entered, all three indentifier must be available.	Entry required.
Address details per facility agent (observed agent, consortium manager, collateral trustee)	Address details of the existing facility agents (name, street 1, post code, town/city, country) must be entered. Note: The complete deletion of an existing facility agent is possible.	Entry required.

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 updatesFollowing 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.

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2.3.1.7 Capture of voluntary returns2.3.1.7.1 Basic features

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

Deutsche Bundesbank examines every request for the voluntary return of collateral to determine whether the participant has sufficient collateral to cover their utilised credit from Deutsche Bundesbank. If, after consultation, the participant cannot provide sufficient collateral to cover, the voluntary return is rejected by Deutsche Bundesbank.

For credit claims with a rating of 'zero' in the MACCs stock, every participant receives a request to voluntary return the credit claim (PDF file) to download to the ExtraNet mailbox. Maturing credit claims are disregarded.

Digression: Claims against borrower's note granted by the federal government or the federal states

In case of claims against borrower's notes (*Schuldscheindarlehen*) granted by the federal government (*Bund*) or the federal states (*Länder*) and held-to- maturity the debtor may still process payments with debt-discharging effect to the assignor (MACCs – participant) if the notification of assignment by the assignee (Disclosure by Deutsche Bundesbank) is received by the debtor within a certain timeframe before the maturity date. The timeframe given by the federal government is 21 calendar days, in case of the federal states one month prior to the maturity date of the repayment. The said provision could result in Deutsche Bundesbank as assignee not being able to satisfy its claim against the debtor in case of a realisation within the specified timeframe. Consequently the claims against borrower's notes in question are to be removed from the participant's stock file in MACCs at the beginning of the timeframe. The system will automatically set the relevant claim against borrower's note to zero at the beginning of the timeframe. The participant will at the same time be requested via its ExtraNet – mailbox to withdraw the claim from its stock in MACCs.

A credit claim must be withdrawn within the said timeframe of 7 calendar days.

There is only one entry record permitted to exist for the specific credit claim (withdrawing or update). Should the entry record not have been processed by Deutsche Bundesbank, no update can be entered in MACCs by the participant.

Role One of the two roles below is necessary to capture voluntary returns of credit claims:

- Capture credit claims ("four eyes" principle)
- Capture/release credit claims ("two eyes" principle)

Approach/menu navigation	 process stages: The participant calls voluntary return". The system then disp claim stocks of the p to select a pool. Then the participant for which the volunt. They then confirm th credit claim informat subsequently appear therewith released). 	g a voluntary return encompasses sev up the menu item "Submission>Credi plays the "Credit claim" selection scree articipant pool. If multiple pools exist – possibly after conducting a search - ary return is to be captured. he captured of the voluntary return af ion in the "Return for a credit claim" is (if applying the "two eyes" - princip ion and display screens	t claim>Capture en with the credit , the participant has – selects a credit claim ter verifying the input screen that
"Credit claim" selection screen	stock". What shows up that participant. If exact the corresponding colla select a pool by pressing Depending on the pool for the pool will be disp "Credit claim ID", "Inter "Debtor name" and the claim will take the user	tion screen comprises two areas: "Po in the "Pool" display depends on the tly one pool exists, its pool data is dis teral account in read-only mode. If m g the "Select Pool" button. selected or already displayed, a list of layed. The user can search for credit nal reference number", "Debtor ID/D n select the corresponding credit clain to the subsequent "Return for the cre of a read-only single-view screen of cr	number of pools for played directly with ultiple pools exist, f credit claims existing claims by providing ebtor proxy ID" and m. Selecting the credit edit claim" input
"Return for a credit claim" displayed screen	upper area contains info by sections on the credi	claim to be returned is displayed in re- ormation on the pool and debtor. This t claim, on the structure of interest pa Credit identifiers and possibly to the j ity agents.	s will be followed ayments and
Plausibility checks	Data attributes	Plausibility check	Error message
	Credit claim General	No open entry (update or voluntary return) for this credit claim may exist.	Entry record already exists.
		No open submission (update or voluntary return) for this credit claim may exist.	Submission already exists.

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Continuing captureFollowing 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 "Entry 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	2	Changing and deleting entries
2.3.2	.1	Basic features

Basic features	All entries made under the "four eyes" - principle can be changed or deleted prior to release or after rejection (see chapter 2.3.3 ",Release of capture" of this documentation).
	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 - including IRB rating ("four eyes" - principle) Capture credit claims ("two eyes" - 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 displays 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 voluntary returns cannot be changed.

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2.3 Capture, change/deletion and release

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 the 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 userIf two or more users are simultaneously processing an entry record for
change/deletion, the entry record of that user who confirmed it first will be saved
successfully.

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

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2.3.3	Release of capture
2.3.3.1	Basic features

All entry records captured under the "four eyes" - principle require approval. The **Basic features** rule is that the approving user must be different from the user that captured the record. MACCs supports this principle by displaying to the user releasing only entry records with a different user ID for release processing. The following roles are necessary to release captures (debtor, IRB rating, credit Role claim): - Release debtors - including IRB rating ("four eyes" - principle) - Release credit claims ("four eyes - principle) The process of approving entries encompasses several steps. Approach/menu navigation - 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 In the selection screens, MACCs lists the entry records that can be released by the Selection screens user. Once an entry record is selected, an approval screen is displayed for a visual check Release screens and the record can then be released or rejected. Released entry records are then available for further processing by the Deutsche Bundesbank. Rejected entry records are given the status of "rejected" and are 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 user entering the updates are highlighted in yellow. The status of processing at Deutsche Bundesbank can be seen in chapter 2.4 "evaluation

functions" of this documentation.

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2.3.3.3 Conflicting user access to an entry record

Conficting userIf two or more users are simultaneously processing an entry record for release, the
record of the user who confirmed the entry record first will be saved successfully.

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

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2.4	Evaluations
2.4.1	Basic features

Basic featuresMACCs offers the possibility of a large number of evaluations for all data areas
(e.g. credit claims, maturities, debtors, IRB-ratings).

Evaluations can be carried out for all types of submissions (new submissions, updates and voluntary returns as well as submissions of debtors and IRB-ratings) for a requested date or time period. The individual types of evaluations and the provision in MACCs are illustrated in chapter 2.4.2 "Overview of available evaluations" of this documentation.

Roles The following roles are required for the evaluation of debtors and/or credit claims:

- Debtors analyst
- Credit claims analyst

Using the evaluationWhen the various evaluation functions are accessed, the default setting is the
current business day. MACCs offers two evaluation options for the link list:

- A detailed Excel evaluation of the link list can be created by clicking on "Create Excel". For evaluations on submissions, debtors or IRB ratings, a file is provided for direct download. For evaluations on submissions of credit claims, the evaluation is provided in the evaluation list (menu item "Evaluation list"). The relevant evaluation can then be accessed from the evaluation list. Under certain circumstances, evaluations provided via the evaluation list may only be accessed after a short waiting period.
- The link (magnifying glass) that appears before each search hit in the link list can be used to switch to an individual display of the submitted credit claim. The individual display offers the option to download a PDF file.

Search function The search function depends on the respective evaluation.

Search for exactly one object attribute or for multiple object attributes

A search term for exactly one object attribute or for multiple object attributes (e.g. "Evaluation – Debtor search" in the attributes "Name and/or Town/City") first needs to be entered in a search field. The dynamic search only starts once the user confirms it after entering a character (e.g. a number, a letter or a special character). The system searches in certain attributes of the object for matches with the entered character or search term according to the information in the link list. It does not matter whether the search term matches the beginning, middle or end of the attribute; nor is the search case-sensitive, which increases the number of hits.

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Error message

The search functions for evaluations are subject to plausibility checks. 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. If an entry is not plausible, the affected fields are highlighted in red and the respective error message is displayed above the input screen:

The maximun	n period is 3 Monate.		
Selection criteria			
Period From: *	2023-04-02	to: *	2023-08-24
Figure 1. Incelsusile			

Figure 1: Implausible inputs

Selection criteria				
Period				
From: *	2023-06-25	to: *	2023-08-24	

Figure 2: Plausible inputs

2.4.2 Overview of available evaluations

The following overviews list all of the available evaluations and the associated output formats as well as the way in which the individual evaluations are provided (immediately or via the evaluation list). The boxes marked with a cross indicate the output format or the type of provision.

Overview of MACCs

Evaluation	Versio	n format	Provision		
	PDF	Excel	Down- load	User interface	EL ⁵
Submission Debtor (individual evaluation)	x		х	х	
Submission Debtor (summary evaluation)		х	х		
Submission Credit claim (individual evaluation)	х		х	х	
Submission Credit claim (summary evaluation)	х	х		х	х
Submission IRB-rating (individual evaluation)	х		х	х	
Submission IRB-rating (summary evaluation)		х	х		
Evaluation Counterparty	х		х	х	
Evaluation Debtor		х			х
Evaluation Credit claim (individual evaluation)	х		х	х	
Evaluation Credit claim (evaluation, standard output)	х	х			х
Evaluation Credit claim (evaluation, extended output)	x	х			х
Evaluation Maturity		Х	х		
Evaluation Development of single credit claim		х	х		
Written confirmation	х		Х		

Table 1: Available evaluations of MACCs

2.4.3 Detailed explanations on individual evaluations

Particular features of individual evaluations are described in more detail below.

Evaluation of
submitted debtorsAs shown in figure 3, under the menu item "Evaluation>Submission>Debtor", it is
possible to set the period for the evaluation; the period may not exceed three
months.

You can look for specific <u>individual debtors</u> via the search function (see chapter 2.4.1 "Basic features" of this documentation). The displayed debtors can be sorted by choosing the selection criteria. The option to evaluate <u>multiple debtors</u> is provided in the evaluation register by clicking "Create Excel".

Selection crite	ria				
Period From: *	2023-05-01		to: *	2023-	.07-31
Select debtor					
N	lame ≎	Stree	et address 💲		Po
lagiengein gm	ıbh	steitei		153	326
•					
				1 reco	ords, actua
Create Excel					

Figure 3: Evaluation - Submission - Debtor

Information for individual debtors can be accessed by clicking on the name highlighted in blue. This information can be accessed directly as a download file in PDF format on the screen that appears when the button "Create PDF" (see Figure 4) is clicked. The button is located at the bottom of the page.

Т	ype of transaction:
0	Online
U	Iser ID entry: *
E	EXNKTNGF

Figure 4: Evaluation - Submission - Debtor - Details

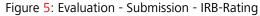
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Evaluation of submitted IRB-Ratings Submitted IRB ratings can be displayed via the menu item "Evaluation> Submission>IRB-Rating. First the time period in which the requested evaluation is requested should be entered (the total period may not exceed three months). The search can then be narrowed down by entering various attributes and the displayed IRB rating can be sorted in alphabetical or chronological order by choosing the selection criteria. An overview of the search result can be generated using the "Create Excel" button and can be downloaded directly. The magnifying glass symbol on the left (see Figure 5) can be used to display the individual evaluation and then generate a download file in PDF format (see Figure 6).

E Valuatio	n - Submission - IRB-Rating		
Selection	criteria		
Period From: *	2023-08-30	to: *	2023-08-30
Select IRE	3-Rating		
	Debtor ID/Debtor proxy ID 🔺	Dating	grade 🗘
		Raung g	jiado 🗸
		Kaung (
٩	DES00000006020	Erste Sahne	
م م			
	DES00000006020	Erste Sahne	

Create Excel



Individual submission evaluation IRB-Rating	
equested date 2023-08-30	Evaluation time
Status	
Processing status	Reason for rejection
Booked	
Debtor	
Debtor ID	Debtor proxy ID
DES00000006020	
Debtor name	
Winter GmbH	
IRB Rating	
Rating grade	
1 0.000000 - 0.040000 Erste Sahne 0	CQS1
Further details of the entry	
Type of transaction	Type of Capture
Online	Creation
User ID entry	Date, time
EXNKTNGF	2023-08-30 13:06:52

Figure 6: Evaluation - Submission - IRB-Rating - Details

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Evaluation of submitted credit claims Submitted credit claims (new submissions, updates and voluntary returns) can be displayed via the menu item "Evaluation> Submission>Credit claim. First the time period of the requested evaluation should be entered (the total period may not exceed three months). The search can then be narrowed down by entering various attributes, and the displayed credit claims can be sorted by choosing the selection criteria. An overview of the search result can be generated using the "Create Excel" or "Create PDF" button and can be downloaded from the evaluation list. The magnifying glass symbol on the left (see Figure 7) can be used to display the individual evaluation and then generate a download file in PDF format (see Figure 8).

Evaluation - Submission - Credit claim							
Selectio	on criteria						
Period From: *	202	23-06-01	to: *	2023-08-28			
Select	Credit claim						
	Pool-ID 💠	Internal reference number 🔺	Credit clair	m ID 💠	Debtor ID/Debto		
~							
٩	401	KaBe00002	DEK00000979431	9			
٩	401	Test_ Jira 3883			DES0000002021		
Q	401	test_jira 3883			DES0000002050		
Q	101	123126	DEK000010313513		DES0000036996		
٩	101	148789156489462	DEK000010313521		DES0000000670		
٩	101	78789484564fa	DEK00001031353	9	DES0000071375		
✓ 6 records, actual Page: 1 of 1							
Create Excel Create PDF							

Figure 7: Evaluation - Submission - Credit claim – Selection of submitted credit claims

For example: Update to nominal amount and maturity of a credit claim:

Current			New
Credit claim ID: *			Credit claim ID: *
DEK000009799532			DEK000009799532
Internal reference number: *			Internal reference nur
1			1
Reference known by debtor: *			Reference known by
1			1
Value date: *	Law governing credit claim: *		Value date: *
2022-02-22	DE	-	2022-02-22
Nominal amount: *	Currency: *		Nominal amount: *
1,000,000.00	EUR	-	1,500,000.00
Maturity date: *	Type of credit claim: *		Maturity date: *
2022-02-24	Credit claim	-	2029-02-01
Consortium Ioan:	Collateral assets posted for the credit claim:		Consortium loan:
Current Type of interest payment: *	Repayment:		
- Structure of interest payments and repayments	Repayment: Monthly	•	New
Structure of interest payments and repayments Current Type of interest payment: * Fixed	s Repayment:	•	New Type of interest payn Fixed
Structure of interest payments and repayments Current Type of interest payment: * Fixed	Repayment: Monthly Explanation reference interest: Flag Cap:		New Type of interest payn Fixed Reference interest:
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest.	Repayment: Monthly Explanation reference interest:	•	New Type of interest payn Fixed Reference interest:
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate:	Repayment: Monthly Explanation reference interest: Flag Cap:		New Type of interest payn Fixed Reference interest: Resetting period inte
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate: Cap (%):	Repayment: Monthly Explanation reference interest: Flag Cap:		New Type of interest payn Fixed Reference interest: Resetting period inte
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate:	Repayment: Monthly Explanation reference interest: Flag Cap:		New Type of interest payn Fixed Reference interest: Resetting period inte
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate: Cap (%): Further details of the entry	Repayment: Monthly Explanation reference interest. Flag Cap: Floor (%):		New Type of interest payn Fixed Reference interest: Resetting period inte
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate: Cap (%): Further details of the entry pe of transaction	Repayment: Monthly Explanation reference interest. Flag Cap: Floor (%): Type of submission		New Type of interest payn Fixed Reference interest: Resetting period inte
Structure of interest payments and repayments Current Type of interest payment: * Fixed Reference interest: Resetting period interest rate: Cap (%): Further details of the entry pe of transaction Inline	Repayment: Monthly Explanation reference interest. Flag Cap: Floor (%): Type of submission Update		New Type of interest paym Fixed Reference interest: Resetting period inter

Figure 8: Evaluation - Submission - Credit claim - Details

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Evaluation of counterparty

Under the menu item Evaluation>Key data>Counterparty, as shown in figure 9, it is only possible to set a reporting date (this <u>may not</u> be in the future). A new screen opens by clicking "Show".

MACCs

	🏚 🔸 Evaluation - Key data - Counte	erparty
Submission	Selection criteria	
✓ Evaluation	Selection criteria	
 Submission 	Requested date: *	2023-08-28
Debtor		
Credit claim	Show	
✓ Key data		
Counterparty		
Debtor		



The button "Create PDF" at the bottom of each page (various tabs), can be used to directly generate a download file with information on the counterparty and the assigned pools (see figure 10a and for IRB participants see figure 10b).

Individual evaluation Counterparty	
individual evaluation Counterparty	
Requested date: 2023-08-28 Evaluation time: 2023-08-28 14:11:04	
Counterparty Pool-ID 101 Pool-ID 401	
Institution ID: * RIAD Code: *	
DE50006 DE50006	
Borrower number: BIC SWIFT:	
60000006 ZYENDEF0XXX	
Name: *	
Testbank 5 KEV	
Subunit:	
Street address: *	
Musterstraße 1	
Post code: * Town/City: *	
12345 Hannover	
Country : * Banking group:	
DE Regional banks and other commercial banks	
Collateral account - Monetary policy: Collateral account - TARGET-Contingency:	
5000099006	

Figure 10a: Evaluation – Key data – Counterparty – individual evaluation

equested	2023-08-29	Evaluation time:		2023-08-29 14:36:16	
ite:					
Counterparty	IRB Pool-ID 101 Pool-I	ID 102 Pool-ID 401			
Institution ID:	*		RIAD Code: *		
DE50003			DE50003		
Borrower num	nber:		BIC SWIFT:		
6000003			ZYBMDEFFXXX		
Name: *					
Testbank 2 K	EV				
Subunit:					
Street addres	q: *				
Musterstraße					
Post code: *			Town/City: *		
12345			Hannover		
Country : *			Banking group:		
DE			Regional banks an	d other commercial banks	
Collateral acc	ount - Monetary policy:		Collateral account -	TARGET-Contingency:	
5000099003					

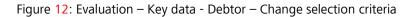
Figure 10b: Evaluation – Key data – Counterparty – individual evaluation for IRB participants

Evaluation key data of debtors Under the menu item "Evaluation>Key data>Debtor", as shown in figure 11, it is possible to set a requested date and then a pool can be selected. Clicking "Change" opens in the foreground a window and the pool can be selected using the blue highlighted pool ID (see figure 12).

* • Evaluation - Roy data - Datata						
Selection criteria						
Requested date: *	2023-08-29					
Pool-ID: Pool - class:		Pool name:		Change		

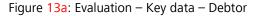
Figure 11: Evaluation - Key data – Debtor

Change selection criteria	
Pool-ID	
101	
102	
401	



After selecting a pool, MACCs transfers the data to this pool. It is possible to change this again using the "Change" or "Delete" buttons (see figure 13a). The evaluation file is created by clicking "Create Excel" and can be downloaded from the evaluation list (menu item "Evaluation list"). IRB participants can select predefined evaluations with "All debtors" or "Debtors with IRB-Rating" (see figure 13b).

Selection criteria						
Requested date: *		2023-08-29				
Pool-ID:	Pool - class:		Pool name: *			
101	Monetary Policy		Geldpolitische Nutzung		Change	Delete
Create Excel						



1	t → Evaluation - Key	data - Debtor				
	Selection criteria					
	Requested date: *		2023-08-29			
	Pool-ID:	Pool - class:		Pool name: *		
	101	Monetary Policy		Geldpolitische Nutzung	Change	Delete
	 All debtors 					
Q	Debtor with IRE	I-Rating				
	Create Excel					

Figure 13b: Evaluation – Key data – Debtor (view IRB participants)

Evaluation key data of credit claim Under the menu item "Evaluation>Key data>Credit claim the user can display credit claims that are in stock. The requested date search can then be narrowed down by entering various attributes, and the displayed credit claims can be sorted by choosing the selection criteria. The search result may be displayed as an individual evaluation or as a summary evaluation. An individual evaluation can be displayed by clicking the Credit claim ID highlighted in blue (see figure 14). The individual evaluation can be accessed directly as download file in PDF format.

The summary evaluation provides the option of a "Standard output" and an "Extended output" (see Figure 14). Both types of summary evaluations can be accessed as PDF and Excel file and can be downloaded from the evaluation list. It is important to note that in the "Extended output" summary evaluation, the Excel file contains an expanded range of information (additional data on AnaCredit identifiers, extra data on debtors, guarantors, joint and several debtors, etc.).

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Evaluation	- Account - Credit claim	
Selection cr	iteria	
Requested da	te: *	2023-08-29
Select Cred	it claim	
Pool-ID ≎	Credit claim ID ≎	Inter
I		
101	DEK000009768552	abc22
102	DEK000009769055	310120
102	DEK000009769089	567898
101	DEK000010323660	123154
401	DEK000009768578	12345
101	DEK000009768529	AS2021
101	DEK000009768537	123
•		
	<u> </u>	
Standard Extended	· · · · · · · · · · · · · · · · · · ·	
Extended	ouput	
Create Excel	Create PDF	
Figure 14:	Evaluation - Acco	unt (key da [.]

Evaluation due to maturity booked out credit claims Under the menu item "Evaluation>Key data>Maturity", the system displays a list (period from - to pre-filled with the current business day; the total period may not exceed three months). Maturing credit claims for a specific time frame (the total period may not exceed three months) due to the maturity of derecognised credit claims. This is available directly as a download file in Excel format (see figure 15). The dynamic search only starts after confirmation by the participant after a character (e.g. a number, letter or special character). By clicking on the selection criteria, the displayed credit claims can be sorted by alphabetical or chronological order.

▲ → Evaluation - A	ccount - Credit claim maturity		
Selection criter	ia		
Period From: *	2023-08-29	to: *	2023-08-29
Credit claim			
Pool-ID \$	Internal reference number \$	Credit clair	m ID ≎
No records four	nd!		
•			
			0 record
Create Excel			

Figure 15: Evaluation – Account (key data) – Credit claim maturity (period-based)

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Evaluation development of single credit claim

Under the menu item "Evaluation>Key data>Development of single credit claim" the development of individual credit claims can be displayed by searching for a specific time period (a search period from 31.07.2020 can be used here). Using the search functions and entering individual or multiple attributes, it is possible to filter the credit claim stock. In addition, the displayed credit claims can be sorted by clicking on the the selection criteria. An Excel file is created automatically by clicking the blue highlighted credit claim ID (see figure 16).

Selection cr	iteria		
Period From: *	2023-08-29	to: *	2023-0
Select Cred	it claim		
Pool-ID \$	Credit claim ID ≎	Internal reference numb	er 🗘
1			
101	DEK000009768529	AS20210125	
101	DEK000009768537	123	
101	DEK000009768552	abc22	
401	DEK000009768578	12345	
102	DEK000009769055	31012022	
102	DEK000009769089	5678987	
101	DEK000010323660	12315489	

Figure 16: Evaluation - Account (Key data) - Development of single credit claim

Written confirmation

Under the menu item "Evaluation>written confirmation", the written confirmation to be drawn up on the cut-off date of the last business day of the respective quarter can be created for each pool using the "Create PDF" button. The PDF file is available directly as a download file. The cut-off date to be selected is always a TARGET business day, it is communicated via email shortly before the end of the quarter and must be observed.

The written confirmation must be signed by two authorized signatories to Deutsche Bundesbank in a legally binding manner for all business transactions (please also state your name in printed letters). Please note that the signatures are issued with a recognizable reference to the company name. In our opinion, the signatories would provide the binding confirmation/assurance with signatures on the company, but they would not oblige the credit institution. If you did not assign any credit claims, TARGET-Contingency-Collateral or ACC to Deutsche Bundesbank on the reporting date, a notification of a failure is **not required**.

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Debtor search

Under the menu item "Evaluation>debtor search", all debtors currently available in MACCs can be specifically searched for a debtor. The search can be restricted by means of various attributes and by clicking on the selection criteria, the displayed debtors can be sorted. For the selected debtor, a single display can be generated as a PDF file directly for download by clicking on the blue highlighted debtor ID/debtor proxy ID (see Figure 17). In addition, information on the rating is provided:

- for ICAS participants, if it is an eligible German private sector.
- for IRB participants, if an IRB-Rating (of the participants) is available.

ń	Debtor search			
	Debtor search			
	Debtor ID/Debtor proxy ID 🗘	RIAD Code ≎	LEI 🗢	٦
				All
<	AT000000011559	AT0000000011559	529900ARBU9SBJFNX419	Corporate
	AT000000024107	AT000000024107	529900J7EWWGQ375DL84	Corporate
	AT000000061067	AT000000061067	529900BMPGUGAFYYAV45	Corporate

Figure 17: Evaluation - Debtor search

Evaluation list Under the menu item "Evaluation>Evaluation list", all evaluations that are not immediately available for download can be accessed as a kind of mailbox. Evaluations available can be downloaded as an Excel or PDF file using the download icon. The evaluations are available for repeated retrieval until they are deleted by the participant using the recycle bin icon. It is recommended that the evaluation that is no longer required be deleted in a timely manner.

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2.5 Troubleshooting

Basic features

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

Deutsche Bundesbank Directorate General Markets Credit Claims Management (Kreditforderungsmanagement) Taunusanlage 5 60329 Frankfurt am Main

Tel.: +49 (0)69 2388 1470 Fax: +49 (0)69 2388 1460 Email: <u>maccs@bundesbank.de</u>

In addition, the provisions contained in chapter 4 "Backup procedure – user instructions" of this documentation must be observed.

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3	File transfer – user
	instructions
3.1	Basic principles
3.1.1	Basic features

Basic features Participation in the MACCs file transfer procedure is based on the ExtraNet documentation, which presents the general rules for the file transfer procedure, 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.

Important documents are made available to online participants via the file transfer service. For more information, see Chapter 3.3.3 "File transfer services for online and file transfer participants" of this documentation.

3.1.2 ExtraNet documentation

Link	The ExtraNet documentation can be downloaded from Deutsche Bundesbank's website (<u>www.bundesbank.de</u>) under Service/ExtraNet/Overview ExtraNet (grey box on the right-hand side).
Relevant chapters	The following chapters are particularly relevant to the file transfer procedure: — Chapter 3.2 "File transfer" and
	– Chapter 3.3 "User management".
Queries	The Support team credit claims will answer any queries you may have about the ExtraNet documentation.

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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 3.3 "User management".
Roles	For the MACCs file transfer <u>procedure</u> , the following roles are available in ExtraNet for the relevant users:
	 Submission debtors - including IRB rating (file upload) Submission credit claims (file upload) Submission IRB rating (file upload) Receipt reports/partial reports debtors (file download) Receipt reports credit claims (file download) Receipt reports IRB rating (file download)
	For the MACCs file transfer <u>service</u> , the following roles are available in_ExtraNet for the relevant users:
	 Stock report credit claims (file download) Info file debtors (file download) Info file PSE (file download) Notifications (file download) Central bank evaluations (file download)
	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, see chapter 3.2.1.5 "File download" of the ExtraNet documentation.
Special features	In addition, the following special features need to be observed in MACCs:
	 The application to create users for MACCs does not only contain the General Terms and Conditions for ExtraNet, but also Supplementary Terms and Conditions for MACCs, which are accepted by means of a legally binding signature by the applying credit institution. These, in particular, expressly forbid the use of functional users – which is generally permitted in ExtraNet.
	 File transfer participants can apply for a technical user to be set up by Deutsche Bundesbank (functional user for file transfer procedure) in order to facilitate for the automated processing of the MACCs business transactions. The conclusion of a bilateral agreement is mandatory. The provisions according to the bilateral agreement are relevant for the use of the technical user.
	 The application for authorisation of users in ExtraNet for MACCs is to be directed to the Support team credit claims via the email address <u>maccs@bundesbank.de</u>.

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3.1.4 XSD schema files

XSD The XSD schema 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 Deutsche Bundesbank's website (www.bundesbank.de) under Service/Banks and companies/MACCs/Customer information/submission channels (File-Transfer (General)).

QueriesThe Support team credit claims will answer any queries you may have about the
XSD of the XML files.

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3.2 Requirements for participation3.2.1 Application

Basic features The participant 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. In addition to confirming that the "*Erläuterungen zu den Dateien im File-Transfer von MACCs*"⁶ have been received, the application contains the data of the contact persons on the participant's side.

ProcedureUpon receipt of the application, the Support team credit claims will contact the
participant to coordinate the further procedure and the necessary customer tests
in the test environment up until the launch. Planned dates for the mandatory
customer test and the launching of the file transfer procedure must be defined.

⁶ Only available in German.

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3.2.2 Tests

Basic featuresMandatory testing is required prior to launching the MACCs file transfer procedure
to ensure that the files submitted by the participant can be processed error-free 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.

3.3 Procedure3.3.1 Overview of procedure

Procedure

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

Step	Action
1	Participant creates and submits a file via ExtraNet.
2	Submission file is validated: Check against XSD schema.
2a	Validation error: File is not processed but corresponding receipt file is posted in ExtraNet for participants to download.
2b	Validation is OK: File is split into individual submission records.
3	Complete processing of individual submission records from the file by Support team credit claims where records are either accepted or rejected.
4	Receipt file created indicating whether each record has been accepted or rejected.
5	Receipt file posted in ExtraNet for participants to download.
6	End of day's operations in MACCs; various customer files are created and posted in ExtraNet for participants to download.
6a	One stock file posted per account.
6b	Info file with all debtors available in MACCs (more information see chapter 3.3.3 of this documentation).
6c	Info file on eligible ICAS debtors posted.
6d	Info file on public debtors posted.
6e	Receipt file for online submissions of credit claims posted.
6f	Notification about conclusion of credit assessments posted.
6g	Notification about change of debtor key data posted.
6h	Notification about change of ECAI ratings posted.
6i	Notification about stocks with a zero rating posted.
6ј	Stock file for CCB stocks posted.

3.3.2 Explanation of the steps3.3.2.1 Creation of the XML file by the participant

XSDThe current versions of the XSD for creating an XML file to submit debtors, IRB
ratings and credit claims can be downloaded from Deutsche Bundesbank's website
(www.bundesbank.de) under Service/Banks and companies/MACCs/Customer
information/Submission channels (File-Transfer (General)). The participant can use
the XSD to create a syntactically correct file.

3.3.2.2 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 the 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.

3.3.2.3 File check prior to acceptance (validation)

File check/In the automated processing procedure for incoming messages in the intranet by
Deutsche 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. A receipt file is generated showing the type of validation error. The receipt file is posted in ExtraNet for download by the participant.

3.3.2.4 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.

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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 cases 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, a new rating is created or an existing rating is changed. If an IRB rating is updated to a non-eligible grade, Deutsche Bundesbank automatically reduces the credit claim value of all credit claims with this rating to zero Euro. 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 submissions 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 participant 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 assigned the status "in processing".

3.3.3

.3.3 File transfer services for online and file transfer participants

Stock fileIf agreed to, every participant receives an XML file for every set up pool 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 6:00 p.m.)
for download by the participant.

- Information about
debtorsAll monetary policy participants that use the ICAS rating system receive two files
each business day (an XML file and an Excel file) with all debtors available in
MACCs (all participants with an ICAS rating assignment also receive information in
the file about the debtors classified as eligible in ICAS Deutsche Bundesbank. IRB
participants also receive information on their own IRB-ratings in the file). The files
are posted in ExtraNet for the respective MACCs participants to download.
Participants who do not have stock for more than one year may be withdrawn
from the ICAS eligibility information..
- Information about
public debtorsAll monetary policy participants receive in addition 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
informationAfter completion of processing of online submissions, after changes to debtor key
data, after changes to ECAI ratings have been processed, after Deutsche
Bundesbank has completed the eligibility check and as well as in case of zero
ratings at the end of the day (maturing credit claims are disregarded) participants
are notified by email that this information can be downloaded from their mailbox.

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3.3.4 Change in credit line

Completion of processing	Once all data records of one submission type (new submission/update/voluntary return of credit claims or update IRB-rating) have been processed, the new total credit claim value for the participant is calculated, the collateral stock is updated and the credit line in the collateral account is adjusted accordingly.
Voluntary return	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. In the event of undercoverage, the processing of the voluntary return may be delayed until the cover is created.
Period	The period until final processing of the submission file is complete is determined mainly 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 the submission of a file until the posting of the receipt file 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.

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3.4 Framework specifications

Framework specifications

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

- The maximum number of credit claims per file is 50,000.
- The maximum number of IRB-ratings per file is 5,000.
- The maximum number of debtors per file is 100.
- Several files can be transmitted to Deutsche Bundesbank on one business day.
 A condition for transmitting a file, however, is that the participant has received a receipt (file error, record error, acceptance/rejection) from Deutsche 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.

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 3.5 Deletion procedure for downloads

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 3.5

 Deletion procedure for downloads

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 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 filesIt is not necessary to confirm the download of stock files, evaluations and info files
with debtors classified by Deutsche 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, Deutsche Bundesbank will notify participants as to how to proceed.

Backup transactions that have not been notified and transmitted by telephone within the MACCs support hours (08:00-16:00) are generally processed on the same day. If – without prejudice to the legally effective submission of the claim data – it is not possible to process the data on the same day, the processing takes place on the next business day. If, for good reason, processing is not carried out within the aforementioned period, Deutsche Bundesbank shall inform the participant separately. There is no further claim to be made against Deutsche Bundesbank.

Backup formsBackup forms for the individual transactions can be downloaded from Deutsche
Bundesbank's website (www.bundesbank.de) under Service/Banks and
companies/MACCs/Customer information/Submission channels.

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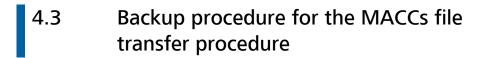
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4.2 Backup procedure for the MACCs online procedure

Email procedure, alternatively transmission via fax	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.
Transaction 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 <u>maccs@bundesbank.de</u> 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" of this documentation.
	 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).

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Backup procedure There are three backup procedures for the file transfer procedure and these are to be used in the following order. Email sending files 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 credit claims. Deutsche Bundesbank returns the corresponding receipt file by email as well. All items that can be submitted in the regular file transfer procedure (new Transactions in the submission of a credit claim, update an existing credit claim, return an existing backup procedure 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 chapter 2.3 "Captures, changes and releases" of this documentation. 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" of this documentation). This can be used for submitting all items (relating to debtors, IRB-ratings and Transactions in the backup procedure credit claims). For information regarding changing debtor master data, see chapter 2.3 ",Captures, changes and releases" of this documentation. Email sending forms 3. Email procedure If the MACCs online procedure cannot be used either, the email procedure described under chapter 4.2 "Backup procedure for the MACCs online procedure" of this documentation to be used instead.

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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 (<u>maccs@bundesbank.de</u>) 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 chapter 4.2 "Backup procedure for the MACCs online procedure" of this documentation.