CKO2

Specifications for participant institutions

Status:	Final English version
Authors:	P. Bissot
Reviewers:	Participant institutions
Document version:	1.2
Date:	30/11/2009

NationalBank OF BELGIUM

Eurosystem

Table of Contents

1 INTRODUCTION

1.1 Document history

Date	Ver.	Author	Description
29/07/2009	1.0	P. Bissot	Final English version
25/09/2009	1.1	P. Bissot	Some corrections and added information. IT requirements (§3.4 & 3.7).
30/11/2009	1.2	P. Bissot	Adaptations following and arising from the info sessions for participants, the draft writing and a first review of the legal texts and some technical choices

After the approval of the version 1.0, revised versions will be published if needed only at the end of the months August to November 2009. After each end of month, the declarers will have two weeks to pass on their comments to the Central Corporate Credit Register (CCCR). The last version will be published in the second half of December 2009.

1.2 Content of document

This document includes
- the general description of the activities of the CCCR, the data it collects, their processing and the outputs produced,
- the main specifications of the IT system, and
- the business requirements

which the National Bank of Belgium (NBB) uses to make its own IT and business plan presented to the participants of the CCCR in order to replace the current IT application known as CKO1.

1.3 Purpose of document

This document aims at giving the necessary information to the participants of the CCCR to allow them to assess the needed human and technical resources and the cost of their own developments as well to agree on a possible planning of implementation.
It constitutes also the basis for the CCCR to write the detailed business requirements for its IT department and the final protocol which will be distributed in due time among all its future participants so that they will be in state to begin their own developments.

1.4 Purpose of development

The CCCR fulfils a legal obligation. To perform its mission, the CCCR must develop and offer to the stakeholders a new central IT system called CKO2 that:
- allows the financial institutions to better assess risks when providing their financial services.
- helps the Banking, Finance and Insurance Commission (CBFA) to control credit institutions by providing information on the risks they run.
- provides the NBB with data necessary to develop risk assessment tools aiming at giving additional information
  - o to the financial institutions on the risks they run and
  - o to the NBB for financial stability purposes and for credit risk assessment of the bank loans used by credit institutions as collateral of monetary policy operations.
- exchanges data with European central credit registers, in accordance with the Memorandum of Understanding (MoU) ratified by the governors of the European central banks.

1.5 Scope of development

The scope of the new system includes the same functions as CKO1, i.e.:
- the collection of granted credits;
- the consultation of the reported credits;
- the creation and sending of several outputs;
- back-office functions for managing and monitoring the system;
- the production and sending of sectorial and geographical statistics based on data warehouse tools;
- the production and sending of results from data checks based on data warehouse tools.

Moreover, CKO2 will register, process, store and deliver some new data aimed at helping the stakeholders to better assess the credit risks linked to the debtors.
The conversion from CKO1 to CKO2 requires a period of tests and, just after the go live of the application, the load of all debtors' identification data.

1.6 Business context

Since 2000, participants have expressed their needs to improve the current CCCR system (CKO1) mainly by allowing data exchange over the network and online consultation. The NBB has also been in favour of an enhanced IT application for a few years as CKO1 has become an assembly of several applications and components due to the need to cope with important updates of its system and to comply with the evolution of the IT. Therefore several proposals have been made to renew the application content and functions, but without coming to an agreement.

In the near future, the CCCR will have to bear important costs in order to cover a technical upgrade of an essential software called VAGen that will not be supported anymore by IBM. To avoid these costs that do not provide any functional advantages for the system or the participants, it is strongly recommended to plan the go live of CKO2 as close as possible to the end of the VAGen lifecycle.

1.7 Relevant previous activities

As mentioned earlier, the current CCCR system responds partially to the business functional requirements. The new CCCR will thus, stick to the current system requirements where it is possible.

1.8 References

Ref.	ID	Author	Title
[1]	CKO2	P. Bissot	CKO2 - Projet de renouvellement de l'application informatique de la Centrale des crédits aux entreprises - Cadre général
[2]	CKO2	P. Bissot	CKO2 - Projet de renouvellement de l'application informatique de la Centrale des crédits aux entreprises - Spécifications générales
[3]	CKO1		CKO1 - Instructions aux participants - Partie I: Dispositions légales et administratives
[4]	CKO2		Meeting reports of the working groups established to define the framework of CKO2
[5]	CKO2	D. Groethaers	CKO2 Business requirements 1.0

1.9 Overview of document

This document is intended to define the business requirements. Nevertheless, it isn't a definitive document to be used by the reporting institutions to begin any development as it could still be subject to some modifications in the course of their detailed analysis by the development team in the NBB.

Section 2 describes different aspects of the background which led to the decision to set up this project, the scope of the CCCR, the data on debtors and credits which the declarers have to pass on to the NBB, the outputs produced for the reporting institutions after the data processing and other aspects for the go live of the application.

Section 3 lists high level functions and describes the major technical aspects of the new system.

Section 4 refines the functions listed in section 3 using the use cases methodology.

Section 5 gives an general overview of the XML protocol.

Finally, section 6 provides the project glossary.

2 GENERAL DESCRIPTION

2.1 Introduction

2.1.1 *Business problem statement*

The Central Corporate Credit Register fulfils a legal obligation. Financial institutions are (for credit institutions and insurance companies licensed for guarantee and supplier credits) or will be (for leasing companies and factoring companies) legally bound to send information to the CCCR. The communication, recording and consulting of this information are regulated by legal texts which also include the task assigned to the CCCR. These legal texts will be modified before the reporting institutions begin to test the new IT application.

In accordance with these texts, all institutions referred to in the law and established in Belgium must forward information to the CCCR regarding legal entities (i.e. enterprises) and natural persons (i.e. individuals) which have obtained credits which don't have legally to be registered in an other credit register run by the NBB (credits granted generally in connection with their business activity). This applies to all persons, whether resident in Belgium or abroad, except for insurance companies licensed for guarantee and supplier credits, factoring companies and leasing companies which forward data only as to residents.

The reported information includes:
- the debtor: Enterprise Number or National Register number, surname, first name, date of birth, address (and economic activity for non-residents) in the case of a natural person, or the business name, legal form, address of the registered office, (economic activity for non-residents) and enterprise number in the case of a legal entity;
- the credit: the amount of the facility and the amount drawn, by credit mode, currency and maturity (initial and residual);
- other data: collateral amount, probability of default and default of payment.

Participants, debtors, the Banking, Finance and Insurance Commission as well as other central credit offices abroad have all access to the data.

By offering its participants the opportunity to consult the information recorded for each debtor, the Central Corporate Credit Register is an important tool for assessing credit risk, both at the time when credit is granted and during continuous credit monitoring. Information is communicated to the participants either on request (corresponding to the current nominative consultation in CKO1) or regularly on a monthly basis (corresponding to the current automatic return in CKO1).

Centralization of this information also helps the Banking, Finance and Insurance Commission to perform its task of supervising the banking industry, a task which consists in assessing and preventing the risks incurred by this sector.

Within the context of the Working Group on Credit Registers (WGCR), in accordance with the Memorandum of Understanding ratified by the governors of the European central banks, the CCCR also :
- records data from European central credit registers about credits granted abroad to Belgian borrowers and about credits to foreign borrowers also registered with credits in Belgium;
- sends information about European borrowers that obtained credits in Belgian institutions and about Belgian borrowers also registered abroad with credits;
- can send requests to other CCRs as regards the indebtedness of non-residents on demand of reporting institutions.

However, although the presence in CKO2 of additional credit data coming from the other CCCRs on borrowers registered in the CCCR, the participants expressed clearly that they didn't need that common consultations (nominative request and automatic return) on residents or non-residents include data about

credits obtained in other European countries. In CKO1, these data are included in an apart output which can be obtained on demand by a participant.

Finally, the CCCR also produces a number of sets of statistics, in particular a sectoral breakdown of credits to residents and a geographical breakdown of foreign credits. These overall statistics on total credit may be requested by any participant via subscription to be charged to the requesting participant.

2.1.2 _Information on the planned enhancements_

As the new CCCR is the successor of the current system, this section describes the needs for the new system from the perspective of "What do we need to change?". This is done in the understanding that the basic principle remains the same and only needs to be enhanced.

Network communication
The main requirement from the participants is the ability to report to the CCCR and send consultation requests directly over the network. This should replace the current transmission media including cassettes, floppy disks, paper, and remote access to an NBB repository where consultation requests and asynchronous replies can be accessed.

Data will be reported to the CCCR through the following channels:
- A2A automated file upload via secured web services
- U2A internet manual file upload (via browser)
- U2A internet interactive forms (on line input via browser)

Several consultation means will be available for the participants to consult debtors individually or in groups:
- A2A automated file upload/download via secured web services
- U2A internet interactive forms (on line input via browser) (individual consultations only)

With regard to the result of reports, asynchronous consultations and the production of outputs (i.e. participant repertoire and monthly feedback) or data warehouse statistics, message sending when the output is available will be developed.

Total credit limit
In CKO2, no threshold of indebtedness will be applied to select the debtors. No threshold will either be applied on the amount of payment default to be communicated by the participants.

Debtors identification
The new debtors identification (below called "matching") is based on several combinations of criteria according to the debtor type (i.e. legal entity or natural person) and address (i.e. resident or non-resident).

New data
The assessment of the credit risk incurred by the financial institutions and, therefore, of the risks each debtor represents, is of course an important issue for these institutions but is also a key point for the supervisory authorities in Belgium and at European level. In this respect, some other new data prove essential to improve the assessment possibilities. The agreed data which will be collected in CKO2 are the following:
- amount of the collateral used by the debtor to secure its debt to the lender;
- probability of default assigned by the lender to its debtors;

- amount and date of the default of payment for each debtor which hasn't repaid its debt in due time[1];
- more detailed breakdown according to the date of maturity of the credits granted.

2.1.3 *Business constraints on the project*

The system must meet the following additional constraints:
- The data exchanged between the CCCR and the participants (report, consultation, output) will be formatted in XML.
- The authentication, confidentiality and integrity of the exchanged data must be guaranteed through the use of digital certificates.
- The system will be available 24 hours a day, 7 days a week, except during maintenance periods.

2.2 **Reporting obligation**

The current legal basis of the CCCR is essentially contained in the banking law of 22 March 1993 on the status and supervision of credit institutions. It was subsequently amended, in particular to include insurance undertakings, and was supplemented by the royal implementing decrees (cf. list of legal texts Ref. [3]).

The existing royal decrees need to be replaced, primarily for the following reasons:
- to provide for the participation of leasing companies and factoring companies;
- to abolish the existing debtor reporting threshold (currently debts of EUR 25 000 for the same participant);
- to provide for the reporting of additional data (amount of collateral, probability of default, date and amount of payment defaults);
- to enable participants to use, store and exchange with the CCCR the National Register number of individuals;
- to exclude explicitly out of the scope of the CCCR credit granted for private purposes to non-resident individuals by branches of Belgian banks established abroad.

According to the NBB's legal service, the law relating to the CCCR has to be amended or replaced on account of its current lack of precision, which will no longer be acceptable when the royal decrees are rewritten. The NBB's legal service considers that this will not increase the time taken to ratify the legal texts, compared to only replacing or amending the royal decrees.

2.3 **Declarers**

The CCCR declarers are the financial institutions which are required by law to report data to the CCCR. They are divided into four types:
- credit institutions established in Belgium and approved by the CBFA (current declarers);
- insurance undertakings approved by the CBFA for class 14 (credit insurance) and class 15 (guarantee insurance) (current declarers);
- leasing companies established in Belgium and approved by FPS Economy[2] in accordance with Royal Decree n°55 of 10 November 1967 (new declarers);
- factoring companies established in Belgium[1] (new declarers)

---

[1] Reporting of the date and reason for which the default amount is canceled had been envisaged, but given up due to the lack of interest for that data and the difficulty to give a precise reason.

[2] Factoring companies established in Belgium and engaging only in real estate leasing, which do not require the approval of FPS Economy, could be required to participate in the CCCR, if appropriate.

2.4 **Credit data**

2.4.1 Concept of credit

2.4.1.1   When the declarer is a credit institution

The following provisions are taken mainly from the current legal and administrative instructions (cf. Ref. [3]) but take no account of the abolition of the reporting threshold. Consequently, <u>except for the fact that the duty to report to the CCCR no longer involves any selection according to the minimum debt level of a debtor, and except for either of the modifications duly mentioned, the other current provisions remain valid.</u> Those provisions are based on the instructions issued by the CBFA.[2] <u>Credit institutions will therefore refer to the latest version of those instructions.</u>

The Central Register is applicable to all credit granted to resident and non-resident legal entities and individuals or acquired by assignment, whatever the amount of the credit.

Credit granted by branches of Belgian credit institutions established abroad has to be reported in the same way as credit granted in Belgium.

Subject to any other provisions mentioned, credit institutions are required to draw up their periodic reports by applying the same accounting and valuation rules as for their annual accounts.

If credits already reported to the CCCR have been transferred to another institution or vehicle, the reporting obligation by the assigning credit institution gives up except if the credits have been assigned to a resident vehicle in the framework of a securitization contract..

The concept of credit facility/authorization adopted for reporting to the Central Register corresponds to the concept of a confirmed credit line defined in the set of periodic information to be reported by credit institutions regarding their financial situation (Scheme A).
That definition assumes a firm commitment to grant cash credit and/or a commitment which:
- has been notified, <mark>even verbally,</mark> to the beneficiary
- cannot be revoked with immediate effect at any time.

However, notwithstanding the above principle, a credit facility/authorization for an amount equal to that of the amount drawn must be reported to the Central Register if the following two conditions are met:
- the withdrawal was authorized by the credit institution and that authorization was notified to the beneficiary, <mark>even verbally</mark>,
- that authorization does not correspond to the definition of the confirmed credit line.

The credit facility/authorization must be reported at the time when the institution is required to record its decision in a suspense account or in an asset account if an amount has been withdrawn. There is therefore no need to delay reporting to the Central Register until the specific conditions applicable to the withdrawals, such as the provision of collateral, have been met.

---

[1] Currently Dexia Commercial Finance, Eurofactors, Fortis Commercial Finance, ING Commercial Finance and KBC Commercial Finance.

[2] Latest coordinated (unofficial) version of 16 February 2009 of the 1st Decree of the CBFA dated 28 April 1992, last amended by the decree of 12 December 2006, on the periodic information relating to the financial situation of credit institutions, to be reported to the NBB and the CBFA."

- the amounts of credit granted cannot be offset (netted) against the debtors' assets held by the declarer, even if that reduces the risk borne by the declarer. In principle, those assets are taken into account in the collateral provided by the debtors;
- as to syndicated credit, each participant reports only its own part in the total amount.

2.4.1.2   If the declarer is a guarantee insurance undertaking

The guarantees granted by the said undertakings "form substitutes for bank credit, from the economic point of view".[1] They are treated as guarantee credit granted by the banks. Only guarantees granted to resident legal entities and individuals fall within the scope of the Central Register.

If guarantees already reported to the CCCR have been transferred to another institution or vehicle, the reporting obligation by the credit institution gives up.

2.4.1.3   If the declarer is a credit insurance undertaking

Supplier credit insured by the said undertakings "forms a substitute for bank credit, from the economic point of view." It is defined as "the cumulative amount guaranteeing claims on the same debtor".[2] Only amounts insured by resident legal entities and individuals in respect of resident legal entities and individuals fall within the scope of the Central Register.

2.4.1.4   If the declarer is a leasing company

From an economic point of view, leasing contracts form substitutes for bank credit. This concerns the leasing of both movable and immovable property.[3]

These contracts must be reported as recorded in accordance with the Belgian Generally Accepted Accounting Principles (Belgian GAAP) as soon as the contract enters into force   (= is activated). Only contracts concluded with resident legal entities and individuals having an enterprise number fall within the scope of the Central Register.

If leasing contracts already reported to the CCCR have been transferred to another institution or vehicle, the reporting obligation by the credit institution gives up..

2.4.1.5   If the declarer is a factoring company

From an economic point of view, advances which factoring companies make to their customers using their own funds form substitutes for bank credit. Only advances to resident legal entities and individuals having an enterprise number fall within the scope of the Central Register.

If factoring advances contracts already reported to the CCCR have been transferred to another institution or vehicle, the reporting obligation by the credit institution gives up..

2.4.2   Credit excluded from reporting

The following provisions are taken from the current legal and administrative instructions (cf. Ref. [3]).
The following types of corporate credit are excluded from the scope of the Central Corporate Credit Register:
- credit granted to credit institutions as defined in Article 1, first indent of Council Directive 77/780/EEC of 12 December 1977 on the coordination of the laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions;
- credit granted to the Securities Regulation Fund;

---

[1] Royal Decree of 15 January 1999 on the centralization of information relating to credit risks in regard to the participation of insurance undertakings.

[2] Royal Decree of 15 January 1999 on the centralization of information relating to credit risks in regard to the participation of insurance undertakings [art. 4 3° b)]

[3] Provided the real estate leasing contracts are concluded by approved leasing companies.

- credit granted to the European Communities, the European Investment Bank, the European Bank for Reconstruction and Development, the International Monetary Fund and the multilateral development banks;[1]
- credit in respect of which another law stipulates registration with the National Bank of Belgium.[2]   This concerns consumer credit and mortgage credit granted to individuals for private purposes.

Note: Credit granted for private purposes to non-resident individuals by foreign branches of Belgian banks is also excluded from the scope of the CCCR.

2.4.3   Credit breakdown by mode

A credit mode has to be attributed to all credit granted, more specifically to each type of amount (amount authorized and amount used) so that the total amount of a debtor's authorized debt and the actual usage are each broken down according to the credit modes to which those amounts relate.
An authorized amount in one mode may be used in the same mode or in one or more other modes.

2.4.3.1   If the declarer is a credit institution
These modes were determined and defined in a desire for consistency with the provisions and definitions of the accounting scheme for credit institutions (Scheme A).[3]

Two differences should be mentioned:
- a specific credit mode was added to that list for reporting mixed credit, which is credit providing an authorized amount which can be used in various other modes.
- loans at up to one year and loans at over one year are placed under the same heading since the initial term of the loans has to be specified elsewhere for each credit mode.

Credit recorded under heading 150 of Scheme A "non-recoverable or doubtful debts" will continue to be recorded under the original credit mode.
Only the following credit modes, identified by a two-digit code,[4] peculiar to the CCCR can be reported. The Scheme A codes are shown next to them (Cf. table 00.10 for cash credits and 00.30 for commitment credits).

> *Cash credit*
> 01 Authorized credits with mixed uses (all codes possible)
> 11 Fixed term credits (code 121.69)
> 15 Overdrafts (code 121.7)
> 21 Financial leasing and similar transactions (code 121.39)
> 23 Mortgage loans (code 121.59)
> 31 Non-mortgage installment loans (code 121.4)
> 41 Own acceptances (code 121.29)
> 51 Commercial bills (code 121.1)
> 61 Other cash credit (code 121.8)

Note: cash credit will also feature two new criteria in relation to CKO1: the initial term of the credit and the residual term (cf. 2.4.4.4)

---

[1] Defined in Article 2, point 1, 7th indent of Council Directive n°89/647/EEC of 18 December 1989: the International Bank for Reconstruction and Development, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the Council of Europe Resettlement Fund, the Nordic Investment Bank and the Caribbean Development Bank.

[2] In other words, credit in respect of which no other law stipulates registration with the NBB must be reported in full to the CCCR.

[3] Latest (unofficial) coordinated version dated 16 February 2009.

[4] The codes are provisional.

Commitment credit
71 Guarantees (other than referred to under 72) (code 342.2)
72 Gurarantee-substitute credit (code 342.1)
73 Letters of credit (code 343.9)
74 Not traded acceptances (code 341.9)

2.4.3.2   If the declarer is a guarantee insurance undertaking
Only the following credit modes, identified by a two-digit code, may be reported.

Class 15 transaction
78 Guarantees (other than referred to under 79)
79 Guarantee-substitute credit

2.4.3.3   If the declarer is a credit insurance undertaking
Only an amount authorized in the following credit mode, identified by a two-digit code, may be reported.

Class 14 transaction
77 Insured supplier credit

2.4.3.4   If the declarer is a leasing company
Only the following credit modes, identified by a two-digit code, may be used.

25 Financial leasing of movable property
26 Financial leasing of real estate

2.4.3.5   If the declarer is a factoring company
Only the following credit modes, identified by a two-digit code, may be used.

91 Advances against invoices with recourse
92 Advances against invoices without recourse

2.4.4   Additional information relating to debtors

2.4.4.1   Collateral security

The participants reporting collateral security amounts consider that information relating to collateral security should not appear in the responses to debtors asking the CCCR to inform them of the data recorded in their name in the CCCR.

The participants reporting collateral security amounts want that information relating to collateral security should not be included in the responses to inquiries by participants, nor in the outputs. It will be used only for the NBB's internal purposes.

The collateral amount reported must follow the successive reviews conducted by the declarers during the life of the debtor (at the time of the monthly entries in CKO2 on the basis of the situation at the end of the month). The collateral amount must therefore be reported each month at the same time as the credit amounts.

There is no provision for specific checks on the data received.

2.4.4.1.1   If the declarer is a bank

The amount in question is the total amount of the collateral following application of the haircuts decided on by the declarer institution.

That amount includes the various collateral values assessed by the declarers according to the type of collateral lodged. [1] It represents what would be recovered if the debtor were to default. It is the amount used to calculate the LGD (loss given default) at debtor level.

2.4.4.1.2   If the declarer is an insurance undertaking (guarantee and credit)

Insurance undertakings do not receive any collateral and therefore have no information to report on this subject.

2.4.4.1.3   If the declarer is a factoring company

Factoring companies do not receive any collateral and therefore have no information to report on this subject. The invoices in the hands of the factors to allow advances to their clients can not been considered like collateral as they became the property of the factors.

2.4.4.1.4   If the declarer is a leasing company

For leasing companies, the amount of a customer's collateral is equal to the total amount still to be repaid on the customer's contracts for the leasing of movable property and real estate on the last day of the reporting month (i.e. the initial amount of the contracts less the repayments already made).

2.4.4.2   Probability of default at one year (PD)

This is the probability that the undertaking will default during the ensuing year.

Where a participant uses ratings instead of PDs, it has to calculate the PD to be reported to the CCCR on the basis of the class to which the rating belongs. Since that class is defined by a minimum and a maximum percentage probability of default, the PD will be equal to the average of these limits.

In the case of associations, the participants themselves determine their method of assessing the PD on the basis of the individual PDs of the co-debtors.

In the case of syndicated loan, each participant reports its own PD.
The PD must be reported following the changes made by the declarers during the life of the debtor. The PD must therefore be reported each month at the same time as the credit amounts.
The PD must be set at 100 % after the reporting of a single default. Since the PD is not necessarily adjusted immediately when the default occurs (this updating may take place later, following a batch processing chain sequence), it may be that a default has been reported but the PD submitted when the information is sent to the CCCR has not yet been adjusted.
There will therefore be no check on the consistency of these two data items when the information is sent to the CCCR.

The participants reporting PDs consider that information relating to probabilty of default should not appear in the responses to debtors asking the CCCR to inform them of the data recorded in their name in the CCCR.

The participants reporting PDs want that information relating to the PD should not be included in the responses to inquiries by participants, nor in the outputs. It will be used only for the NBB's internal purposes.

---

[1] Knowledge of the various types of collateral is not relevant in this case.

2.4.4.2.1   If the declarer is a bank

That probability is the one estimated for the purpose of the internal ratings-based approach under Basel 2 (for banks which use internal ratings) or the one estimated by external credit rating agencies recognized in Belgium (for other banks).

In the case of syndicated loan, each participant reports its own PD as to the same debtor.
In certain banking groups, the PD may be determined at group level while the amount of the default and the date on which it occurs are established by an entity at a lower level or on a local basis. Consequently, it is possible for the PD to be equal to 100 % owing to a default in relation to a group entity other than the declarer entity, and for the debtor not to be in default in relation to that declarer entity. Therefore, in that case, the latter will report the PD at the level of the banking group, but no default amount and no date.

2.4.4.2.2   If the declarer is an insurance undertaking

Credit insurers are subject to Solvency 2, not Basel II. As things stand at present, they say that they cannot report the PD.
The situation of bond insurers is similar to that of credit insurers.

2.4.4.2.3   If the declarer is a factoring company

Factoring companies do have this information. Where their debtors are also customers of the bank belonging to the same financial group, the PD can be the same as that calculated by the bank.

2.4.4.2.4   If the declarer is a leasing company

All leasing companies must assign a probability of default. However, it is accepted that this is applied according to the "best effort basis" principle in exceptional cases where certain small companies are still unable to fulfil this requirement.

2.4.4.3   Default on payment[1]

Type of default definition

According to the Basel II definition, two possibilities exist to notice a payment default[2]. One can be considered as "objective" ("90 days past due"), the other one as "subjective" ("unlikely to pay"). The participants agree to report the two cases but deems the subjective assessment as an internal and confidential information which can not be passed on to other participants. The "subjective" default will be used by the National Bank of Belgium for research purposes only and will not be present in outputs or in the answers to consultations neither by other participants, nor by debtors.
Therefore a specific field where two values are possible must be used to signal the type of definition to which the default data is linked.
Logically, a "subjective" default can only come before an "objective" one, and can never be reported if an "objective" default is still registered.

Date of default

This date is the date on which the default is recorded according to the Basel II definitions. In the event of a further default, the date remains unchanged. The date of default must be reported each month at the same time as the credit amounts.
If all credit is repaid, the date must be reset to 0 by the declarer. From then on, no more date has to be reported.
The date needs not include the day (month/year will suffice) if it is not possible for the declarer to report it.

---

[1] Reporting of the date and reason for which the default amount is canceled had been envisaged, but given up due to the lack of interest for that data and the difficulty to give a precise reason.

[2] Cf. definition in Annex 1.

<u>Unrepaid amount of the credit in default, regardless of the amount</u> (no lower limit).

The amount to be reported is the amount which the debtor failed to pay at the due date, namely capital + contractual interest. Interest on arrears cannot be included.

The amount of the defaults must be adjusted in line with successive reviews conducted by the declarers during the life of the debtor (at the time of the monthly entries in CKO2 on the basis of the situation at the end of the month). The unpaid amount of the credit in default must therefore be reported each month at the same time as the credit amounts.

The amount must be set at 0 by the declarer when the whole amount in default has been repaid or when the declarer considers it irrecoverable. From then on, no more amount has to be reported.

In accordance with the principle of reciprocity, the "objective" information can be accessed only by the declarer belonging to a sector (bank, leasing company, etc.) which also reports that information to the CCCR.

2.4.4.3.1   If the declarer is a bank

Application of the principles set out above.

Note: the prohibition on the netting of debtors' assets against their credit, specified for the amounts of credit used, does not apply to defaults on payment. In certain cases, the internal procedures of the bank(s) can provide for netting between the various accounts of the debtor to determine the total amount of the default.

2.4.4.3.2   If the declarer is an insurance undertaking

Since insurers are subject to Solvency 2, not Basel II, they state that they cannot report the information requested as things stand at present.

Moreover, in the case of credit insurers, the default is acknowledged when they record a claim for reimbursement. At that time, the debtor's authorized limit is set at zero, obliging the credit insurer to cease reporting the debtor to the CCCR. Consequently, there is no effective reporting of default (date and amount) by credit insurers.

The situation of guarantee insurers is similar to that of credit insurers.

2.4.4.3.3   If the declarer is a factoring company

Factoring companies do have this information according to the Basel II definition for customers who have assigned their portfolio of invoices to them. The default amounts related to these customers must be reported so long as they are considered recoverable, so that there is as yet no provision for them in their accounts (in accordance with the tax rules and the IFRS standards), subject to a maximum of two years.

2.4.4.3.4   If the declarer is a leasing company

It is only "economic arrears" that are taken into consideration, and not "technical arrears".

Defaults must be reported so long as their amount continues to be recorded in the accounts of the leasing company. The maximum period for recording them depends on the leasing company's case-by-case appraisal of the defaulting debtor's situation.

2.4.4.4   <u>Initial and residual terms</u>

In the case of cash credit, there are two new criteria compared to CKO1: the initial term of the credit and the residual term. These two concepts concerning the term are broken down as follows: up to one year, one to two years, two to five years, and over five years.

Credit with no due date will be recorded in the class with an initial term of "up to one year" to conform to the accounting rules. Credit granted "until further notice" will also be classified as having a term of ≤ 1 year.

If a credit sees its initial term modified, this change will have to be reflected in the following reporting. This change will however be transparent for the NBB as no control makes it possible to detect it.The NBB will use these terms in connection with its research.

In contrast, participants wish to have <u>the residual term only</u> in the responses to their inquiries.

2.4.5 Reporting rules

General rule
Reporting frequencies and times are the same for all declarers. They have to forward to the CCCR the information permitting unequivocal identification of credits and debtors: identification of the declarer and of the debtor, data on the credit situation and its progress, and other related data.

Note
In contrast to the current rules for CKO1 where simplified reporting regimes exist, there is no exception to this general rule, either according to the type of participant, or according to the type of debtor.

2.5 **Content of the reporting**

2.5.1 *Debtors*

2.5.1.1 Declaration threshold

In CKO2, no minimum threshold applies for determining the debtors to be reported to the CCCR. Declarers must report the debtors recorded in their database, whatever the amount of their debts and credits (in contrast to CKO1 where there is a limit of EUR 25 000 on a debtor's debt).

2.5.1.2 Identification

A debtor may be a legal entity, an individual or an association of legal entities and/or individuals. Debtors may be resident or non-resident.

2.5.1.2.1 Resident legal entity
A resident legal entity is identified by its enterprise number (unique identifier).
The other data reported by the participant are:
  ❖ Full name.
  ❖ Code for the legal form.
  ❖ Full address (separate attributes) :
      o road,
      o number (optional),
      o P.O. box (optional),
      o post code,
      o country code (BE).
  ❖ In the case of a branch of a foreign undertaking, the name and other data identifying the parent company may be reported[1] (optional) (same as the data for a non-resident legal entity).
  ❖ Free zone.

2.5.1.2.2 Non-resident legal entity
A non-resident legal entity is identified by its internal number recorded by the participant (unique identifier adopted by the participant which can only be used for that debtor).
The other data reported by the participant are:
  ❖ Name (including legal form, if appropriate).
  ❖ Full address (separate attributes):
      o road,
      o number (optional),

---

[1] Reporting of the name and other identification data may permit better identification of the debtor.

- o P.O. box (optional),
- o post code (optional),
- o town,
- o country code
- ❖ Tax number or enterprise number used to officially identify the entity in the country in question, if that is one of the countries with which an MoU on data exchange has been signed.[1] <u>This number is optional.[2]</u>
- ❖ NACE code (minimum 3 and maximum 5 digits).
- ❖ Free zone.

Note: non-resident legal entities need only be reported by credit institutions.

2.5.1.2.3   Resident individual

A resident individual must be identified by one of the following identifiers:
- either his enterprise number (recommended if existing),
- or his NRNP number, if he has no enterprise number,
- or his internal number recorded by the participant if he has neither an enterprise number nor an NRNP number (exceptional case).

The other data reported by the participant are:
- ❖ Surname
- ❖ Official first name.
- ❖ Sex (optional).
- ❖ Date of birth (day, month, year).
- ❖ Full address (separate attributes) :
  - o road,
  - o number (optional),
  - o P.O. box (optional),
  - o post code
  - o country code (BE)
- ❖ Free zone.

In the case of persons reported with an enterprise number by the declarer, a special matching module in CKO2 will look for the debtor's NRNP number and complete the enterprise number of the participant by entering the NRNP number, so that declarers can use either of these numbers to interrogate the CCCR.

For the same purpose, a likely search will occur in the case of persons reported with a NRNP number to find an enterprise number.

An internal number should only be used to identify a debtor without official identification number. If not, the assignment of an official number by the matching module will prove difficult and somewhat problematic.

2.5.1.2.4   Non-resident individual

A non-resident individual is identified by his internal number recorded by the participant (unique identifier adopted by the participant which can only be used for that debtor).

The other data reported by the participant are:
- ❖ Surname
- ❖ Official first name.
- ❖ Sex (optional).
- ❖ Date of birth (day, month, year).

---

[1] At present: Austria, Germany, France, Italy, Spain, Portugal.

[2] Reporting of this number avoids manual searches by CCCR staff to positively identify the debtors exchanged with other central registers, some of which require this number.

- ❖ Full address (separate attributes) :
  - o road,
  - o number (optional),
  - o P.O. box (optional),
  - o post code (optional),
  - o town,
  - o country code
- ❖ Tax number or enterprise number used to officially identify the individual in the country in question, if that is one of the countries with which an MoU on data exchange has been signed (*optional data item*).
- ❖ NACE code (minimum 3 and maximum 5 digits).
- ❖ Free zone.

Note: non-resident individuals need only be reported by credit institutions.

2.5.1.2.5 Association of joint debtors

An association of resident and/or non-resident legal entities and/or individuals (called joint debtors) is identified by its unique internal number assigned by the participant to denote the association (unique identifier adopted by the participant which can only be used for that debtor).

The other data reported by the participant are:
- ❖ For each joint debtor: identification data the same as those for the individual debtors above. A person who is simultaneously the sole debtor of a credit and a joint debtor in an association must be identified by the same number (unique identifier).
- ❖ Free zone.

2.5.2 *Credits*

The information used to identify credits are: the identification number of the credit beneficiary, the credit modes of the credit authorized and used, broken down according to the initial term and the residual term, the amounts and monetary units, and the date on which the reported situation was ascertained.

The following data must be reported to identify a credit (apart from the participant code and the debtor identification number)[1]:

- ❖ Period to which the credit relates (end of month).
- ❖ Type of amount:
  - ▪ authorized (A) or
  - ▪ used (U).
- ❖ Credit mode.
- ❖ Initial term (DI):
  - ▪ ≤ 1 year, or

---

[1] Example: credit by Belgian bank B to debtor D:
- 100 EUR authorized as mixed credit (80) and overdrafts (20) and 50 CHF authorized as term credit by the branch of bank B in Switzerland.
- 80 EUR used in the form of term credit (60) and overdrafts (20) and 20 CHF used in the form of term credit by the branch of bank B in Switzerland.

A/Mixed credit/DI > 5 years/DR>5 years /-/EUR/80
A/Overdrafts/DI ≤ 1 year/DR ≤ 1 year /-/EUR/20
A/Term credit/DI > 2 years et ≤ 5 years/DR ≤ 1 year /CH/CHF/50
U/Term credit/DI > 2 year et ≤ 5 years/DR > 1 year and ≤ 2 years /-/EUR/60
U/Overdrafts/DI ≤ 1 year/DR ≤ 1 year /-/EUR/20
U/Term credit/DI > 2 years and ≤ 5 years/DR ≤ 1 year/CH/CHF/20

- - > 1 year and ≤ 2 years, or
  - > 2 years and ≤ 5 years, or
  - > 5 years.
- ❖ Residual term (DR):
  - ≤ 1 year, or
  - > 1 year and ≤ 2 years, or
  - > 2 years and ≤ 5 years, or
  - > 5 years.
- ❖ (If the credit was granted by a foreign branch of a bank established in Belgium) the code for the country where the branch concerned is located (otherwise BE reported).
- ❖ Currency in which the credit was granted.
- ❖ Exact amount in the original currency indicated (in contrast to CKO1, no multiple depending on the currency).

The amount of the credit authorizations to be reported includes only the authorized capital sum.[1] The amount of credit used corresponds to the capital sum actually made available to the beneficiary plus any **interest due but not paid.** Interest on arrears is not included.

Note for credit insurers
The credit amount corresponds to the cumulative amount guaranteeing claims on the same debtor. Only an authorized amount has to be reported. The concept of credit used does not exist for this mode of credit.

Note for guarantee insurers
The surety granted by guarantee insurers is treated as guarantee credit granted by banks (but identified with a different credit mode). It is necessary to report an amount authorized and an amount used.

Note for leasing companies
This concerns the leasing of both movable property and real estate.[2]
These contracts must be reported as registered in accordance with the Belgian Generally Accepted Accounting Principles (Belgian GAAP) as soon as the contract enters into force (= is activated).
It is necessary to report an amount authorized and an amount used.

Note for factoring companies
It is only necessary to report advances by factoring companies to their customers, using their own funds.
It is necessary to report an amount authorized (maximum amount that the factor is ready to pay on account to its customer) and an amount used (amount really paid on account to its customer).

2.5.3 *Other data*
Data other than those permitting identification of debtors and credits must be reported (cf. 2.4.4):
- probability that the debtor may default within one year (concept taken from Basel II accord);
- default amount to be calculated as defined in the Basel II accord;
- date on which the default occurred, giving rise to reporting of the amount mentioned above;
- type of the definition applying to the default (two possiblities);
- amount of collateral provided by the debtor.

---

[1] In the case of credit scheduled for repayment by instalments without writing back the authorized outstanding total, the amount of the credit facility will therefore correspond to the outstanding capital balance as specified in the repayment plan.

[2] Provided that the real estate leasing agreements are concluded by approved leasing companies.

The following data items will be part of the monthly reporting of the credit data for all debtors as they occur and can change in the course of the relationship between the declarer and the debtor:

- ❖ Probability of default (in %);
- ❖ Guarantee amount (in EUR);
- ❖ Date of default;
- ❖ Total amount of default (in EUR);
- ❖ Type of default.

2.5.4   Special cases

The following special cases are those already dealt with in the CKO1 instructions.

Credit to debtors who have requested a regime covered by the law of 31 January 2009 on business continuity (entered into force on 1 April 2009 – Royal Decree of 27 March 2009 published in the Moniteur belge on 31.03.2009).[1]
If a participant submits an application in regard to business continuity, that does not affect the obligation to report the progress of the credit granted and used.

Credit to debtors declared bankrupt
If a business is declared bankrupt, that does not terminate the credit notification obligation. In such cases, the procedure is as follows:

- if the declarer (except for credit insurers) abolishes or terminates the credit, the authorization is restored to zero;
- if the credit insurer abolishes its guarantee on the insured claims, an end of reporting will be notified;
- if the debtor maintains one or more credit authorizations in favour of the debtor declared bankrupt, the amount of the authorization is notified.

The real outstanding amount must be notified at the time of subsequent reporting of the credit used; only payments to the declarer, as the creditor, justify reporting of a reduced outstanding amount. The declarer therefore cannot reduce the amount reported by the amount of the provisions for write-downs which he forms.
At the time of closure of the bankruptcy, it is necessary to notify the end of reporting on the debtor.

Terminated credit
A declarer's final, definite decision to terminate a credit facility, i.e. to end his commitment unilaterally, leads to notification of a credit authorization for a zero amount, while the amounts used are declared in accordance with the general rules. Reporting will continue until the whole of the amount due has been recovered, or until such time as the claim has been cancelled because it has become finally irrecoverable in full.

For credit granted by credit institutions only.
Syndicated loans
"A syndicated or consortium operation is an operation involving multiple credit institutions in the sense that one or more of them acquires and holds a claim or asset in its own name, but partly on the instructions and therefore for the account and risk of other credit institutions called participants".[2]
When reporting to the CCCR, each participant in the syndicated loan will:
– notify its share in the finance as cash credit,

---

[1] Former 'concordat judiciaire' [arrangement or composition approved by the court].

[2] Latest (unofficial) coordinated version dated 16 February 2009 of the "CBFA decree of 28 April 1992, last amended by the decree of 12 December 2006, on the periodic information relating to the financial situation of credit institutions, to be reported to the NBB and to the CBFA."
.

−   notify as surety/credit substitute the share for which it assumes only the risk and not the financing.

"Export credit" transactions
Only the institution granting the credit is required to report notifications.

2.6 Reporting frequency and times

Reporting of credit and debtors takes place monthly. In contrast to CKO1, no other frequency is stipulated. However, it is desirable for the reporting of new debtors, particularly by the biggest declarers, to take place more frequently (twice monthly or weekly) in order to ensure that the CCCR's identification workload is more evenly spread through the month in the event of a problem, and to enable declarers to speed up the correction and resubmission of data on debtors rejected with a view to the reporting of their credit within the prescribed time.

As in CKO1, the reports from participants must be forwarded to the Central Register within eight calendar days following the situation reported.

2.7 CKO2 consultations

2.7.1 On-line interrogations

This method of interrogation applies to the production database and is requested by all participants. It must be available both to participants with substantial technical resources effecting numerous interrogations (solution A2A[1]) and to those making few inquiries with more limited technical resources (solution U2A[2]). In the latter case, the visual aspect of the interface used must permit easy interrogation. All participants are free to choose the interrogation method most convenient to them.

Simultaneous consultation of the CCCR and the CCRNP (= CKP) on the basis of a single interrogation but with outputs specific to each application is a technical possibility which the NBB will not analyze and assess unless participants expressly request the NBB to do so. In that case it would have to take account of the legal obstacles to consultation of the CKP by bank staff accessing the CCCR. The current specification therefore makes no provision for this possibility.

Individual interrogation must be possible on the basis of
▪   the enterprise number (resident legal entities or individuals), or
▪   the NRNP number (resident individuals), or
▪   the participant's internal number, or
▪   the name + legal form + post code (resident legal entities) or
▪   the surname+ first name+ date of birth (resident individuals), or
▪   the name + country (non-resident legal entities), or
▪   the surname+ first name+ date of birth + country (non-resident individuals).

---

[1] Automated communication between computers without development of a specific visual interface by the NBB.

[2] Communication via a specific visual interface developed by the NBB for the user, who must personally encode information on a form (or submit a data file).

Every interrogation must generate a response:
- indicating the credits found (if a single person has been identified), or
- reporting "absence of credit" (if a single person has been identified), or
- without information on credit but indicating the persons meeting the search criteria (in the case of homonyms), or
- reporting that the person cannot be identified.

The credits are mentioned in the response by credit mode and according to the residual term. They are either those at the end of the last two months (even if the last month's credit situation is incomplete), or those at the end of two months chosen by the participant from available production periods. If two participants have reported data and the latter concern different reporting months, the credits are not totalized. For each reporting month, the number of participants reporting data and the completeness or not of the information (based on the total number who should, in principle, still declare data for the debtor concerned) are mentioned for each debtor.

The extra information (date and amount of the default) regards the situation contained in the database of production like it was reported for the dates chosen by the consulting participant but taking the foreseen time limit of conservation into account (12 months)[1].

The data on persons and credits mentioned in the output are similar to those produced in the responses supplied by CKO1, except for the NACE code and the year of the latest annual accounts filed.

2.8 Other CKO2 outputs

2.8.1 Automatic feedback

This output, requested by the banking sector, is the result of monthly processing of the production database comprising the credits with all participants for all debtors of the requesting participant for the past two reporting months. This output enables the participant to arrange regular monitoring of all his customers.

The result is similar to the current automatic feedback in CKO1 (except for the NACE code and the year of the latest annual accounts filed) and to the answers produced in the on-line interrogations.

The automatic feedback is produced after closure of a monthly report by action on the part of CCCR staff where the data are considered sufficiently complete and representative.

The automatic feedback can be supplied to any participant, whatever the method of access used in relation to the application.

2.8.2 Participant directory

This output, requested by the banking sector, is the result of asynchronous processing of the production database to supply the requesting participant with all the identification and credit data which the participant has notified to the CCCR and which relate to a month which he specifies in his request. This output enables the participant to reconcile the data recorded in the CCCR with his own recorded data.

The result must be the same as the current directory in CKO1.

The credit information contained in the directory (i.e. relating to the date specified) is supplemented by all the internal numbers and identification data relating to persons already reported by the requesting participant

---

[1] Therefore, a debtor's default can't be given back in a consultation more than 12 months after the end of the default.

(except for persons whose data have been deleted by the participant) and even those for whom there are no credits on the date specified.

2.8.3   Statistics

Sectoral and geographical, selective or historical statistics can be supplied to participants on request or periodically.

A standard and unchanging statistical presentation can be made on the basis of the production data. However, the statistics supplied currently show that participants have a variety of needs which are not readily compatible with processing in production. Moreover, those needs change over time. A data warehouse is more appropriate to the expectations generally expressed. Fixed standard reports or reports permitting a degree of parameterization according to requirements will be made available to participants. Ad hoc reports may also be developed by the CCCR and supplied on the basis of a specific request from a participant.[1]
Requesters will be invoiced for the cost of preparing and supplying these statistics.[2]

2.8.4   Other

The CCCR could conceivably offer other types of product. For example, changes of address recorded since a reference date and relating to the resident customers of a participant. That product could be supplied on request or periodically.
However, the price offered by the NBB in an attachment to the letter to Febelfin and Assuralia does not provide for types of output other than those mentioned in the preceding points.
Any request for additional types of product must be expressly notified by the participants to the CCCR, which will assess the development and operating costs.

2.9 **Exchange of data with foreign credit registers**

At the request of participants, there is no provision for any output relating to the data exchanged for the purpose of the WGCR.

2.10 **Miscellaneous**

2.10.1   Data warehouse

The period for preserving the production data is only 12 months[3] (of which the latest can be incomplete) and the scope for interrogation is limited. Yet detailed data preserved for long periods offer significant added

---

[1] Later, if the participants consider it necessary, a more sophisticated solution permitting direct access to the data warehouse could supplement the functionalities provided for entry into production. In that case, the participants could themselves develop reports by choosing selected parameters on any data item to meet highly variable needs, as and when required (with regular data updates) and in the desired lay-out. That entails the use of the Business Objects software used by the NBB. The NBB cannot estimate the cost of such development, beyond the production of standardised reports, until the participants give an exact description of what they need and the business requirements of the data warehouse have been fixed.

[2] The method of setting the rate charged will be determined later in consultation with the participants.

[3] The period for preservation in production could be extended to 24 months if the participants explain why that is necessary, as it would entail modifying the planned structure of the database, which would make the development more complicated and mean an additional (albeit moderate) operating cost for the larger volumes of data to be preserved.

value for the CCCR, both internally for the NBB, and for the CBFA and participants. It is therefore necessary to store detailed data in a complete and efficient data warehouse updated daily by the production application and to develop the tools needed for its interrogation. The individual data are preserved there for 5 years on a monthly basis, then for at least a further 5 years on a quarterly basis (monthly if that proves to cost hardly any more than on a quarterly basis).

The data warehouse obviously has to be developed, as the data stored in the data warehouse enables the CCCR:

- to measure and monitor data exchanges between the NBB and participants and the operation of the application in production on the basis of statistical information transferred daily to the data warehouse.

- to conduct all its consistency checks on the data reported by participants.

For participants, the data warehouse is a tool which enables them to compile statistics. For example, it can be used for precise sectoral analyses cross-referencing a number of parameters (e.g.: average amount authorized in a particular sector).

In the case of the Business Objects software currently used at the NBB to arrange requests to the data warehouse, constitution of the data universe is an essential development.

All updating of the data relating to debtors and credits by the participants takes place via the production application and therefore only concerns data already recorded in it. These updates then give rise to an adjustment in the data warehouse after transfer of the data. It is not possible for participants to make direct adjustments to data in the data warehouse.

The data warehouse (tables, universe of Business Objects, CCCR programs necessary for operating checks and quality checks) must be available as soon as the production application is implemented.

Finally, it must be pointed out that
- the data warehouse (like any production database) cannot be used for commercial or marketing purposes to obtain information on non-customers;[1]
- the data warehouse is not a suitable tool for producing the automatic return owing to the complexity of the processing to be conducted on very large volumes of data.

2.10.2   Data preservation and accessibility period

- The data in the production database are intended for responding to interrogations submitted by name on the recent debt situation of debtors, and for automatic feedback. Therefore only the debtors' indebtedness at the end of the last 12 months are preserved and accessible in that environment (the last monthly situation being possibly incomplete depending on the date and timely reporting by the participants)..
  Example: from 1 to 30 November 2009, it will be possible to show the monthly credit situations going back to 30 November 2008 as they were reported for the ends of months.
- The information related to the defaults of payment (date and amount) at the end of the last 12 months is also stored and accessible in the production environment only what the "objective" meaning of default concerns ("90 days past due").When that type of default doesn't exist anymore in a monthly reporting in comparison with the previous one (because of reimbursement or whatever other cause), an information field "date end of default" containing the reporting date on which the default hasn't been reported anymore will be showed in the answers to consultations and in the automatic feedback during one year from the "date end of default".

---

[1] The 1993 banking law states that the Central Register can be consulted for the purpose of assessing the risk associated with the credit which participants have granted or acquired by assignment, or which they have been asked to obtain.

Example: from 1 to 30 November 2009, it will be possible to show date and amount of default as they were reported for the ends of month going back to 30 November 2008. In case of deletion of default on the reporting date 31 January 2009 (in comparison with 31 December 2008), a date of end of default will be showed up to 30 January 2010.

- Also, these same data and the review of the older data are preserved in the data warehouse, an environment better suited for responding to needs concerning quality checks on the data recorded, general statistics and customized data for participants, miscellaneous statistics for the NBB, the ECB and the Belgian economic and political world, and for use in the preparation of risk assessment models by the NBB. These data will be preserved for a minimum of 10 years.

2.10.3 Security

The security of the application is based on:
- the authentication, confidentiality and integrity of the communications, interrogations and recorded data. Technical measures (equivalent to those set up in the CKP) based on the use of electronic certificates will be implemented to safeguard these security requirements. Non repudiation is the only thing that the application will not cover.
- preservation of a backup of communications and interrogations for a period to be specified in a Service Level Agreement between the NBB and participants.
- possible establishment of a Business Continuity Plan to be specified in a Service Level Agreement between the NBB and participants.

2.10.4 Tests and entry into production

The project plans must specify a date for entry into production for all participants, but it will be preceded by a period of testing between the CCCR and participants. It should last for 6 months.[1]

The NBB will provide exclusively for CCCR participants a test environment which will be available full-time, the night included for batch processing, during the test period planned before entry into production of the new CKO2 application and subsequently, before entry into production of new releases of the application. The test environment will be regularly (quarterly) cleaned to reflect a coherent situation of the database for testing.

The CCCR will draw up a schedule of tests that participants will have to carry out, taking account of the functionalities which they choose and the timetable agreed with the CCCR.
Tests will be possible for each participant by using his own data for reporting and consulting, but for the consultations, the NBB will constitute and deliver in due time a set of data to allow participants to prepare their consultation tests so they can be sure of the expected answers.
Performance tests with large data volumes will be organized and scheduled with the participants who wish it. They will just result in accepted or rejected data.

Support to participants will be delivered during working hour.

Successful completion of the tests planned by the CCCR is compulsory for all participants before entry into production.

---

[1] An excessively long period must be avoided because this test period requires the use of substantial resources (infrastructure and staff) the cost of which is included in the project investment. Moreover, this period should still be covered by any VAGen support contract financed for the purpose of CKO1.

All participants must proceed to production on the same date. From then on they must start by supplying data for the CCCR. However, the test environment will still be available after that date.

2.10.5 Initial loading

Further to a request from the current participants of the CCCR, the initial loading will start from scratch from the entry into production date onwards without previously transferring any identification data from CKO1 to CKO2[1]. Therefore all the participants will have to feed CKO2 in a short time on the basis of the situation of their total database, depending on the processing possibilities of huge data volumes by the NBB IT architecture and the CKO2 application.

Due to a possible subsequent large amount of identification problems to be solved by the CCCR back-office, which will depend on the quality of the data sent by the participants, measures will be taken by the CCCR to limit the period of solving the identification problems (reinforcing the team, preprocessing of files for some large participants, scheduled loading so as not to overload the CKO2 application, ...). The whole month of June will certainly be necessary to solve all the identification problems.

The credit data on new debtors relating to periods preceding entry into production will not have to be reported by participants, in order to limit the initial loading operations.

The debtor credit data already present in CKO1 will not be transferred to CKO2 either. Therefore, inquiries on the data base will only make sense after the reporting in the beginning of the first month after the entry into production of CKO2.

As far as possible, the data recorded in the data warehouse of the current CKO1 application will be loaded into the new CKO2 data warehouse.

2.10.6 Planning

CKO2 is scheduled to enter production on 01/06/2011. From then on, it will no longer be possible to exchange messages or files with the CCCR via the current communication channels. The current CKO1 application will be deactivated.[2]

The NBB will supply the protocols relating to CKO2 to future declarers according to the following timetable:

01/03/2010	Draft protocol of the functions for the reporting by (and their feedback to) the declarers
01/05/2010	Final protocol of the functions for the reporting by (and their feedback to) the declarers
	Draft protocol of the functions for the consultation by and the outputs to the declarers
01/07/2010	Final protocol of the functions for the consultation by and the outputs to the declarers

After each delivery of draft protocols, declarers will have one month for submitting their comments to the NBB.

The NBB then proposes to supply the CKO2 application modules according to the following timetable if the declarers indicate their agreement:

01/12/2010	Opening of the integration environment for the declarers to test the functions as to the reporting (and their feedback)
01/02/2011	Opening of the integration environment for the declarers to test the functions as to the consultation and the outputs
01/06/2011	Go live of CKO2: opening of the production environment for all the declarers

---

[1] It had been envisaged to transfer the identification data of already registered debtors from CKO1 to CKO2 to limit the workload after the go live of CKO2, but this solution seemed not satisfying.

[2] The possibility of keeping the CKO1 application available for an extra month to permit consultation by name will be examined in due course if the current CCCR participants consider it necessary.

The NBB will prepare a data file and supply it to declarers by 01/12/2010 to enable them to prepare and carry out their consultation tests.

The same planning will apply to all current declarers.

2.10.7   CBFA (for information)

The CBFA's authorized staff can consult all CCCR data in the same way as staff of the Central Register.
If desired, they can also access the data warehouse to conduct their own searches there.

2.10.8   Finance

The investment costs for CKO2 and for the operation of the CCCR and its IT application were stated in the NBB offer attached to its letter dated 01/12/2008 to Febelfin and subsequently notified to existing or future participants.[1]   Fixed for a four-year period, those costs will be recouped by the NBB in accordance with principles to be determined by the participants in consultation with the NBB. Those principles will concern the structure and levels of the rates charged for the various services supplied by the CCCR: participation in the CCCR, data collection, data processing, various types of outputs for the circulation of data (interrogation by individual names and by groups, automatic feedback, directory, statistics). The same principles will apply to all types of participants.

A specific development cost was indicated in the offer for "group consultation", "automatic feedback" and "participant's directory" outputs. As "group consultation" turns out to be useless due to the technical possibility of sending large numbers of successive on-line queries, only the other two outputs will be developed, lowering slightly the costs.

For CKO1 participants, the "postponement" to 01/06/2011 of the date for entry into production (01/01/2011) indicated in the offer made to Febelfin and Assuralia in December 2008 will not entail an additional cost in comparison with the costs of the previous year as regards the IT operation of CKO1 (except for normal indexation of the NBB rates).

---

[1] The financial part of this offer is attached as Annex 2.

3 PRODUCT FUNCTIONALITY

3.1 User functions

The functions listed in this section are intended to be used by the participants. Back-office functions, designed for internal use, are not listed in this document.

3.1.1 Report and way of data exchange

- Report debtor and credits (A2A automated file upload via web services)
- Report debtor and credits (U2A internet manual file upload via browser)
- Report debtor and credits (U2A internet interactive application via browser)
- Retrieve list of reporting status (A2A automated file download via web services)
- View reporting status (U2A internet interactive application via browser)
- Retrieve acknowledgment of receipt (A2A automated file download via web services)
- Retrieve acknowledgment of receipt (U2A internet manual file download via browser)
- View acknowledgment of receipt (U2A internet interactive application via browser)

3.1.2 Consultation and way of data exchange

- Consult debtor credits (A2A automated file upload/download via web services)
- Consult debtor credits (U2A internet interactive application via browser)[1]

3.1.3 Output and way of data exchange

- Subscribe to monthly feedback output (message to the CCCR)
- Retrieve monthly feedback output (A2A automated file download via web services)
- Retrieve monthly feedback output (U2A internet manual file download via browser)
- Subscribe to repertoire output (message to the CCCR)
- Retrieve repertoire output (A2A automated file download via web services)
- Retrieve repertoire output (U2A internet file download via browser)
- Subscribe to sectoral and geographical statistics (message to the CCCR)
- Retrieve sectoral and geographical statistics (U2A internet manual file download via browser)
- Retrieve results of monthly checks (U2A internet manual file download via browser)

---

[1] Consultation via U2A Internet manual file upload/download isn't useful. Internet interactive applications via browser are sufficient for Internet users.

3.2 **Performance features**

Average and maximum threshold
Currently, in CKO1, about 90 participants out of the 135 registered[1] report data once or twice (in case of update) a month and about 50 participants only[2] consult data through the existing products (nominative requests or automatic return). The number of registered participants will be extended to include leasing and factoring companies, but should not exceed 180 participants.

In the current system, participants forward information to the CCCR regarding debtors who have obtained credit totaling 25,000 euro or more. This represents about 400,000 debtors and 1,200,000 credit amounts (authorized + used) to be reported each month. By the deletion of the threshold, this would rise up to maximum 850,000 debtors and maximum 3,500,000 credit amounts. The participant with the highest volumes would have about 175,000 debtors for 1,000,000 credit amounts. The breakdown of the credit data according to the initial and the residual maturity could raise the number of credit amounts to about 5 000 000, what remains bearable for the IT process. The higher storage cost won't be charged to the participants.

Regarding the consultation, it is quite hard to determine how the new system will be used and which channels will be privileged. This should not have a big impact on the system since consultations currently represent only about 5,000 requests a year. However, the number of consultations will certainly rise with the availability of the online consultation.

Online response time
Online functions require by definition a very short response time. The standard guidelines for online response times are:

0.1 second: Limit for users feeling that they are directly manipulating objects in the User Interface. Users do not sense any interruption.

1 second: Limit for users feeling that they are freely navigating the command space without having to wait. A delay of 0.2-1.0 seconds does mean that users notice the delay and thus feel the computer is "working" on the command, as opposed to having the command be a direct effect of the users' actions.

10 seconds: Limit for users keeping their attention on the task. Users experience is interrupted and they are likely to leave the site. Anything slower than 10 seconds needs a percent-done indicator as well as a way for the user to interrupt the operation.

Asynchronous processing response time
For asynchronous processing (reporting, multiple requests consultations) and manual interventions (e.g. matching), an SLA will define the allotted response time for each task including:
- when each process must be performed (when a new message arrives or at night)
- the time limit for the CCCR staff to execute manual operations.

---

[1] The others, mainly insurance companies, have no data to communicate because they don't deliver any of the product/service aimed by the law although they have been agreed by the CBFA for the concerned activities.
[2] Consultation is not mandatory by law before granting credits or to monitor the indebtedness situation of the existing clients.

3.3 Capacities for processing, on-line storage and off-line archiving

- Data files sent by participant can't exceed 10 Mb. Zipped files with a volume within that limit are allowed.
- The system must keep all reported data for a period of 12 months.
- The logging information regarding the actions of internal and external users must be kept during 3 months.

Detailed information about the system architecture and storage aspects will be covered in the application architecture specifications.

3.4 Access requirements

The CCCR infrastructure will be available through two different access points.

Via a NBB web application - U2A
In this mode, a NBB-web application with **https and certificate** checking will be used for the **online functions**, like file uploads, data entry and consultation. In this U2A-application the user directly communicates with the CKO2-application via a webbrowser.

Protocol: HTTPS

File formats: Manual data entry or XML[1] file upload. Feedback files will be in XML format.

Usage profiles: Users will manually enter data through the web interface either by data entry or file upload.

The required equipment is an internet PC with browser and a class 3 NBB or 3rd party certificate from Globalsign, Certipost, Isabel. All participants should reasonably already possess one of these. Regarding the underlying Operating System (OS) and browsers, the NBB internet application will be compliant with the most common browsers (Internet Explorer-versions 7+, Mozilla/Firefox-versions 3+) and OS (Windows XP and Vista). Other browser/OS versions can be tested on demand, but will not be officially supported.

Via NBB Secured web services
Secured web services will be available for participants wanting to automate the access to the CCCR. Participants will authenticate to the CCCR using digital certificates (class 3: cfr. Authentication in § 3.5).

Protocol: Webservices over HTTPS

File formats: XML (both reporting and feedback files)

Usage profiles These webservices will be accessible via automated applications and via low-cost solutions such as SOAPUI or other free tools. A detailed explanation how to use these webservices will be provided later.

The purpose of the **web services or https-requests** is to communicate via an A2A channel (application to application) for the data exchange with CKO2. The payload can be included in a SOAP request (web service calls in strict sense) or directly in a HTTPS request.

1. The web service is described by a WSDL (WebServiceDescriptionLanguage or WebServiceDefinitionLanguage). It tells where the service is located. It defines for each method which input parameters are needed and what the response looks like.

2. **The use of the web services can be automated by the participants.** In this case, the development can be done with standard technologies.

---

[1] The XML file must comply with the schema that will be specified. It is recommended to validate the XML files on the client side prior to sending.

3. Tools like SOAPUI (user interface) and Curl - both available freely on the internet - allow testing and automation of web service calls in a relatively easy way. This can be done manually and gradually evolve to an automated solution.

3.5 Security requirements

System availability
Users functions will be accessible 24 hours, 7 days a week, except during maintenance periods. The highest availability rate for reporting functions should be reached between the 5th and 15th of each month. Indeed, the system should be able to process all reports during this period.
The availability percentage and maximum down time will be covered by a separate SLA.

Backup
NBB centralized backup solution will be used. All messages exchanged between the participants and the system will be included in the backup procedure.

Transaction confidentiality and data integrity
Data protection is required to ensure that requests and responses have not been tampered. The integrity and privacy will be guaranteed both for U2A internet and A2A communication using SSL.
For internal functions, the data protection means in use in the NBB for the applications dealing with confidential information will be implemented (limited number of functions authorized for a work post + limited number of people authorized to access a work post).

Authentication
Authentication ensures that an entity involved is what it actually claims to be. Authentication involves accepting credentials from the entity and validating them against an authority.

Mutual authentication is a prerequisite for accessing the new CCCR U2A and A2A functions. This implies that both the CSSR server and the participant must be authenticated with digital certificates.
NBB best practices allow only class 3 certificates for this purpose. The class 3 certificates provide the highest assurance thanks to a rigorous identification of the certificate holder.

Authorization
Authorization confirms the user credentials and determines if the service requestor is entitled to perform the operation, which can range from invoking a service to executing a certain part of its functionality. Only authorized and authenticated users will be able to access the system and only with the privileges assigned to them according to their user profile. The privileges will be assigned according to:
- the user certificate for A2A and U2A functions
- the user workgroup for internal functions

Non-repudiation
Non-repudiation guarantees the message sender's identity (i.e. that the message sender is the same as the creator of the message). The non-repudiation is not required for CCCR which means that messages will not be digitally signed.

3.6 Other requirements

The data exchanged between the CCCR and the participants (report, consultation, output) will be formatted in XML. A comprehensive description of the XML protocol will be provided later.

3.7 Miscellaneous information on the access to CKO2

The Gateway used for CKP comes from an older technology while the more recent technical architecture SOA (Service Oriented Architecture) will be used for automated CKO2 exchange.

3.8 Proposition for the SLA, availability and support

- Large opening hours with support only during office hours. Support can be given besides the opening hours but "only if a supporting staff is still available".
- Support based on "best effort", no commitment on the result..
- This means in practical terms that the participants can send files outside the opening hours but that the NBB will only start solving the potential arisen problems the morning of the next working day.
- There is no impact on the price except if it is decided to enlarge the support hours what requires to work in shifts maybe ou of the normal working time.

4 USE CASES

4.1 List of use cases

Reference	Use Case
Participant use cases	
CKO2-REP-1	Report debtor and credits (A2A automated file upload via web services)
CKO2-REP-2	Report debtor and credits (U2A internet manual file upload via browser)
CKO2-REP-3	Report debtor and credits (U2A internet interactive application via browser)
CKO2-REP-4	Retrieve list of reporting status (A2A automated file download via web services)
CKO2-REP-5	View list of reporting status (U2A internet interactive application via browser)
CKO2-REP-6	Retrieve acknowledgment of receipt (A2A automated file download via web services)
CKO2-REP-7	Retrieve acknowledgment of receipt (U2A internet manual file download via browser)
CKO2-REP-8	View acknowledgment of receipt (U2A internet interactive application via browser)
CKO2-CONS-1	Consult debtor credits (A2A automated file upload/download via web services)
CKO2-CONS-2	Consult debtor credits (U2A internet interactive application via browser)
CKO2-OUT-1	Subscribe to monthly feedback output (message to the CCCR)
CKO2-OUT-2	Retrieve monthly feedback output (A2A automated file download via web services)
CKO2-OUT-3	Retrieve monthly feedback output (U2A internet manual file download via browser)
CKO2-OUT-4	Subscribe to repertoire output (message to the CCCR)
CKO2-OUT-5	Retrieve repertoire output (A2A automated file download via web services)
CKO2-OUT-6	Retrieve repertoire output (U2A internet file download via browser)
CKO2-OUT-7	Subscribe to sectorial and geographical statistics (message to the CCCR)
CKO2-OUT-8	Retrieve sectorial and geographical statistics (U2A internet manual file download via browser)
CKO2-OUT-9	Retrieve results of monthly checks (U2A internet manual file download via browser)

4.2 Participant use cases

4.2.1 CKO2-REP-1 - Report debtor and credits (A2A automated file upload via web services)

Each month, the participant reports data about the current situation (last day of the month) of all its debtors and their credits.

Reports can be sent 24 hours a day. A first validation of the files can result in a global reject which is immediately communicated to the participant[1]. Later on all the files accepted in the first validation are processed during the night. Records accepted and rejected are made available to the participant with the error messages needed for corrections in a first receipt of acknowledgment. Debtors which can not be immediately identified and the possible credit data linked remains pending. Only once all the pending records have been processed, a second receipt of acknowledgment with accepted and rejected data is produced and made available to the participant.

Use cases CKO2-REP-4 to 8 summarize how the reporting result can be retrieved by the participant.

A reported package is divided into units of work that each comprises an action and the data on which the action must be processed. Since each unit contains all the necessary information to be processed, monthly data can be split into several packages (i.e. sets of units) to be sent separately. Nevertheless, the units regarding the creation of new debtors and the units regarding their credits must be placed in separate files so that debtors can be processed before credits (credits can only be validated and registered if they can be related to correctly identified debtors).

The following actions can be performed:
- Create debtor (DEB)
- Modify debtor identification number (MODIDDEB)
- Correct debtor identification data (CORDEB)
- Stop debtor (STOPDEB)
- Delete debtor (DELDEB)
- Create debtor credits (CRED)
- Correct debtor credits (CORCRED)

General principles
- The report of a debtor (whatever the debtor's type) is separated from the report of his credits: the debtor is communicated thanks to a specific action code (DEB) and his credits are communicated thanks to another code (CRED).
- Debtors and credits must be communicated in separated files. Credits will be treated and registered only if the debtor can be correctly identified.
- For a reporting date being the last day of a month M, the debtors can already be transmitted during the month M (but not before). Credits will be transmitted after the reporting date (within the 8 calendar days)[2].
- Resident natural persons should be reported with an official identification number (enterprise or RNPP number) or if none of both exists (exceptional cases), with an internal participant number. The CKO2 application will check the existence of the other official number than the one reported (or of both in the case of an internal number) and will deliver it (or both) in the acknowledgement of receipt of the participant. For the monthly reporting of credit, the participant will have the choice to

---

[1] For example, data files exceeding 10 Mb.

[2] This principle is similar to the existing one in CKO1 (participants can report to the CCCR in several times within the month preceding the reporting date in order to limit the workload linked to the arisen identification problems). CKO1 enables to communicate the authorized amounts before the end of the reporting month. This will not be the case anymore in CKO2.

use one of the existing numbers (included the internal number if it has been reported). So doing, it will be posible to consult the database on every existing identification number.

- Should a debtor not be reported anymore, a specific action code is used to stop the reporting (STOPDEB)[1]. If, in the future, credits have to be reported for this debtor again:
  - o the action code CRED <u>can</u> be used without going by the identification process (unlike CKO1); or
  - o the participant can resume the communication of this debtor by first using the action code DEB and then the action code CRED (if, for example, the participant is not able to determine if he already communicated the debtor to the CCCR).

- In order to have an adequate follow up of the communications of the credit situations and of their evolution in the CCCR, each amount regarding an authorized or a used credit has to be reported each month once it has ever been communicated, even if it hasn't been modified (in other words, a monthly photo principle of all debtors and credits present in the databases of the participant is applied).

  A used amount for a credit does not systematically require the communication of an authorized amount for the same credit. An authorized credit can indeed lead to utilizations in other credit modes or currencies than the ones of the authorization. And vice versa.

- An internal number given by a participant (if there is no enterprise nr. or National Register for Natural Persons number (NRNP no.)) can be modified by the participants thanks to a specific action code (MODIDDEB). A foreign debtor who moves to Belgium will have to receive an official identification number, which requires the use of a DEB action code. Therefore, no link will exist between both id data (existence of two different persons).

- The identification data for a debtor registered with a participant internal number (i.e. not registered with an enterprise no. or NRNP no.) can be modified by the participant thanks to a specific action code (CORDEB). On the contrary, if a debtor is registered with an enterprise nr. or national register nr., the data from the Crossroads Bank for Enterprises or from the National Register for Natural Persons are supposed to be the reference data which means that they cannot be modified by the participant.

- A credit situation already communicated by the debtor that appears to be wrong must be corrected by a specific action code (CORCRED). In this case, the participants must mention <u>all the debtor's credit data</u> (authorized and used) for that reporting month.

- It is possible to delete all the information of a registered debtor, wrongly communicated, by using a specific action code (DELDEB).

Create debtor (DEB)

The debtor creation is the preliminary step before all other actions can be carried out. Indeed, if a new debtor cannot be identified and recorded in the system, no credit report for this debtor can be accepted.

In order to register a new debtor, the participant must communicate a set of information about the debtor. This information is checked by the system and compared to different data sources, i.e.
- the already registered debtors,
- the Crossroads Bank for Enterprises (for legal entities and sole traders),
- the National Register for Natural Persons (for natural persons).
This procedure is called "matching".

When the matching fails, either the debtor is rejected or a system administrator is required to solve the problem.

---

[1] Remark: if a STOPDEB action has been reported for a debtor at a wrong date, as there are still credits reported for this debtor at that time, the credit situation (which has been declared as being null via STOPDEB) should be corrected by communicating all the credits of this debtor via CORCRED.

A debtor can be a legal entity, a natural person or an association of debtors. It can be resident or non resident. Depending on the debtor type, the following identification information must be sent by the participant. The items with an asterisk are mandatory.

When a debtor has been reported once by a declarer, and that later on this declarer has stopped its client relation with that debtor by using the action code "stop debtor" (see hereafter), the declarer is not obliged to but may use this action code "Create debtor" to report again the debtor if the client relation starts again (new credits extended). The other way of passing on the information that the same debtor has been granted credits again consists in reporting directly the new credits by using the action code "Create debtor credits".

Resident Legal Entity
In principle, each borrower which is a legal entity receives an enterprise number at the Crossroads Bank for Enterprises as soon as it has been created.
- Enterprise number *
- Name *
- Legal form *
- Address
    o Street *
    o Number
    o Box
    o Postcode *
    o Country *
- Foreign parent company identification data (when available) when the debtor is a branch of a foreign company (see hereafter the needed information for non-resident)
- Free text

Non-Resident Legal Entity
- Participant internal number *
- Name *
- Address
    o Street *
    o Number
    o Box
    o Postcode
    o City *
    o Country *
- Foreign identification number (when available) when the debtor stems from a country with which an exchange of credit data takes place under the auspices of the ECB[1].
- Economic Activity code (NACE-Bel 2008: 3 to 5 digits)
- Free text

Resident Natural Person
A great part of those persons have an enterprise number. The others must have a national number, but exceptionally some resident natural persons have neither of them.
- Enterprise number OR National register number OR Participant internal number *
  NB: The participant internal number is only allowed when no other identification number exists
- Surname *
- First name *
- Gender
- Birth date *

---

[1] In 2009, those countries are Germany, Austria, Italy, France, Spain and Portugal.

- Address
  - Street *
  - Number
  - Box
  - Postcode *
  - Country *
- Free text

Non-Resident Natural Person
- Participant internal number *
- Surname *
- First name *
- Gender
- Birth date *
- Address
  - Street *
  - Number
  - Box
  - Postcode
  - City*
  - Country *
- Foreign identification number (when available) when the debtor stems from a country with witch an exchange of credit data takes place under the auspices of the ECB.
- Economic Activity code (NACE-Bel 2008: 3 to 5 digits)
- Free text

Association
- Participant internal number
- List of debtors with the above-mentioned information

Once a debtor has been registered, only its identification number (i.e. enterprise number, national register number or participant internal number) must be passed on to perform all the following actions.

Modify debtor identification number (MODIDDEB)

When a debtor is identified by the participant internal number, this action allows to update its number to reflect internal changes at the participant side.

- Reference date
- Old id number
- New id number

Correct debtor identification data (CORDEB)

When a debtor is identified by the participant internal number, this action allows to update the identification data that is associated with this number to reflect internal changes at the participant side.
NB: Debtors not identified by an internal number are not allowed to be updated since their identification data is only a reference to an official data source (Crossroads Bank for Enterprises or National Register for Natural Persons).

- Reference date
- Id number
- New id data

Stop debtor (STOPDEB)

When a debtor has no more credits at the participant, reporting for this debtor must be explicitly stopped. As a consequence, all credits reported by the participant for this debtor are set to zero at the reference date.

However, when using this action, this does not prevent the participant from reporting new credits in the future without re-creating the debtor. In that case, the participant is not obliged to use a DEB action (but he is allowed to) and he can use immediately a CRED action.

This action code must also be used when the composition of an association has changed. The association must be deleted and a new debtor must be created (DEB) with the new composition. It isn't indeed possible just to change the composition.

This action code can't be used when only a part of the credits have been reimbursed and that the credit relation remains for the rest. The last case (i.e. some credits of a debtor but not all have to be set to zero), must be processed by using the action code "Create debtor credits" (see hereafter).

- Reference date
- Id number

Delete debtor (DELDEB)

When a debtor has been introduced by mistake in the system, this action allows the participant to delete all its data (debtor + credits) related to the debtor. If the debtor has to be communicated later on because it has been granted credits, the action code DEB must be used.

- Reference date
- Id number

Create debtor credits (CRED)

Credit situation

After the end of a month, participants report the last credit situation of all their debtors.

All credits must be communicated for all debtors after the end of each month even when the situation has not changed. This way, the CCCR has a complete picture of the credits and no consistency check must be performed with the previous months.

A credit item is characterized by the following data:
- Reference date
- Type (authorized or used)
- Mode (according to a table)
- Initial maturity (according to a table)
- Residual maturity (according to a table)
- Country (if granted outside Belgium) (according to a table)
- Currency (according to a table)
- Amount (EUR)

Remarks:

- This action can be used to report on the last available data but also on previous months when no credit has already been sent for the concerned debtor and reporting date. But the "Modify debtor credits" action must be used if credit data has already been reported for the concerned debtor and reporting date.
- Although the monthly update is mandatory, no specific control will be implemented to oblige a declarer to report all the monthly situations before communicating the most recent situation.

Other information to be updated simultaneously with the common credit data

Some additional data are collected in CKO2 in comparison with CKO1. They regard the situation at the debtor level rather than at credit level. But as these data have to be monthly updated (while data on debtors are only passed on once), they are reported by means of the action CRED. These data are:

- Probability of default (%)
- Collateral amount (in EUR)
- Date of default
- Amount of default (in EUR)
- Type of default (code)

This information has to be reported each month, even if no change has been registered.

Correct debtor credits (CORCRED)

This action is used to correct reported credit amounts for a specific debtor. The content is exactly the same as for the "Create debtor credits" action, except that the participant explicitly mentions that the set of values is a correction on previously reported values.

NB: As only the 12 last months are kept in the system, it is obviously not possible to modify credits before this period.

Comparisons of CKO1 action codes with the CKO2 action codes

CKO1		CKO2	
Code	Action	Code	Action
11	• Communication of a new debtor and at least one credit (authorized or used). • Resumption of the communication of credits for a debtor for whom an end of communication (action code 14) has been registered before (if no action code 26 occurred).	DEB	• Communication of a new debtor N.B. No possibility of credit communication
12	• Evolution of authorized amounts communicated before (might be 0). • Communication of all used credits (might be 0).	CRED	• First communication of credits for a new debtor (authorized and/or used). • Communication of all authorized credits of each debtor. • Communication of all used credits of each debtor. Resumption of the communication of credits for a debtor for whom an end of communication (STODEB) has been registered before.
13	Communication of new blocks of authorized credits.		
14	No more credits to be communicated for the debtor (end of relation or amount < threshold).	STOPDEB	No more credits to be communicated for the debtor (end of relation).
15	Change of the identification no.: Internal no.---> Enterprise nr. or Enterprise no. ---> Internal no. (if natural person).	MODIDDEB	Change of the identification no. Internal no. ---> Internal no. if no Enterprise no. or National register no. exists in the database CKO2.
		CORCRED	If credit data has already been registered for a certain date, all the credit changes have to be done by CORCRED in which the whole credit situation of the debtor needs to be reported.
21	First but late communication for a debtor: credit dates preceding the reference date.		• debtor's identification via DEB • credit communication via CRED.
22	Change of identification data of a debtor (except if they come form the Crossroads Bank for Enterprises and relate to a legal entity).	CORDEB	Change of identification data of a debtor if no Enterprise no. or National register no. exists in the database CKO2.
23	Delete of a debtor (wrongly communicated) and of all his registered credits.	DELDEB	Delete of a debtor (wrongly communicated) and of all his registered credits.
24	Add of a (nonexistent) credit block for an existing debtor and at a specific reporting date.		Communication of the whole credit situation via CORCRED.
25	Delete of an existing credit block for a debtor at a specific reporting date.		Communication of the whole credit situation via CORCRED.
26	Delete of an end of communication (14) reported before for a debtor.		Communication, via CORCRED, of the credit at the reporting date at which the STOPDEB happened.

4.2.2 CKO2-REP-2 - Report debtor and credits (U2A internet manual file upload via browser)

The participant accesses the internet application to manually upload a file containing debtors and/or credits reports. The uploaded file's content must meet the same requirements as defined in use case CKO2-REP-1.

4.2.3 CKO2-REP-3 - Report debtor and credits (U2A internet interactive application via browser)

The participant accesses the internet application to manually fill forms that require complete information for reporting debtors and/or credits. The data must meet the same requirements as defined in use case CKO2-REP-1.

4.2.4 CKO2-REP-4 - Retrieve list of reporting status (A2A automated file download via web services)

The participant retrieves a list of processing status for the reports sent during the last 2 months. The list contains for each report, its identification number, the reporting channel (i.e. A2A) and the corresponding processing status (i.e. Processing / Done).

4.2.5 CKO2-REP-5 - View list of reporting status (U2A internet interactive application via browser)

The participant accesses the internet application to view the list of processing status for the reports sent during the last 2 months. The result is the same as in use case CKO2-REP-4, but presented in a visual way. This view regards reports sent via Internet manual file upload and via Internet interactive forms.

4.2.6 CKO2-REP-6 - Retrieve acknowledgment of receipt (A2A automated file download via web services)

The participant automatically retrieves feedback about its reports based on their identification number. Acknowledgements of receipt are only available for reports with status "Done" (cf. CKO2-REP-4).
They contain for each reported unit (cf. CKO2-REP-1) an indication on whether the unit has been accepted or rejected. If the unit is rejected, a free text describes the encountered error.

4.2.7 CKO2-REP-7 - Retrieve acknowledgment of receipt (U2A internet manual file download via browser)

The participant accesses the internet application to manually download an acknowledgement of receipt for a specific report identification number. The acknowledgement of receipt content is the same as defined in use case CKO2-REP-6.

4.2.8 CKO2-REP-8 - View acknowledgment of receipt (U2A internet interactive application via browser)

The participant accesses the internet application to consult an acknowledgement of receipt for a specific report identification number. The acknowledgement of receipt content is the same as defined in use case CKO2-REP-6, but presented in a visual way.

4.2.9 *CKO2-CONS-1 - Consult debtor credits (A2A automated file upload/download via web services)*

The debtor credits consultation consists in requesting the list of credits for one specific debtor at the end of 2 months (not necessarily in a row) in the last 12 months. These two months have to be specified in the request by the questioner. If not, the data at the end of the last 2 months are delivered.
Debtor credits consultations are processed synchronously by the system.

As mentioned earlier, a debtor can be a legal entity, a natural person or an association of debtors. It can be resident or non resident. Depending on the debtor type, the following information is required from the participant to identify the requested debtor:

Resident Legal Entity
- Enterprise number OR
- Name + Legal form + Postcode

Non-Resident Legal Entity
- Participant internal number OR
- Name + Country

Resident Natural Person
- Enterprise number OR
- National register number OR
- Participant internal number OR
- Surname + First name + Birth date

Non-Resident Natural Person
- Participant internal number OR
- Surname + First name + Birth date + Country

Association
- Participant internal number

The result of a consultation can be:
- an indication that the requested debtor exists but has no credit
- an indication that the debtor can not be identified
- a list of debtors (with their identification data) that match the given search criteria when several debtors have been found
- the identification data and a list of credits for the requested debtor and periods when only one debtor has been found

The list of credits for a debtor contains for each of the two months specified in the request or of the last 2 months if not specified:
- the total credit reported by all participants and those reported by the requesting participant itself
  - for the debtor and all associations it belongs to (when the debtor is a legal entity or a natural person)
  - for the association only and all other associations the requested association belongs to (when the debtor is an association)
  - broken down by type, mode, residual maturity, country (when available) and currency;
- for each reported month, the number of participants having reported data on the debtor;
- the completeness or not of the information (based on the total number who should, in principle, still declare data for the debtor concerned) for both months;
- the extra information (date and amount of the default) regarding the situation contained in the database like it was reported for the dates chosen by the consulting participant but taking the foreseen time limit of conservation into account (12 months)[1].

4.2.10 CKO2-CONS-2 - Consult debtor credits (U2A internet interactive application via browser)

The participant accesses the internet application to manually fill forms that require information about a debtor in order to consult its credits. The requested information and the result meet the same requirements as defined in use case CKO2-CONS-1.

Internet interactive forms are sufficient for Internet users and makes the consultation via U2A Internet manual file upload/download via browser not useful.

4.2.11 CKO2-OUT-1 - Subscribe to monthly feedback output (message to the CCCR)

The participant sends once a message via the secured portal to the CCCR with the needed information to subscribe to the monthly feedback output. The message is processed by the CCCR administrator. As a result, monthly feedback outputs will be available every month for download (cf. CKO2-OUT-2 and CKO2-OUT-3).

The monthly feedback output lists credits of the participant customers for the last 2 months. The list of credits for each debtor includes:
- the complete debtor identification information
- credits reported by all participants and the requesting participant and totalized as defined in use case CKO2-CONS-1.

4.2.12 CKO2-OUT-2 - Retrieve monthly feedback output (A2A automated file download via web services)

The participant's system is notified that a monthly feedback output is available for download and consequently, automatically downloads it.

---

[1] Therefore, a debtor's default can't be given back in a consultation more than 12 months after the end of the default.

4.2.13 CKO2-OUT-3 - Retrieve monthly feedback output (U2A internet manual file download via browser)

The participant is notified that a monthly feedback output is available for download and accesses the U2A internet application to manually download it.

4.2.14 CKO2-OUT-4 - Subscribe to repertoire output (message to the CCCR)

The participant sends a message via the secured portal to the CCCR with the needed information to subscribe to the repertoire output for a specific month in the last 11 months. The message is processed by the CCCR administrator. As a result, the requested output will be available for download (cf. CKO2-OUT-5 and CKO2-OUT-6).

The repertoire output lists credits granted by the participant to only its customers for the requested month. The list of credits for each debtor includes:
- the complete debtor identification information (also for debtors already reported in the past with an internal identification number but with no more credits)
- credits reported by the participant only

4.2.15 CKO2-OUT-5 - Retrieve repertoire output (A2A automated file download via web services)

The participant's system is notified that the requested repertoire output is available for download and consequently, automatically downloads it.

4.2.16 CKO2-OUT-6 - Retrieve repertoire output (U2A internet manual file download via browser)

The participant is notified that the requested repertoire output is available for download and accesses the internet application to manually download it.

4.2.17 CKO2-OUT-7 - Subscribe to sectoral and geographical statistics (message to the CCCR)

The participant sends a message via the secured portal to the CCCR with the needed information to subscribe to the sectoral and geographical statistics. The message is processed by the CCCR administrator. (cf CKO2-OUT-8).

4.2.18 CKO2-OUT-8 - Retrieve sectoral and geographical statistics (U2A internet manual file download via browser)

The participant is notified that new sectoral and geographical statistics are available. As a result, the participant can download reports he can create by selecting some criteria.
The data are extracted from the data warehouse of the CCCR and not from the production database.
The possible outputs can be various and will depend on the newly collected data the participants agree to disclose to the other participants.
For instance, the following possibilities exist on the basis of the current application CKO1. Most of them are already used by a few participants.

Authorized/used amounts: totals, percentages, averages

Last closed **month** and/or month(s) or quarter(s) to be chosen.
- for all the financial institutions and/or per type of participant and/or
- for only one participant and/or
- for all the participants, the inquiring participant excepted

Break down according to the following criteria - simple or grouped:
-*type of participant*
  * insurance company
  * financial institution
  * ...

- *geographical location of the debtor*
  - country
    * Country code (AT ... DE ..... BE...... US ....)
    * by country groups (Europe, BE, Others ...)
    * residents / non-residents
  - Zip code
    * region
    * province

- *country where credits were granted*

- *economic activity*
  * Nace code on 3, 4 or 5 positions
  * groupings of Nace codes (by section as defined in the nomenclature)

- *type of person:* natural person/legal entity

- *legal status:* normal situation - bankruptcy ...

- *legal form:* S.A./N.V., S.P.R.L/B.V.B.A.., S.C./C.V., ...

- *company size* (based upon the model of statutory account filed at the Central Balance Sheet Office)

- *credit mode*
  * mode
  * Cash / Commitment

- *currency*
  * currency code
  * EUR / Others

Other **criteria combination** are possible as far as the aggregation do not enable to identify a debtor.

Frequency: monthly / quarterly / upon request.

4.2.19 CKO2-OUT-9 - Retrieve results of monthly checks (U2A internet manual file download via browser)

Results of monthly checks are available for all participants.
The participant is notified that new results of monthly checks are available and can download the reports.

5 XML PROTOCOL OVERVIEW

5.1 High-level overview

A message can be related to:
- The reporting of debtors and/or credits
- The consultation of debtors credits
- The retrieval of outputs

A message can further be a request from the participant or a reply from the system.

5.2 Report debtor and credits

As the reporting of debtors and credits is processed asynchronously by the system, this function only consists in a report request without any feedback at this stage.

To be valid, a unit must contain:
- An action
- The debtor on which the action must be performed
- Possibly, the credits that must be added or modified

An action can be related to a debtor or a debtor and its credits. The following actions can be performed:
- Create debtor
- Modify debtor identification number
- Correct debtor identification data
- Stop debtor
- Delete debtor
- Add debtor credits
- Correct debtor credits

A debtor can be a legal entity a natural person or an association of debtors. It can be resident or non-resident.

The list of credits for a particular debtor is related to a period. Each individual credit amount is characterized by the following information:
- Type: authorized or used
- Mode
- Initial and residual maturity
- Country
- Currency

The other additional data must also be reported monthly with the credit although they are related to the debtor.

5.3 Retrieve list of reporting status

This function consists in requesting the list of processing status for the reports sent during the last 2 months.

To request the list of processing status, only the *Request/StatusList* element must be present. The corresponding reply under *Reply/StatusList* element lists the status of all reports identified by their message number. The status can hold values "Processing" and "Done".

5.4 Retrieve acknowledgment of receipt

This function allows to retrieve feedback about a processed report based on the report identifier.

To request an acknowledgment of receipt, only the ***Request/Result/MessageId*** element must be present. It must hold the identifier of the report.

The reply contains for each reported unit an indication on whether the unit has been accepted or rejected. If the unit is rejected, free text describes the encountered errors.

If an error occurred when processing the request because the request was incomplete or contained errors, the ***Reply/Errors*** element is returned with the list of encountered errors.

5.5 Consult debtor credits

The debtor credits consultation consists in requesting the list of all credits for a debtor at the end of 2 months (not necessarily in a row) in the last 11 months.

The debtor consultation request is held in a single ***Unit*** element. Several units with a unique identifier are used for multiple consultations requests.

A unit contains a debtor and 2 months under format yyyy-mm. A debtor can be a legal entity, a natural person or an association of debtors. It can be resident or non resident.

The debtor credits consultation reply is held in a single ***Unit*** element.
The result of a consultation can be:
- an indication that the requested debtor doesn't exist
- an indication that the requested debtor exists but has no credit
- a list of debtors that match the given search criteria, when several debtors have been found
- a list of credits associated to the debtor and all associations it belongs to for the requested periods, when only one debtor has been found

The list of credits for a debtor contains:
- the period for which the credits are listed
- the number of participants that have reported on the debtor
- the number of participants that should have reported on the debtor according to a comparison with the previous period
- the totalized credits reported by all participants

The data set contains also the additional data the participants agreed to disseminate in the answers.

If an error occurred when processing the request because the request was incomplete or because a unit contained errors, either the ***Errors*** element or the ***Unit/Errors*** element is returned with the list of encountered errors.

5.6 Retrieve monthly feedback output

The monthly feedback output lists credits of the participant customers for the last 2 months, totalized for all participants.

To retrieve a monthly feedback output only the ***Request/Feedback*** element must be present.

The reply under element ***Reply/Feedback*** is a list of units that each comprises:
- the complete identification information of a debtor
- the totalized credits reported for this debtor by the participant itself and by all participants

5.7 Retrieve repertoire output

The monthly feedback output lists credits of the participant customers as reported by the participant for a specific month in the last 12 months.

To retrieve a monthly feedback output only the ***Request/Repertoire/Period*** element must be present with the requested month.

The reply under element ***Reply/Repertoire*** is a list of units that each comprises:
- the complete identification information of a debtor (even if no more reported)
- the credits reported by the participant for this debtor.

6 DEFINITION OF TERMS AND ABBREVIATIONS

Abbreviation	Description
A2A	Application to application
U2A	User to application
CBFA	Banking, Finance and Insurance Commission
CCCR	Central Corporate Credit Register (= CCE)
CCE	Centrale des crédits aux entreprises (=CCCR)
CCP	Centrale des crédits aux particuliers (= CKP)
CCRNP	Central Credit Register for Natural Persons (= CCE/CKP)
CKO1	Central Corporate Credit Register current IT application
CKO2	Central Corporate Credit Register new IT application
CKP	Centrale voor kredieten aan particulieren (= CCP)
CPVP	Commission for the Protection of Privacy
Declarer	= participant = reporting institution
ECB	European Central Bank
HTTP	Hypertext Transfer Protocol: protocol for communicating on the Internet
HTTPS	Hypertext Transfer Protocol Secured using SSL
IT	Information technology
MoU	Memorandum of Understanding on the exchange of credit information among European credit registers
NACE	Nomenclature of the economic activities
NBB	National Bank of Belgium
NRNP	National Register for Natural Persons (= RNPP)
PD	Probability of default
SSL	Secured Sockets Layer: cryptographic protocol that provides secure communications on the Internet
VAGen	Visual Age Generator (software used in CKO1)
WGCR	Working Group on Credit Registers: working group of the European Central Bank that implements the MoU

BASEL 2: DEFINITION OF THE DEFAULT OF PAYMENT[1]

A default is considered to have occurred with regard to a particular obligor when
either or both of the two following events have taken place.

- The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realizing security (if held).
- The obligor is past due more than 90 days on any material credit obligation to the banking group. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings.

The elements to be taken as indications of unlikeliness to pay include:

- The bank puts the credit obligation on non-accrued status.
- The bank makes a charge-off or account-specific provision resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure.
- The bank sells the credit obligation at a material credit-related economic loss.
- The bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees.
- The bank has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the banking group.
- The obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the banking group.

For retail exposures, the definition of default can be applied at the level of a particular facility, rather than at the level of the obligor. As such, default by a borrower on one obligation does not require a bank to treat all other obligations to the banking group as defaulted."

---

[1] Cf. Basle Committee on Banking Supervision document - pages 100 and 101 - §452, 453, 455: "International Convergence of Capital Measurement and Capital Standards. A Revised Framework". Comprehensive Version - June 2006

FINANCIAL OFFER FEATURES

CONFIDENTIAL

RELATED TO THE DEVELOPMENT OF A NEW COMPUTER APPLICATION FOR THE CENTRAL CORPORATE CREDIT REGISTER (CKO2) AND THE RUNNING OF THIS CENTRAL REGISTER

1