DeNederlandscheBank

EUROSYSTEEM

Reference number

2017/191536

DGS Single Customer View Data Delivery Agreement for banks

Data Delivery Agreement
of *De Nederlandsche Bank*,
based on the Single Customer View
Policy Rule of July 2017

Owner: Resolution Division
Manager Resolution

DNB-public

Version 1.0.4

DNB-GLO-CODE:
DNB_STAT_DGSXSCVXX_GLO_K

SUMMARY OF VERSIONS AND STATUS

Version history

Version	Date	Comment	Author(s)
0.8	23 June 2017	First version of this document based on AnaCredit DDA	Ronald Damhof / Rudy Oosterling
(0.9*)	07 July 2017	Processed review results of Ingrid Jagt	Ronald Damhof / Rudy Oosterling
1.0	12 September 2017	Processed feedback of banks and changes to the LDM that impact this document. (See release notes for changes to the document)	Rudy Oosterling
1.0.1	09 October 2017	Processed feedback about inconsistent requirement for use of double quotation marks versus inverted commas in chapter 2.4.1. It should be double quotation marks.	Rudy Oosterling
1.0.1	09 October 2017	Corrected the lists with csv file column header definition, which lacked a closing double quotation mark in the last column. Chapter 2.4.2 up to and including 2.4.22	Rudy Oosterling
1.0.1	26 October 2017	Correction of gloCode and dataDeliveryCode for matching the technical specifications for the metadata xml and xsd files. Chapter: 1.3, 2.1, 2.3.5, 2.3.8 and 3.4	Rudy Oosterling / Roland Hommes
1.0.1	26 October 2017	Added footnote in chapter 2.4.1 that explains that for each currency it's required to report the value without thousand separator and decimal separator, so the requirements are applicable to all currencies. Not only for euro's.	Rudy Oosterling
1.0.1	1 November 2017	Review of linguistic usage.	Robert Geurts
1.0.2	22 February 2018	General correction of internal/external references to sections and/or documents.	Rudy Oosterling
1.0.2	22 February 2018	Added reference to Delivery of data to DNB using Logius Digipoort	Rudy Oosterling
1.0.2	22 February 2018	Corrected the example in section 2.6.6.2 on dealing with logical entities.	Rudy Oosterling
1.0.2	26 February 2018	Altered text of point 3 of section 1.12 and added a footnote.	Rudy Oosterling
1.0.2	27 February 2018	Updated Figure 3 in section 3.4 on page 31 to an English version	Rudy Oosterling
1.0.2	27 February 2018	The Data Delivery code has been made final. Section 1.3 page 7 and Section 2.3 page 13	Rudy Oosterling
1.0.2	27 February 2018	Removed the following bank obligation in section 1.7: keep an archive of DGS SCV data that has been exchanged for a period of 5 years	Rudy Oosterling
1.0.2	27 February 2018	Rewriting of section 4.1 about the reporting population and the source for its identifying codes.	Rudy Oosterling

1.0.2	28 February 2018	Synchronized all LDM specific changes. A list of these changes are provided in the Release notes of the LDM.	Rudy Oosterling
1.0.2	28 February 2018	Removed footnote on section Appendix B. Rules will only be published in the DDA and the LDM Report.	Rudy Oosterling
1.0.2	28 February 2018	Removed the authorization explanation in section 2.2 as it is decided that segregation is not required.	Rudy Oosterling
1.0.3	03 March 2018	Corrected quotation marks, that had been overwritten by MsWord into inverted commas for text field delimiter in section 2.4.1	Rudy Oosterling
1.0.3	23 July 2018	The entity party_role has to be delivered as part of the csv files. The entity has been added to the list in section 2.1, its file interface specification has been added in section 2.4.20 and its mapping to the logical data model has been added in section 3.3	Rudy Oosterling
1.0.3	23 July 2018	Section 2.6.6 and 2.6.6.x have been rewritten to give clearer insight into what is required and what is not. Now it should be clear that only entity type delivery is required with rowcounts for each logical entity in the model. Checksums are not required. Additionally an example of the entity type delivery csv file content is provided in Apendix C	Rudy Oosterling
1.0.3	23 July 2018	Appendix C is moved to appendix D. Appendix C now contains an example of the content for entity type delivery.	Rudy Oosterling
1.0.3	23 July 2018	Appendix A and Appendix B have been updated to reflect the changes to the validation rules. For changes to the rules, see the release notes of the LDM.	Rudy Oosterling
1.0.3	26 July 2018	General correction of wording for better reading through the whole document.	Rudy Oosterling
1.0.3	26 July 2018	The Logius issued message name as mentioned in section 1.3 and 2.3 has been changed to AnaCredit. Make sure to read the latest version of the Logius Digipoort documentation.	Rudy Oosterling
1.0.4	26 September 2018	Section 3.2.1 and Appendix A & B have been updated to reflect the changes to the validation rules. Changed the method of treating mandatory values and mandatory relationships in the LDM. In general: Primary Key values and Foreign key Values are always mandatory. Required attributes (formerly mandatory) are validated by a generic check-for-value rule Required child records (mandatory relationships) are validated by check-for-child-existence rules. (some of which are blocking and some of which are signalling) For more detail see the release notes of the LDM and the LDM itself. Note: Some blocking rules have been made signalling.	Rudy Oosterling

Contents

1 DATA DELIVERY AGREEMENT

1.1 Subject of the agreement

This agreement enables the delivery of the DGS Single Customer View files of banks (DGS SCV data exchange), i.e. the provision of data on depositors, their representatives and their bank accounts, to De Nederlandsche Bank (DNB) for the purpose of the Dutch Deposit Guarantee System (DGS). The provisions in this agreement are compliant with DGS-legislation and DNB policy rules (see section 1.2, reference documents).

This agreement sets out the arrangements concerning:

- the data to be delivered, and the delivery medium, format and frequency;
- the conditions and terms to be met by banks towards DNB, and
- changes to the agreement.

1.2 Reference documents

Document	URL
Richtlijn 2014/49/EU inzake Depositogarantiestelsels (DGSD)	http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1505414562062&uri=CELEX:32014L0049
Wet op het financieel toezicht (Wft)	http://wetten.overheid.nl/BWBR0020368/
Besluit bijzondere prudentiële maatregelen, beleggerscompensatie en depositogarantie Wft (Bbpm)	http://wetten.overheid.nl/BWBR0020414/
Besluit prudentiële regels Wft (Bpr)	http://wetten.overheid.nl/BWBR0020420/
Faillissementswet (Fw)	http://wetten.overheid.nl/BWBR0001860/
Beleidsregel Individueel Klantbeeld Wft 2017 (Single Customer View Policy Rule)	https://zoek.officielebekendmakingen.nl/stcrt-2017-41434.html
Beleidsregel Reikwijdte en Uitvoering Depositogarantiestelsel (Policy Rule on the Scope and Execution of the DGS)	https://zoek.officielebekendmakingen.nl/stcrt-2017-41453.html
Formal Logical Data Model	https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/specificatie-van-de-gegevenslevering/index.jsp
Handboek Gegevenslevering DGS versie 3.0 (DGS Data Deliver Manual 3.0)	https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/index.jsp
Delivery of data to DNB using Logius Digipoort	https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/specificatie-van-de-gegevenslevering/index.jsp

1.3   Data delivery, global overview

An overview of the design, run and control processes of the DGS SCV data exchange is depicted in Figure 1.

¹ Data Delivery Agreement
² Logisch Data Model
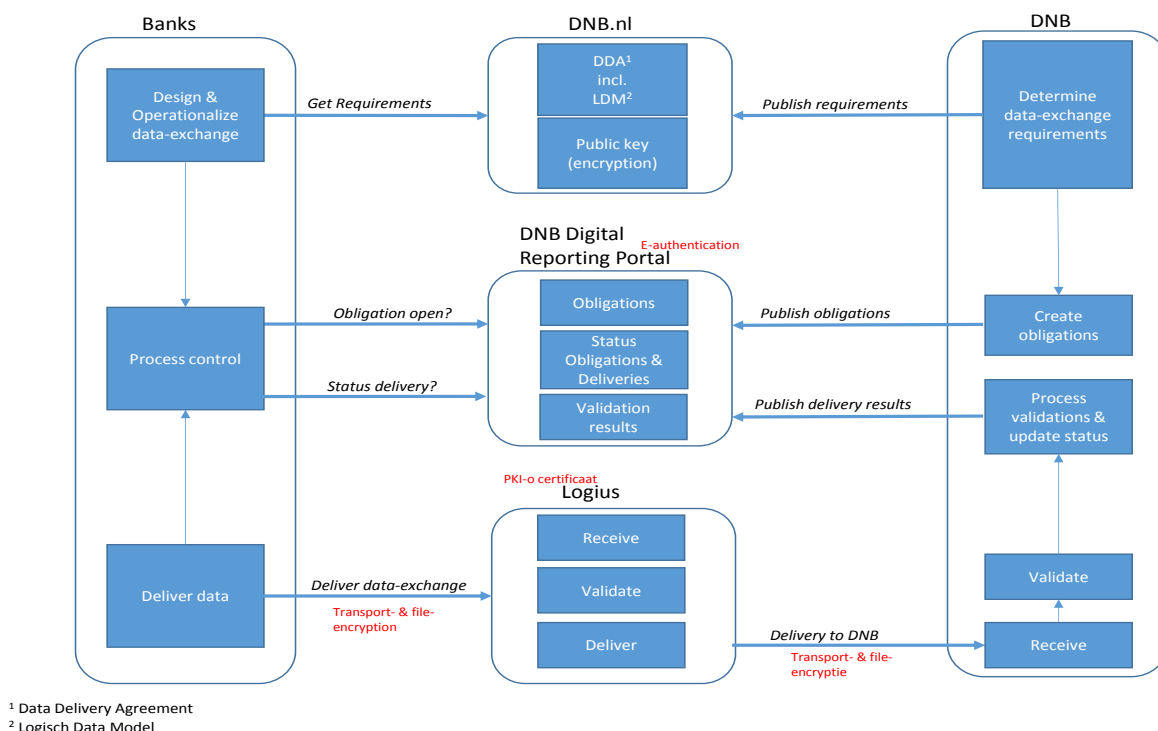
Figure 1: Design, Run and Control overview of DGS SCV data exchange

Global description of the process:

- DNB determines the DGS SCV data-exchange specifications (Data Delivery Agreement, Logical Data Model);
- DNB publishes these specifications, including the public encryptionkey on the website of DNB;
- Banks use this information to operationalize the DGS SCV data exchange;
- DNB publishes the DGS SCV data-exchange obligations in DNB's DLR;
- Banks have secure access to DNB's DLR where they can view the obligation;
- Banks deliver the DGS SCV data exchange files to Logius. Transport as well as files are encrypted;
- Logius receives the data, performs a number of technical checks and sends a delivery notification back to the bank. Subsequently Logius pushes the data exchange files to DNB. Logius will not be able to access the files by any means;
- DNB receives the data, performs a number of technical and logical validations, updates the status of the obligation and publishes the outcome of these validations to DNB's DLR;
- Designated (by the bank) employees will receive a notification;
- Banks can view these outcomes (and status) in DNB's DLR.

Globally, the total data delivery has the features described below. Chapter 2 discusses the delivery of each file in greater detail.

The table below indicates the parameters which are necessary to make the generic description of the Logius services specific for DGS SCV.

Variable	Value used
Logius issued message name	AnaCredit[1]
Reporter identifier	Bank identifier (= RIAD code)
Data Delivery Code	ZNDGSXASCVXXXGXX
GLO Code	DNB_STAT_DGSXSCVXX_GLO_K
Hashing method	SHA-256
Encryption	AES-256
Data file types	CSV, semicolon separated

Delivery timeline is specified in the delivery schedule (see 3.4).

1.4   Data delivery for data quality assessment

Banks are required to prove compliance with the guidelines for reliable and timely DGS SCV data delivery. The aim is to ensure data quality of the submitted SCV files as if they are prepared for an actual DGS payout situation. DNB is supervising the compliance of a bank in its capacity as Dutch DGS authority. The data being transferred for evaluation purposes are required to have a full 'production' status. Submitting SCV files with limited and/or fictitious data does not enable DNB to adequately assess the compliance of a bank with the data quality requirements in a real payout situation. The SCV files therefore have to be identical to the SCV files generated for an actual DGS payout situation. No data minimalisation, no data samples, no anonymization.

Banks will be requested to submit production data for simulating a bank failure and the activation of the DGS procedure. Banks are asked and expected to make a data delivery before the deadline, which can be as short as three working days. DNB will make the request, and communicate the deadline in formal writing.

1.5   Data delivery in case of DGS activation

In case banks fail and DGS is activated, banks are obliged to submit all required DGS data within three working days. DNB will publish the activation of DGS in formal writing.

1.6   Data quality strategy

In the context of data exchanges for DGS Single Customer View, there is always a trade-off between the requirement to submit data within three working days and the requirement to meet the standards concerning data quality. A high degree of availability often compromises checks, with all its consequences for the quality of the data and, consequently, their use and interpretation. Another factor to consider is cost, which is often incurred downstream to make the data fit the purpose.

In striking a balance between these two requirements, DNB has adopted the following approach:

- the validation rules used to determine the acceptance of the delivery (2.5) and with which parties down the chain can prove without doubt that they are able to meet the delivery obligation;
  [1] a number of checks that are technical in nature (Logius subscription, XML validity, PKI-o validity, existence recipient, valid MIME, etc..)
  [2] a reporting requirement in DNB's DLR of DNB (administrative check)
  [3] a file structure specification as described in the Data Delivery Agreement (Structure check)
  [4] a highly specified and formalised logical data model (3.2) which specifies explicitly all the blocking validation rules (constraints) within the data delivery set;

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[1] It is expected that this value will be generalized in the near future to 'DNB reporting', however for now the only option here is to use AnaCredit. Depositogarantiestelsel is no longer an option.

[5]   on top of that, a list of validation rules (appendix A) that are not explicitly modelled[2] but are checked and reported on:

- there is a category of validation rules that are labelled as 'signalling', meaning potentially blocking;[3]
- banks are informed as soon as possible with regard to the blocking validation results if a delivery cannot be accepted, subsequently the delivery is not accepted. When the bank meets the blocking validation rules, it has met its delivery obligation;
- banks are informed about the results of signalling rules – the delivery will be accepted; informing banks allows them to start improving their internal processing chain/data quality;
- having accepted a data delivery, DNB can also conduct checks that involve other data than the data delivered, these plausability rules are also labelled as 'signalling' and are stated in appendix B;
- signalling rules may require resubmission, i.e. an obligation to resubmit data.

Please note that process data of data deliveries which cannot be validated will be administered for management information purposes.

1.7   Bank's responsibilities/obligations

The bank undertakes the required actions to:

- enable access to DNB's DLR;
- have a working connection with Logius;
- deliver and, if necessary, redeliver data in accordance with the applicable specifications;
- arrange for the data to be protected from access by unauthorised individuals;
- notify DNB in advance and with no delay if it is unable to deliver the data by the specified deadline (paragraph 3.4)
- deliver data in accordance with the applicable delivery requirements (including delivery deadlines) until the validation rules are met;
- provide information in case plausibility analyses prompt DNB to request a clarification;
- comply with requests for resubmission.

DNB expects to receive data directly (via Logius) from the banks. Currently, it is not allowed to submit data through intermediaries.

1.8   DNB's responsibilities/obligations

DNB will adequately specify the requirements to enable banks to meet these.

DNB will notify banks of data delivery issues, including:

- blocking validation rules (see paragraph 2.5 for details):
  - *technical:* is the incoming data technically compliant with regards to Logius requirement (subscription, PKI-O, etc..) and DNB (decryption, unzipping, etc..?
  - *administrative*: is the incoming data delivery in line with the requirements set by DNB?
  - *structure*: do the deliveries comply with the required naming and structure?

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[2] Also rules that are somewhat implicit in the logical data model have been explicity repeated in Appendix A, e.g. specialisation model constraints

[3] This means that they initially have a warning status (and do not affect the acceptance of the delivery) and should therefore be addressed and improved.

       o   *logical*: do the data meet the validation rules of the logical data model and is the data delivery complete?
- If possible, automated feedback is given on signalling validation rules;
- feedback on plausibility checks[4] in case DNB requires additional information after evaluating the results of plausibility checks;

DNB will arrange for the prescribed data protection measures in accordance with the information classification level.

1.9 Privacy and retention period

The data being submitted both for evaluation of data quality and an actual DGS activation is considered to have a full 'production' status. It is emphasized that 'SCV-file testing' is not to be regarded as 'testperiod' or testdata. The SCV data exchange for data quality purposes can therefore not be any different as data exchange for an actual DGS payout. No data minimalisation, no anonymization.

- The moment data is received and Logius acknowledges reception of the data, the responsibility for the data shifts from banks to DNB;
- Data is handled in accordance with its information classification (paragraph 1.11);
- DGS SCV data sent from the banks to DNB is required to be encrypted at all times during transport by means of transport encryption and file encryption;
- Validation results by DNB are made accessible by means of DNB's DLR[5] and is considered secure;
- DGS SCV data files are secured and deleted according to the banks policy regarding privacy and retention period;
- By means of authorization in DNB's DLR it possible for banks to assign employees that can only access and view the DGS related requirements, deliveries and validation results.
- Excluded from the definition of data in this regard is the metadata of the information exchange. The retention period of this (meta)data is undetermined.

For SCV-file validation and supervision:

- The retention period of submitted data will be as long as it takes DNB to process and validate the submitted data, with a maximum of 3 months;
- the submitted data will be deleted physically from all mediums within DNB, which includes backups;
- the logical validation results contain only references to submitted data by means of technical keys, which are not considered to be of the same information classification, and will be archived for as long as required by DNB;
- the banks will be notified of the deletion by DNB;
- access to the submitted data is strictly limited to (screened) employees of DNB resolution and database administration;
- any access to the submitted data will be logged.

For an actual DGS payout:

- the retention period will be 20 years.

1.10 Compliance framework

The compliance framework is described in detail in the DGS policyrules of DNB.

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[4] The first priority is to provide feedback on blocking validation rules. DNB's ambition is to also provide feedback reports on signalling validation rules, with the objective of preparing the appropriate divisions within the banks for the moment when signalling rules become blocking.

[5] DNB's DLR is also used for regulatory reporting and statistical reporting.

1.11 Data ownership and information classification

Subject	Who/what
Owner within DNB:	Superivision Division, Resolution Department Manager

Criticality assessment performed (Y/N)	By	Result
Yes	Data owner DNB	DNB-CONFIDENTIAL

DNB classification	Explanatory notes
DNB-PUBLIC	Information classified as **DNB-PUBLIC** is accessible to all stakeholders within and outside of DNB.
DNB-UNRESTRICTED	Access to information classified as **DNB-UNRESTRICTED** must be limited exclusively to persons employed by or performing work at DNB.
DNB-RESTRICTED	Information classified as **DNB-RESTRICTED**, can be made accessible to persons who are involved in the matter or would benefit from a general awareness of it in accordance with the rules of DNB.
DNB-CONFIDENTIAL	For information classified as **DNB-CONFIDENTIAL**, access should be limited to persons who "need to know", i.e. those who require the information for the proper performance of professional duties. "Need to know" should be interpreted broadly enough to enable staff to (a) access information relevant to their tasks; and (b) take over tasks from colleagues with minimal delay in the event of absences. "Need to know" access should be authorised at the appropriate level within DNB.
DNB-SECRET	For information classified as **DNB-SECRET**, access should be strictly limited to persons who are directly involved in the matter and of who the "need-to-know" access is explicitly authorised, to the extent possible in a traceable way, at the appropriate level within DNB.

Subject	Required?	Explanatory notes
Encryption	Yes	Data transport is encrypted from the transporter to DNB. Data encryption is the transporter's responsibility and DNB will oversee it. Data transport encryption from the bank to the transporter is the bank's responsibility. Data exchange files are encrypted by the Bank, using a RSA-2048 public key, provided by DNB. Decryption keys are solely available by DNB (the transporter/Logius is not in possession of these keys).
Anonymization	Not allowed	Anonymization does not apply. DGS SCV data are related to actual depositors (natural and non-natural persons).

1.12 Data Integrity

The demands regarding the integrity of DGS SCV data are classified as **very high**, as such, the following measures are taken to ensure compliance:

- The DGS SCV data exchange is encrypted in transport end to end. Files are encrypted using a DNB public key (RSA-2048) where the private key is only in possession of the DNB resolution division;
- The payout file needs to consist of a predetermined number of files, DNB will validate the number of delivered files;
- The content of the data can be hashed and in such a case the hash needs to be calculated by the banks upon delivery, DNB will then validate these completeness-hashes to ensure the files are identical to the time of sending.[6]

1.13 Changes to the agreement

In the event of changes to the agreement, the procedure described in section 5.3 (Changes to the agreement) is followed.

1.14 Administrative processing

DNB publishes this document under reference 2017/191536.

List of documents applying to the data delivery agreement:

Document	Remarks
Single Customer View Policy Rule	Beleidsregel Individueel Klantbeeld Wft 2017 (Single Customer View Policy Rule)
Data delivery agreement	This document
DGS Data Deliver Manual	Handboek Gegevenslevering DGS versie 3.0 (DGS Data Deliver Manual 3.0)
Logical data model DNB STAT DGS SCV GLO Report for banks	Report of the Logical data model, containing all model details and data specifications.
Logical data model DNB STAT DGS SCV GLO	Powerdesigner file containing the LDM
Reference metadata sets	Lists of reference metadata sets for use in the data validation section of the data delivery (dependant on LDM version)
Reference data sets	Lists of reference data sets for use in classifying data in the data delivery
Release Notes	List of changes to the DDA, LDM and reference data sets
Delivery of data to DNB using Logius Digipoort[7]	Document describing technical details about submitting data to DNB using Logius Digipoort

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[6] Although the LDM contains the preparation to receive the completeness-hashes by means of the checksum properties of the 'entity type delivery', 'attribute delivery' and 'attribute combination delivery' entities, the delivery control type property is set to 'control not applicable'. This indicates that no hashes are required, nor will be checked.

[7] The Logius Digipoort documentation can receive improvements on a more regular basis than the DDA, so be sure to check for updated documentation.

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2   FILE DELIVERY SPECIFICATIONS

2.1   Deliveries and files for each data delivery agreement

This section describes the content of the DGS SCV data exchange, excluding Logius related files, which can be found in the "Delivery of data to DNB using Logius Digipoort". The file interfaces and files are specified below. The following tables list the files that must be reported under the DDA in question. Banks deliver data on the basis of *not more than* the applicable DDA.

GLO code[8]	Frequency	Source file
DNB_STAT_DGSXSCVXX_GLO_K	*Ad hoc*	A (win)zipped container where the name of the container can be determined by the bank but must adhere to the following pattern: [a-zA-Z0-9_-] (numbers, letters, underscore and hyphen)

All files must be submitted, even when there is no content, see below.

.csv files to be included in the delivery	container
dnbmetadata.xml	X
address.csv	X
attribute_combination_delivery.csv	X
attribute_delivery.csv	X
bank_account.csv	X
bank_account_blockage.csv	X
bank_account_ownership.csv	X
bank_scv_delivery.csv	X
depositor.csv	X
depositor_representation.csv	X
entity_type_delivery.csv	X
identification_by_document.csv	X
natural_person.csv	X
natural_person_identification.csv	X
natural_person_with_national_identifier.csv	X
natural_person_without_national_identifier.csv	X
non_natural_person.csv	X
non_natural_person_identification.csv	X
party.csv	X
party_role.csv	X
representative.csv	X
structured_address.csv	X
unstructured_address.csv	X

2.2   Access to DNB's DLR

All DGS agreements and requirements, the data deliveries, their statuses and the validation results are published in DNB's DLR. Banks are required to have access to this portal. Instructions are published on the DNB website[9].

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[8] The abbreviation GLO is the Dutch translation of the data delivery agreement and translates to "gegevensleveringsovereenkomst". To enhance comprehension on DNB side when providing support, the term GLO code is used in favour of its English translation.

[9] https://www.dnb.nl/statistiek/digitaal-loket-rapportages/algemeen/index.jsp

2.3   Delivery of data to DNB using Logius Digipoort

DNB expects that the reporting agent delivers its reports via the Logius portal. In order to do this, please use the values listed below.

Variable	Value(s) to be used	Options
Logius issued message name	AnaCredit	AnaCredit
Reporter identifier	NL…	Bank Identifier (= RIAD code)
Data Delivery Code	ZNDGSXASCVXXXGXX	
GLO code	DNB_STAT_DGSXSCVXX_GLO_K	
Hashing method	SHA-256	SHA-0, SHA-1, SHA-256, SHA-512
Encryption method	AES-256	AES, DES, Rijndael, RC2, 3DES
Data file types	CSV, semicolon separated	CSV, PDF, JSON, XML, XBRL, SDMX

Details on how to use the Logius portal, including the checks done by Logius and DNB, can be found in "Delivery of data to DNB using Logius Digipoort" published on the DGS SCV part of the DNB website[10].

2.4   <entity>.csv file interface

This section describes the metadata aspects of .csv files. Banks must deliver one file for each entity. In addition, an exhaustive list of attributes is provided that is to be delivered for each file. As a rule, one .csv file must be submitted for each entity type in the logical data model, where only entity types that contain extra information in addition to their primary key attribute or attributes are subject to delivery. "Extra information" means an attribute of its own or a foreign key to another entity type. All .csv files contain at least the columns of their entity.

2.4.1   <entity>.csv file description (metadata)

The table below describes the metadata aspects of each .csv file.

Metadata	
Description:	See logical data model. Each entity in the logical data model represents a file (.csv). As a rule, entities without characteristics – attributes or relationships – are not required.
File name:	The entity code in the logical data model is used as the file name. In this code, spaces are replaced by underscores (_)

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[10] https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/specificatie-van-de-gegevenslevering/index.jsp

Selection:	Each entity is delivered in its entirety, and must be a snapshot of the delivery date
File format:	CSV (semicolon delimited)
Character set:	UTF-8
Field separator:	; (semicolon, ASCII number: 59)
Heading:	Yes, this contains the names of the columns, taking into account the field separator and the text field delimiter
End of Line indicator:	CRLF

Text field delimiter:	" (double quotation mark, ASCII number: 34)
	Escape character: \ (backslash, ASCII number: 92)
	Example 1: The string with inverted commas: This is a "test" then becomes: "This is a "test""
	    (the word <u>test</u> is enclosed in inverted commas of ascii numbers: 147 and 148)
	Example 2: The string with double quotation marks: That was an "error" then becomes: "That was an \"error\""
	    (the word <u>error</u> is enclosed in double quotion marks of ascii numbers: 34)

Text field format:	Free text (unless otherwise specified)
Null values:	;;
Date field delimiter:	No delimiter
Date format:	ISO 8601 format, YYYY-MM-DD

Numeric format:	Numeric fields such as amounts, percentages or chances must not contain dots (.) or commas (,). All of these must be entered in whole numbers, i.e. NNNNNNNNNNNN (no leading or trailing zeros, no decimals, no maximum length).
	    • Amounts in euros[11] must be entered in whole euro cents (1000 euros = 100000 euro cents)
	    • Percentages and chances must be entered in millions (5% = 0.05 = 50000)
	Negative numbers are preceded by a minus sign (-) Positive numbers are not preceded by a plus sign (+)
	
	The rationale for this is to prevent interpretation issues due to differences in localization settings between sending, re-transmitting and receiving systems.

File integrity check	Some entities and combinations of attributes per entity require a checksum. See Section 2.6.5. Numeric fields must first be summarised and then hashed. It may be difficult to canonicalise strings; this issue is being investigated and will be specified in more detail in a later version of this document. The prescribed hash function is SHA-256

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11 For each currency it's required to report the value without thousand separator and decimal separator, so the requirements is applicable to all currencies.

2.4.1.1 Determining which entity types to deliver

The logical datamodel contains over fifty entity types. All these are relevant for reporting correctly. However, not all entity types have to be reported physically. Each relevant entity type directly maps 1-to-1 to a .csv definition in this chapter.

The underlying mechanism for selecting an entity type to deliver is:

1. Select all entity types that have, as part of their primary key, the attribute 'bank identifier'.
2. Of these entity types, select only those that have more attributes than only those that make up the primary key including those that have a different primary key than their parent entity (e.g. "party role").

This will select the entity types that have to be reported in step 1, and those entity types that will contain extra information in step 2.

The next sections each describe a single specific <entity>.csv file

2.4.2 address.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"structured_address_indicator";"country"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	structured_address_indicator	Variable characters (20)	20	structured address indicator
5	country	Characters (2)	2	iso 3166 country

2.4.3 attribute_combination_delivery.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"logical_data_model_code";"entity_type_code";"attribute_combination_type_code";"checksum"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	logical_data_model_code	Variable multibyte (255)	255	code
4	entity_type_code	Variable multibyte (255)	255	code
5	attribute_combination_type_code	Variable multibyte (255)	255	code
6	checksum	Variable multibyte (255)	255	medium sized string

2.4.4 attribute_delivery.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"logical_data_model_code";"entity_type_code";"attribute_code";"checksum"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	logical_data_model_code	Variable multibyte (255)	255	code
4	entity_type_code	Variable multibyte (255)	255	code
5	attribute_code	Variable multibyte (255)	255	code
6	checksum	Variable multibyte (255)	255	medium sized string

2.4.5 bank_account.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"bank_account_identifier";"type_of_bank_account";"type_of_third_party_account";"eligible_account";"bank_account_number";"ascription";"account_label";"currency";"balance";"interest";"blocked_account_indicator";"country_of_branch_of_account";"count_of_depositors"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	bank_account_identifier	Variable characters (34)	34	
4	type_of_bank_account	Variable multibyte (255)	255	code
5	type_of_third_party_account	Variable multibyte (255)	255	code
6	eligible_account	Variable multibyte (255)	255	code
7	bank_account_number	Variable characters (34)	34	
8	ascription	Variable multibyte (255)	255	
9	account_label	Variable multibyte (50)	50	
10	currency	Characters (3)	3	iso 4217 currency
11	balance	Decimal (16,0)	16	amount (positive and negative)
12	interest	Decimal (16,0)	16	amount (positive and negative)
13	blocked_account_indicator	Variable characters (24)	24	blocked account indicator
14	country_of_branch_of_account	Characters (2)	2	iso 3166 country
15	count_of_depositors	Integer		

2.4.6 bank_account_blockage.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"bank_account_identifier";"blockage_reason";"explanation"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	bank_account_identifier	Variable characters (34)	34	
4	blockage_reason	Variable multibyte (255)	255	code
5	explanation	Variable multibyte (511)	511	

2.4.7 bank_account_ownership.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"role_of_party";"bank_account_identifier";"participation_percentage"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	role_of_party	Variable characters (14)	14	role of party
5	bank_account_identifier	Variable characters (34)	34	
6	participation_percentage	Decimal (7,0)	7	real number from 0 to 1 with 6 decimals

2.4.8 bank_scv_delivery.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date

2.4.9 depositor.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"role_of_party";"eligible_depositor";"reliability_indicator";"depositor_bank_relation_number";"depositor_qualification"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	role_of_party	Variable characters (14)	14	role of party
5	eligible_depositor	Variable multibyte (255)	255	code
6	reliability_indicator	Variable multibyte (255)	255	code
7	depositor_bank_relation_number	Variable characters (34)	34	
8	depositor_qualification	Variable characters (21)	21	depositor qualification

2.4.10 depositor_representation.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"dep_party_identifier";"dep_role_of_party";"rep_party_identifier";"rep_role_of_party";"type_of_representation_competence"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	dep_party_identifier	Variable characters (34)	34	
4	dep_role_of_party	Variable characters (14)	14	role of party
5	rep_party_identifier	Variable characters (34)	34	
6	rep_role_of_party	Variable characters (14)	14	role of party
7	type_of_representation_competence	Variable multibyte (255)	255	code

2.4.11 entity_type_delivery.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"logical_data_model_code";"entity_type_code";"checksum";"rowcount"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	logical_data_model_code	Variable multibyte (255)	255	code
4	entity_type_code	Variable multibyte (255)	255	code
5	checksum	Variable multibyte (255)	255	medium sized string
6	rowcount	Integer		

2.4.12 identification_by_document.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"type_of_identification_document";"issuing_country";"document_number"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	type_of_identification_document	Variable multibyte (255)	255	code
5	issuing_country	Characters (2)	2	iso 3166 country
6	document_number	Variable characters (36)	36	

2.4.13 natural_person.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"nationality";"initials";"birthname";"affix_of_birthname";"lastname";"affix_of_lastname";"date_of_birth";"gender";"vital_status"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	nationality	Characters (2)	2	iso 3166 country
5	initials	Variable characters (10)	10	
6	birthname	Variable multibyte (70)	70	
7	affix_of_birthname	Variable multibyte (10)	10	
8	lastname	Variable multibyte (70)	70	
9	affix_of_lastname	Variable multibyte (10)	10	
10	date_of_birth	Variable characters (10)	10	date with exceptions
11	gender	Variable multibyte (255)	255	code
12	vital_status	Variable multibyte (255)	255	code

2.4.14 natural_person_identification.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"type_of_natural_person_identifier";"issuing_country";"identification_number"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	type_of_natural_person_identifier	Variable multibyte (255)	255	code
5	issuing_country	Characters (2)	2	iso 3166 country
6	identification_number	Variable characters (20)	20	

2.4.15 natural_person_with_national_identifier.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"birthplace";"country_of_birth"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	birthplace	Variable multibyte (100)	100	
5	country_of_birth	Characters (2)	2	iso 3166 country

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2.4.16 natural_person_without_national_identifier.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"birthplace";"country_of_birth"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	birthplace	Variable multibyte (100)	100	
5	country_of_birth	Characters (2)	2	iso 3166 country

2.4.17 non_natural_person.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"registered_name";"registered_place";"registered_country";"legal_capacity";"enterprise_size"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	registered_name	Variable multibyte (70)	70	
5	registered_place	Variable multibyte (100)	100	
6	registered_country	Characters (2)	2	iso 3166 country
7	legal_capacity	Variable multibyte (255)	255	code
8	enterprise_size	Variable multibyte (255)	255	code

2.4.18 non_natural_person_identification.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"type_of_non_natural_person_identifier";"issuing_country";"registration_number"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	type_of_non_natural_person_identifier	Variable multibyte (255)	255	code
5	issuing_country	Characters (2)	2	iso 3166 country
6	registration_number	Variable characters (64)	64	

2.4.19 party.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"type_of_party";"identifier_indicator";"telephone_number";"mobile_number";"e_mail_address"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	type_of_party	Variable characters (18)	18	type of party
5	identifier_indicator	Variable characters (24)	24	identifier_indicator
6	telephone_number	Variable characters (20)	20	
7	mobile_number	Variable characters (20)	20	
8	e_mail_address	Variable characters (254)	254	

2.4.20 party_role.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"role_of_party"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	role_of_party	Variable characters (14)	14	role of party

2.4.21 representative.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"role_of_party";"representative_bank_relation_number"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	role_of_party	Variable characters (14)	14	role of party
5	representative_bank_relation_number	Variable characters (34)	34	

2.4.22 structured_address.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"street";"house_number";"house_number_addition";"postal_code";"place";"additional_details"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	street	Variable multibyte (35)	35	
5	house_number	Variable characters (10)	10	
6	house_number_addition	Variable multibyte (10)	10	
7	postal_code	Variable characters (13)	13	
8	place	Variable multibyte (100)	100	
9	additional_details	Variable multibyte (35)	35	

2.4.23 unstructured_address.csv

#	Header	Data type	Details
1	"bank_identifier";"reporting_reference_date";"party_identifier";"address_line_1";"address_line_2";"address_line_3";"address_line_4";"address_line_5";"address_line_6"	Alpha-numeric	Semicolon-separated string of all column names. Field names are put in double quotation marks.

#	Column name (attribute)	Data type	Length	Details
1	bank_identifier	Variable characters (20)	20	
2	reporting_reference_date	Date		reporting reference date
3	party_identifier	Variable characters (34)	34	
4	address_line_1	Variable multibyte (100)	100	
5	address_line_2	Variable multibyte (100)	100	
6	address_line_3	Variable multibyte (100)	100	
7	address_line_4	Variable multibyte (100)	100	
8	address_line_5	Variable multibyte (100)	100	
9	address_line_6	Variable multibyte (100)	100	

2.5   Validation strategy

The validation strategy of delivery is closely related to the overall data quality strategy as described in paragraph 1.6.

To summarize the validation strategy of the delivery:

- Blocking violations will result in the status not-accepted of the delivery, the status of the reporting obligation remains open;
- Absence of blocking violations will results in the status accepted of the delivery and the status fulfilled of the reporting obligation;
- Signalling violations have no effect on the status of the delivery nor on the status of the reporting obligation[12].

There are three categories of validations that will lead to an evaluation of the delivery and reporting obligation in the event of violations, refer to paragraph 0. In the table below these categories, the severity and types of feedback are described.

Type	Description	Source	Action	Feedback
I. Logius checks	See Paragraph 1.3.1 in the respective source document	Delivery of data to DNB using Logius Digipoort	Blocking	Delivery notification Logius (XML, MIME)
II. DNB technical, structure and administrative checks	See Paragraph 1.4.9 in the respective source document	Delivery of data to DNB using Logius Digipoort	Blocking	Logius database (400, 410) and DNB's DLR
III (a) Logical - Domain	Do the attributes comply with the size, type and domain constraints?	logical data model + Appendix A and/or Appendix B	Blocking or Signalling[13]	DNB's DLR (XML)
III (b) Logical - Tuple	Do the value of attributes comply with constraints?	Appendix A	Blocking or Signalling	DNB's DLR (XML)
III (c) Logical – Entity	Do the entities comply with the uniqueness (or key) constraints?	logical data model	Blocking	DNB's DLR (XML)
III (d) Logical - Model	Generally speaking, model constraints need other entities to evaluate the rule. e.g. referential integrity requirements of the logical data model (model constraints), subtype constraints and specialisation model constraints[14])	logical data model + Appendix A	Blocking Or Signalling	DNB's DLR (XML)

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[12] As stated in paragraph 1.6, fulfillment of a reporting obligation (status = accepted) might still result in a request for resubmission.

[13] As an exception for DGS SCV domain constraints are signalling where identifier formats require validation (i.e. pass the check digit test). In other situations domain constraints will always be blocking validations.

[14] Although closely related to each other, there is a subtle difference between a subtype constraint and a specialisation model constraint. The first evaluates the correct referential value, the second evaluates the correct attributes per subtype.

2.5.1 Validation processing and feedback

Technical validations will be processed sequentially. When a violation is encountered, processing will stop and no futher validations will be performed.

Logical validations will be processed on the complete DGS SCV data-exchange.

Feedback on technical validations will be straightforward (e.g. XML header violation, no reporting obligation with status open available, etc.). Feedback on logical validations will be published in DNB's DLR as an XML file containing all violations. If however, these violations result in huge amounts of data of the same type of error, the violations will be summarized.

2.6 Submission process

The submission process is explained in the next paragraphs.

2.6.1 DGS reporting obligations, Digitaal Loket Rapportages (DLR)

DNB publishes all agreements and reporting obligations for banks in its DLR. Banks can only submit data if the relevant reporting obligation is published in DNB's DLR and the status is "open".

2.6.2 Logius Digipoort connection criteria

The DGS SCV data submission is to be effected through Logius' Digipoort platform, which provides a secure data delivery service between businesses and public bodies. The ultimate objective of Digipoort is to reduce the administrative burdens for businesses and public bodies using smart, digital solutions for operational processes.

2.6.3 DGS data delivery feedback

Following a DGS SCV data-exchange by the bank, there are a number of feedback moments.

1. Logius, the transporter's service provider, sends a notice of receipt (XML in MIME). This means the transporter has received the data delivery and the majority of validations done by Logius are ok or not ok (if there is a faulty XML header, Logius will have to contact the bank). The transporter (i.e. Logius) provides a track and trace functionality (messageID) to enable data tracking. Passing Logius validation will result in Logius pushing the DGS SCV data exchange to DNB.
2. DNB sends a delivery confirmation notification to Logius (XML in MIME) notifying the transporter that the data-exchange has been received and whether or not it passed DNB's technical validations. Logius will report this message as a status 400 (technical validation OK) or a status 410 (technical validation ERROR). All validation feedback (status and files) by DNB will also be made available and viewable in DNB's DLR.
3. The DGS SCV data-exchange from banks, through Logius, received by DNB and the technical validations by DNB can be tracked in the Logius track & trace database which is accessible via an API by using the messageID provided in the initial Logius delivery confirmation.
4. After the DNB technical validations have been executed, the logical validations will commence. Feedback on these validations is not communicated through Logius, but will be made available in DNB's DLR.
5. Notifications of validation results by DNB can be sent to the responsible person within the bank if he/she has been properly registered in DNB's DLR.

2.6.4   Process and statuses

It's important to distinguish between (1) the reception, validation, feedback and delivery of the DGS SCV data exchange by Logius and (2) the subsequent process of reception, validation and feedback of the DGS SCV data exchange by DNB.

Ad 1) reception, validation, feedback and delivery by Logius

- Bank sends DGS SCV data
- Logius validates and send delivery conformation, (XML, MIME) – including message ID
- Logius pushes DGS SCV data to DNB

Ad 2) reception, validation and feedback by DNB

When Logius sent DNB a delivery notification of the data exchange, communications relating to the status of a delivery can at all times be consulted in DNB's DLR. There are two types of statuses:

1. The status of the reporting obligation: "you must deliver the DGS SCV data for data delivery set <date>".
2. The status of the delivery: "you have submitted a delivery under a reporting obligation". This means that a single reporting obligation can have multiple deliveries in case of validation errors.

When a bank submits a DGS SCV data exchange to Logius, passed the Logius validations and passed the DNB technical validations, the status of the delivery in DNB's DLR is set to **Received**. The status of the reporting obligation remains **Open**. The bank cannot make a new submission under the same reporting obligation as long as the validation process is ongoing (status = **Received**)[15].

When the DGS SCV data exchange passed the DNB technical validations a delivery notification is sent back to Logius. Logius will process this notification into either a status 400 or a status 410. A status 410 in Logius (technical status=ERROR) will also result in the status **Not Accepted** of the delivery**.** DNB's DLR will show the reason for this error. The bank can now correct the error and resubmit under the same reporting obligation.

If the DNB technical validation passed successfully, the Logius database will show a status 400 and the status of the delivery will remain **Received**. Now the logical validations are being processed.

All the logical validations (blocking and signalling) will be executed. If there is a violation of a blocking rule, the status of the delivery will be set to **Not Accepted**. The status of the reporting obligation will remain to be **Open**. Banks can view the validation results in DNB's DLR, correct the error and resubmit the data.

If all the blocking validations are passed, the status of the delivery is set to **Accepted** and the status of the reporting obligation is set to **Completed**. The bank has successfully met the DGS obligation.

Violation of signalling rules will not result in a **Not Accepted** delivery[16]. They might result in a new obligation for a resubmission.

2.6.5   Other signalling rules[17] and plausibility rules

In addition to blocking validations and signalling validations of data within the data delivery set, which are checked and dealt with automatically when the delivery arrives (see 0), there can also be signalling rules that require data outside the data delivery set and plausibility rules that need a

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[15] Sending in a new DGS SCV dataexchange for the same obligation (reporting ID, reporting reference date, datadelivery code) while the status of the previous delivery is **Received**, will result in a validation error of the newly submitted data exchange.

[16] In time, these signalling rules are meant to be changed to 'blocking'.

[17] These are signalling rules that require data outside the scope of the data delivery set.

non-automated interpretation. These rules do not influence the reporting obligation or delivery status, they are separately reported and could lead to either enquiries with the bank or a new obligation to resubmit data.

A special type of signalling rule is the plausibility rule which is less automated; such a rule is often based on detailed analyses and combining data with alternative data sources, etc. Moreover, the outcomes cannot be established in advance. They may provide a plausible explanation, which may or may not have been put forward by the bank.

The outcomes of this type of rules are published in DNB's DLR.

When available, a list of the other signalling rules and plausibilitiy rules is given in the Appendices.

2.6.6 Validation of completeness

The metadata checksum file is part of the files to be submitted. For each entity type, the required type of checksum is listed. For now, no checksum is requested, only, a logical row count is requested for each entity type. This count indicates the number of instances of an entity type that is appropriate to this entity type in accordance with the logical data model.

Please note that this concerns the entities in the logical data model and not only those in the physical data deliveries: the logical data model also requires a row count and checksum for those entity types that do not have a corresponding .csv file to be delivered.

2.6.6.1 Example of a check on a physical delivery

E.g. the bank must deliver exactly 100,000 bank accounts. The bank_account.csv file contains 100,000 rows. The row count for the logical entity is 100,000. The entity type delivery lists a row count of 100,000 for the "bank account" entity type.

DNB checks that 100000 = 100000 and accepts the delivery.

2.6.6.2 Example of a check on a logical delivery

The entity types "non blocked bank account" and "blocked bank account" do not have their own specific features, and therefore do not require physical delivery. However, the logical checksum and/or rowcount of "non blocked bank account" and "blocked bank account" must be delivered.

For example, the bank must deliver exactly 100,000 bank accounts, 1,500 of which are blocked bank accounts and 98,500 are non blocked bank accounts (100,000-1,500).

Only one file must be reported:

1. bank_account.csv with 100,000 records

Altough, three records must be reported in the entity type delivery:

Entity type	Row count
Bank account	100,000
Blocked bank account	1,500
Non blocked bank account	98,500

DNB checks if bank_account.csv contains 100,000 rows and if 1,500 rows and 98,500 rows in bank_account.csv logically consist of respectively blocked bank accounts and non blocked bank accounts.

An example of the entity_type_delivery content can be found in Apendix C.

2.6.6.3 Check on primary key

The LDM has entity types that allow DNB to ask for checks on combinations of attributes. This mechanism is primarily meant to check the integrity of primary keys of the entity types in the logical data model.

Currently, no checks of these types are foreseen, since DNB will rely instead on the hashing of the csv files themselves, in combination of the checks on the referential integrity as specified in the logical data model. This entails that the file attribute_combination_delivery.csv must be reported as an empty file. Nevertheless, as for all .csv files, the header is mandatory.

2.6.6.4   Check on sums

The LDM has entity types that allow DNB to ask for checking totals, like the sum of all bank account balances.This is to be reported in the entity type attribute delivery.

Currently, no checks of these types are foreseen, since DNB anticipates that the hashing of the csv files themselves, in combination of the checks on the referential integrity as specified in the logical data model will give sufficient confidence in the integrity of the transmitted data. This entails that the file attribute_delivery.csv must be reported as an empty file. Nevertheless, as for all .csv files, the header is mandatory.

2.6.7   Resubmission

There are two types of resubmissions:

[1]   When a DGS SCV data-exchange is **Not Accepted** by DNB, the bank will resubmit the *complete* files[18] under the <u>same</u> reporting obligation.

[2]   When a DGS SCV data-exchange is **accepted** by DNB, the bank can only resubmit a subsequent data exchange under a <u>new</u> reporting obligation.

> *In some cases, even after extensive analysis by DNB, the submitted DGS SCV data-exchange may turn out to be incorrect[19] (see also Section 2.6.5). If the cause is a signalling or plausibility rule (appendix B), the bank in question is contacted to provide an explanation. If, based on this explanation, the data submitted is found to be incorrect, DNB can demand a resubmission. A new reporting obligation will then be created in DNB's DLR.*

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[18] Only complete files are accepted, only submitting corrected data is not permitted.

[19] Whereas data validations mainly concern the delivery, the scope of consistency and plausibility rules stretches beyond single deliveries. The **Completed** status means that the delivery complies with validation rules. Non-compliance with consistency or plausibility rules may lead to a resubmission being required.

3   DATA DELIVERY SPECIFICATIONS

After the data from the files have been processed in the file interface, they are validated against the normalised logical data model of the interface and then loaded into it. The interface is described below.

3.1   Process description

The DGS Policy describes which bank accounts and parties must be reported on, as well as the data that must be reported. The DGS Manual addresses this in more detail. See the Manual and the Regulation.

3.2   Logical data model
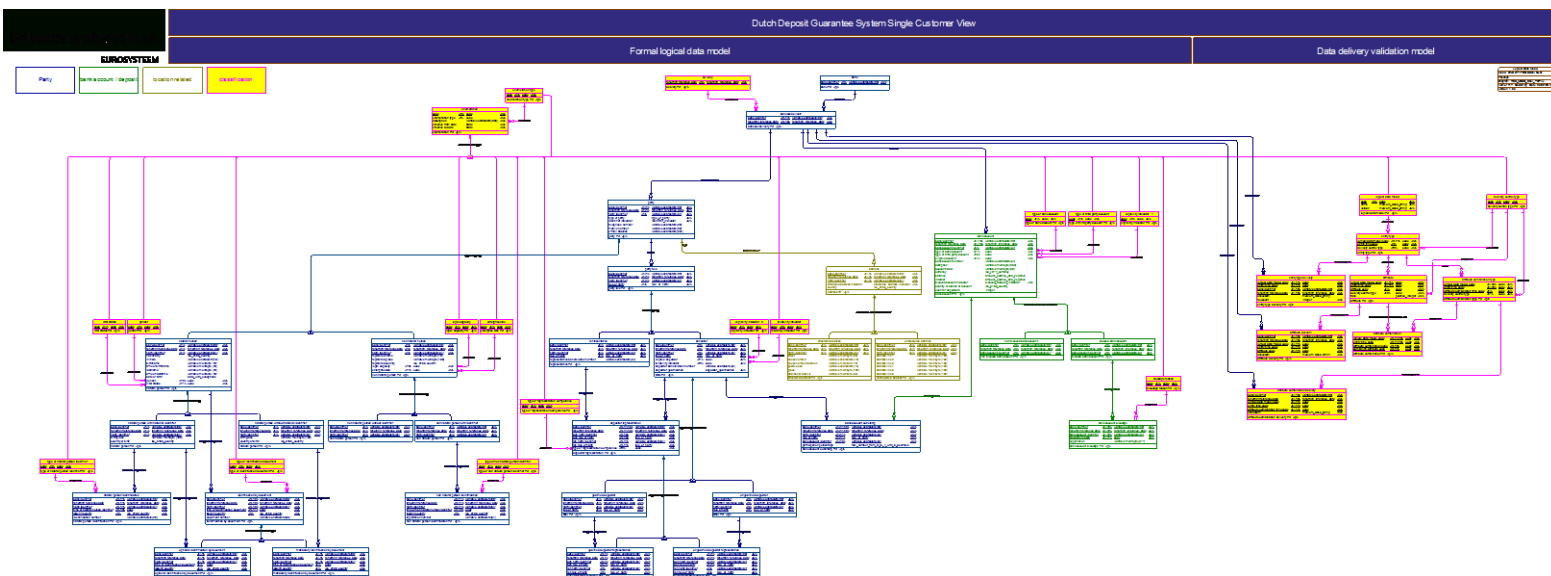
Figure 2 - Full Formal logical data model for DGS SCV

The logical data model describes all entity types, their structure and interrelations. The logical data model is published in full on the DNB website. In HTML format as well as in its native Powerdesigner format.

Although great care has gone towards creating the logical data model and supporting documents, no guarantee can be given with regards to the technical correctness of the contents (for example with respect to the pseudocode).

3.2.1   Optional attributes and relations

For all attributes and relations that are modelled as optional (i.o.w. not mandatory, or zero to 1, or zero to many) the following applies. In case the bank has this data available, it is required for delivery. The optionality only implies that the bank is not required to have this data.

For functional attributes that are required, the existence of a value is validated by a validation rule. (See Appendix B for signalling validation rules)

Also, for required child records (cardinalities 1-to-1 or 1-to-1..n), the existence of the child record is validated by validation rules.

(See Appendix A & B for both blocking and signalling validation rules)

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3.3 Mapping the delivery to the logical data model

This section describes the fields and tables that are shown for the attributes and entities in the file interface, i.e. which fields from which tables are visible for which entities and attributes.

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
address.csv	bank_identifier	address	bank identifier
address.csv	reporting_reference_date	address	reporting reference date
address.csv	party_identifier	address	party identifier
address.csv	structured_address_indicator	address	structured address indicator
address.csv	country	address	country

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
attribute_combination_delivery.csv	bank_identifier	attribute combination delivery	bank identifier
attribute_combination_delivery.csv	reporting_reference_date	attribute combination delivery	reporting reference date
attribute_combination_delivery.csv	logical_data_model_code	attribute combination delivery	logical data model code
attribute_combination_delivery.csv	entity_type_code	attribute combination delivery	entity type code
attribute_combination_delivery.csv	attribute_combination_type_code	attribute combination delivery	attribute combination type code
attribute_combination_delivery.csv	checksum	attribute combination delivery	checksum

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
attribute_delivery.csv	bank_identifier	attribute delivery	bank identifier
attribute_delivery.csv	reporting_reference_date	attribute delivery	reporting reference date
attribute_delivery.csv	logical_data_model_code	attribute delivery	logical data model code
attribute_delivery.csv	entity_type_code	attribute delivery	entity type code
attribute_delivery.csv	attribute_code	attribute delivery	attribute code
attribute_delivery.csv	checksum	attribute delivery	checksum

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
bank_account.csv	bank_identifier	bank account	bank identifier
bank_account.csv	reporting_reference_date	bank account	reporting reference date
bank_account.csv	bank_account_identifier	bank account	bank account identifier
bank_account.csv	type_of_bank_account	bank account	type of bank account
bank_account.csv	type_of_third_party_account	bank account	type of third party account
bank_account.csv	eligible_account	bank account	eligible account
bank_account.csv	bank_account_number	bank account	bank account number
bank_account.csv	ascription	bank account	ascription
bank_account.csv	account_label	bank account	account label
bank_account.csv	currency	bank account	currency
bank_account.csv	balance	bank account	balance
bank_account.csv	interest	bank account	interest
bank_account.csv	blocked_account_indicator	bank account	blocked account indicator
bank_account.csv	country_of_branch_of_account	bank account	country of branch of account
bank_account.csv	count_of_depositors	bank account	count of depositors

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
bank_account_blockage.csv	bank_identifier	bank account blockage	bank identifier
bank_account_blockage.csv	reporting_reference_date	bank account blockage	reporting reference date
bank_account_blockage.csv	bank_account_identifier	bank account blockage	bank account identifier
bank_account_blockage.csv	blockage_reason	bank account blockage	blockage reason
bank_account_blockage.csv	explanation	bank account blockage	explanation

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
bank_account_ownership.csv	bank_identifier	bank account ownership	bank identifier
bank_account_ownership.csv	reporting_reference_date	bank account ownership	reporting reference date
bank_account_ownership.csv	party_identifier	bank account ownership	party identifier
bank_account_ownership.csv	role_of_party	bank account ownership	role of party
bank_account_ownership.csv	bank_account_identifier	bank account ownership	bank account identifier
bank_account_ownership.csv	participation_percentage	bank account ownership	participation percentage

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
bank_scv_delivery.csv	bank_identifier	bank scv delivery	bank identifier
bank_scv_delivery.csv	reporting_reference_date	bank scv delivery	reporting reference date

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
depositor.csv	bank_identifier	depositor	bank identifier
depositor.csv	reporting_reference_date	depositor	reporting reference date
depositor.csv	party_identifier	depositor	party identifier
depositor.csv	role_of_party	depositor	role of party
depositor.csv	eligible_depositor	depositor	eligible depositor
depositor.csv	reliability_indicator	depositor	reliability indicator
depositor.csv	depositor_bank_relation_number	depositor	depositor bank relation number
depositor.csv	depositor_qualification	depositor	depositor qualification

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
depositor_representation.csv	bank_identifier	depositor representation	bank identifier
depositor_representation.csv	reporting_reference_date	depositor representation	reporting reference date
depositor_representation.csv	dep_party_identifier	depositor representation	dep party identifier
depositor_representation.csv	dep_role_of_party	depositor representation	dep role of party
depositor_representation.csv	rep_party_identifier	depositor representation	rep party identifier
depositor_representation.csv	rep_role_of_party	depositor representation	rep role of party
depositor_representation.csv	type_of_representation_competence	depositor representation	type of representation competence

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
entity_type_delivery.csv	bank_identifier	entity type delivery	bank identifier
entity_type_delivery.csv	reporting_reference_date	entity type delivery	reporting reference date
entity_type_delivery.csv	logical_data_model_code	entity type delivery	logical data model code
entity_type_delivery.csv	entity_type_code	entity type delivery	entity type code
entity_type_delivery.csv	checksum	entity type delivery	checksum
entity_type_delivery.csv	rowcount	entity type delivery	rowcount

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
identification_by_document.csv	bank_identifier	identification by document	bank identifier
identification_by_document.csv	reporting_reference_date	identification by document	reporting reference date
identification_by_document.csv	party_identifier	identification by document	party identifier
identification_by_document.csv	type_of_identification_document	identification by document	type of identification document
identification_by_document.csv	issuing_country	identification by document	issuing country
identification_by_document.csv	document_number	identification by document	document number

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
natural_person.csv	bank_identifier	natural person	bank identifier
natural_person.csv	reporting_reference_date	natural person	reporting reference date
natural_person.csv	party_identifier	natural person	party identifier
natural_person.csv	nationality	natural person	nationality
natural_person.csv	initials	natural person	initials
natural_person.csv	birthname	natural person	birthname
natural_person.csv	affix_of_birthname	natural person	affix of birthname
natural_person.csv	lastname	natural person	lastname
natural_person.csv	affix_of_lastname	natural person	affix of lastname
natural_person.csv	date_of_birth	natural person	date of birth
natural_person.csv	gender	natural person	gender
natural_person.csv	vital_status	natural person	vital status

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
natural_person_identification.csv	bank_identifier	natural person identification	bank identifier
natural_person_identification.csv	reporting_reference_date	natural person identification	reporting reference date
natural_person_identification.csv	party_identifier	natural person identification	party identifier
natural_person_identification.csv	type_of_natural_person_identifier	natural person identification	type of natural person identifier
natural_person_identification.csv	issuing_country	natural person identification	issuing country
natural_person_identification.csv	identification_number	natural person identification	identification number

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
natural_person_with_national_identifier.csv	bank_identifier	natural person with national identifier	bank identifier
natural_person_with_national_identifier.csv	reporting_reference_date	natural person with national identifier	reporting reference date
natural_person_with_national_identifier.csv	party_identifier	natural person with national identifier	party identifier
natural_person_with_national_identifier.csv	birthplace	natural person with national identifier	birthplace
natural_person_with_national_identifier.csv	country_of_birth	natural person with national identifier	country of birth

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
natural_person_without_national_identifier.csv	bank_identifier	natural person without national identifier	bank identifier
natural_person_without_national_identifier.csv	reporting_reference_date	natural person without national identifier	reporting reference date
natural_person_without_national_identifier.csv	party_identifier	natural person without national identifier	party identifier
natural_person_without_national_identifier.csv	birthplace	natural person without national identifier	birthplace
natural_person_without_national_identifier.csv	country_of_birth	natural person without national identifier	country of birth

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
non_natural_person.csv	bank_identifier	non natural person	bank identifier
non_natural_person.csv	reporting_reference_date	non natural person	reporting reference date
non_natural_person.csv	party_identifier	non natural person	party identifier
non_natural_person.csv	registered_name	non natural person	registered name
non_natural_person.csv	registered_place	non natural person	registered place
non_natural_person.csv	registered_country	non natural person	registered country
non_natural_person.csv	legal_capacity	non natural person	legal capacity
non_natural_person.csv	enterprise_size	non natural person	enterprise size

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
non_natural_person_identification.csv	bank_identifier	non natural person identification	bank identifier
non_natural_person_identification.csv	reporting_reference_date	non natural person identification	reporting reference date
non_natural_person_identification.csv	party_identifier	non natural person identification	party identifier
non_natural_person_identification.csv	type_of_non_natural_person_identifier	non natural person identification	type of non natural person identifier
non_natural_person_identification.csv	issuing_country	non natural person identification	issuing country
non_natural_person_identification.csv	registration_number	non natural person identification	registration number

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
party.csv	bank_identifier	party	bank identifier
party.csv	reporting_reference_date	party	reporting reference date
party.csv	party_identifier	party	party identifier
party.csv	type_of_party	party	type of party
party.csv	identifier_indicator	party	identifier indicator
party.csv	telephone_number	party	telephone number
party.csv	mobile_number	party	mobile number
party.csv	e_mail_address	party	e-mail address

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
party_role.csv	bank_identifier	party_role	bank identifier
party_role.csv	reporting_reference_date	party_role	reporting reference date
party_role.csv	party_identifier	party_role	party identifier
party_role.csv	role_of_party	party_role	role of party

| .csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
representative.csv	bank_identifier	representative	bank identifier
representative.csv	reporting_reference_date	representative	reporting reference date
representative.csv	party_identifier	representative	party identifier
representative.csv	role_of_party	representative	role of party
representative.csv	representative_bank_relation_number	representative	representative bank relation number

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
structured_address.csv	bank_identifier	structured address	bank identifier
structured_address.csv	reporting_reference_date	structured address	reporting reference date
structured_address.csv	party_identifier	structured address	party identifier
structured_address.csv	street	structured address	street
structured_address.csv	house_number	structured address	house number
structured_address.csv	house_number_addition	structured address	house number addition
structured_address.csv	postal_code	structured address	postal code
structured_address.csv	place	structured address	place
structured_address.csv	additional_details	structured address	additional details

.csv filename	.csv column name	Entity type in logical data model	Attribute in logical data model
unstructured_address.csv	bank_identifier	unstructured address	bank identifier
unstructured_address.csv	reporting_reference_date	unstructured address	reporting reference date
unstructured_address.csv	party_identifier	unstructured address	party identifier
unstructured_address.csv	address_line_1	unstructured address	address line 1
unstructured_address.csv	address_line_2	unstructured address	address line 2
unstructured_address.csv	address_line_3	unstructured address	address line 3
unstructured_address.csv	address_line_4	unstructured address	address line 4
unstructured_address.csv	address_line_5	unstructured address	address line 5
unstructured_address.csv	address_line_6	unstructured address	address line 6

3.4   Delivery timelines

The timelines are in stated in the DGS Data Delivery Manual:
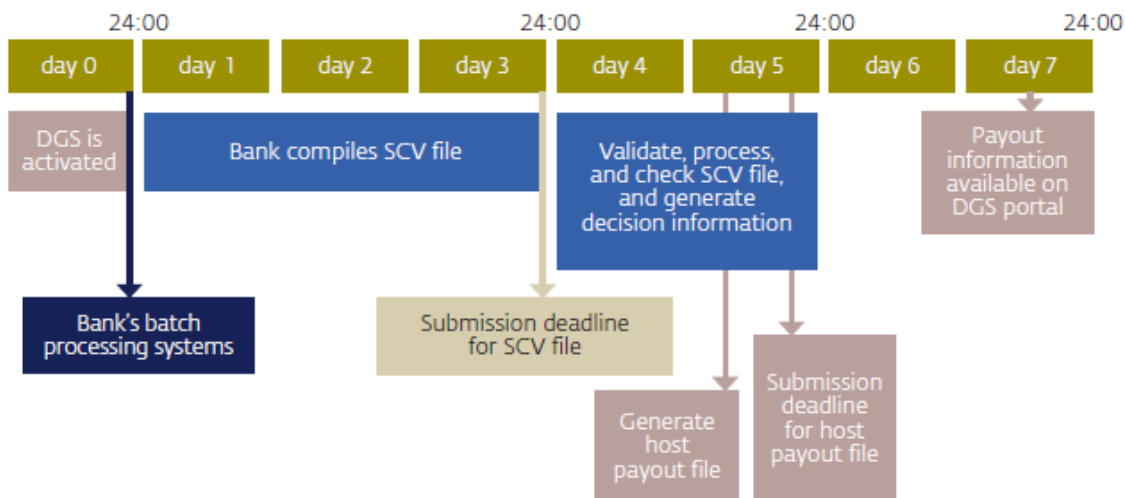
Figure 3: Timeline starting with activation DGS, ending with data on DNB's DLR

From this timeline follows that the last day of acceptance will be three days after DGS activation.

The following timelines apply for the DDA code:

DDA code	Frequency	Last day of acceptance	Example
DNB_STAT_DGSXSCVXX_GLO_K	Ad hoc	3 working days after obligation acknowledgement	DGS activation on 2019-03-08 last date of acceptance =2019-03-14 (including 2 weekend days)

When data exchange is done with the goal to improve data quality, timeliness will be an aspect that is monitored. Data quality will have a higher priority than timeliness.

3.5   Adjustments and deliveries with retroactive effect

Banks can only submit or resubmit SCV files if DNB has published a relevant delivery obligation. It is not possible for banks to submit or resubmit reports without a relevant delivery obligation. Delivery obligations are published in DNB's DLR.

DNB may demand a resubmission. It will publish a new delivery obligation for this purpose.

4   REFERENCE TABLES

Below is the list of reference tables that are available from DNB. The codes in these tables need to be used for classifying data in the data deliveries.

The reference tables exist in the logical data model, however, no mapping is available for the data between the file delivery and the model, as DNB is responsible for management and maintenance of the reference tables.

The reference tables can be found in the following files, which serve as a source for the initial entry of the entity types in the logical data model:

4.1   Reporting population

The reporting population are all banks with a banking license issued by DNB that issue banking products that fall under the DGS policy. More information can be found on:
https://www.dnb.nl/resolutie/depositogarantiestelsel/index.jsp

Banks should use their ECB RIAD-code for their identification within the data delivery. The RIAD-code, which for monetary financial institutions equals the MFI ID, can be found in the MFI database of the ECB on:
http://www.ecb.europa.eu/stats/financial_corporations/list_of_financial_institutions/html/index.en.html

4.2   Reference data sets based on the DGS Policy

You can find the versions of all reference data sets to be used on DNB's web page:

https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/specificatie-van-de-gegevenslevering/index.jsp

File: Reference data sets_<version date>_<version number>.xlsx

The spreadsheet contains the following reference data sets, corresponding to the yellow subtype entities of enumeration in the logical data model:

- blockage reason
- eligibility indicator
- enterprise size
- enumeration type
- gender
- legal capacity
- reliability indicator
- type of bank account
- type of identification document
- type of natural person identifier
- type of non natural person identifier
- type of representation competence
- type of third party account
- vital status

4.3   Metadata reference data sets

The metadata reference data sets containing the logical data model details are not included in the reference data sets listed in Section 4.2. Instead these are published in a separate document, as these lists are directly linked to the version of the LDM, while the reference data sets in section 4.2 are independent of the LDM version. Below is a more detailed description of the most important of these sets for reporting purposes. They are used to check the delivery. As described in Section 2.4.1, under "File integrity check", a checksum may be required for each entity type in

the logical data model. The reference data sets describe the reference data required for automatic validation of the file delivery. See Section 2.6.6 for more information on automatic validation.

You can find the versions of all reference data sets to be used on DNB's web page:

https://www.dnb.nl/resolutie/depositogarantiestelsel/individueel-klantbeeld/specificatie-van-de-gegevenslevering/index.jsp

File: Reference_metadata_sets_<version date>_<verson number>.xlsx

4.3.1   List of entity types

This list matches the "entity type" list in the reference data set in terms of naming, codes and definitions. It indicates for each entity type whether a checksum is required. As stated in Section 2.6.5, a row count is required for all entity types.

4.3.2   List of attributes

This lists the names of all attributes, including the type of checks required. In follow-up versions, the list will be extended with checks on various attributes, focusing on amount totals.

Note: For now, no requirement exists that defines the use of data validation checks on the level of attributes. This implies that an empty (headers only) csv file for the entity type "attribute delivery" needs to be delivered as part of the delivery container.

4.3.3   List of attribute combinations

This list contains all attribute combinations within an entity type that require a checksum. Examples could be all composite key attributes, or other attribute combination checks.

Note: For now, no requirement exists that defines the use of data validation checks on the level of attribute combination. This implies that an empty (headers only) csv file for the entity type "attribute combination delivery" needs to be delivered as part of the delivery container.

5 AGREEMENTS AND CONTACT PERSONS

This section describes all agreements made in detail, so that anyone having to process the data can do so based on the following information.

5.1 Filing and storage

DNB complies with the applicable legislation and regulations with respect to filing and storage, and the relevant retention periods.

5.2 Contact data

No.	Position	Name	email
1	Manager	Ms Diny Tielemans	dgs@dnb.nl
2	Domain expert	Mr Hans Kooy	dgs@dnb.nl
3	Information analyst	Mr Rudy Oosterling	dgs@dnb.nl
4	Data architect	Mr Ronald Damhof	dgs@dnb.nl

5.3 Changes to the agreement

Changes to the Logical Data Model, Data Delivery Agreement and the Reference codes are communicated to all banks. Subsequent versions (following version 1.0) will be accompanied by detailed release notes, stating the precise changes compared to a previous release.

Statistics Division

September 26, 2018
2017/191536

DeNederlandscheBank
EUROSYSTEEM

APPENDIX A – VALIDATION RULES THAT DETERMINE THE REPORTING OBLIGATION STATUS

A list of all blocking validation rules for DGS SCV data deliveries is included in this appendix. These validations are additional to the explicitly modelled blocking validation rules that are already included in the logical data model.

The violation of a blocking validation rule will result in a **non-accepted** status of the reporting obligation.

The result of the rules described in this paragraph as well as the blocking rules defined in the logical data model will automatically be communicated back to the bank (see 2.6.3 for the specification of the message).

These validation rules are taken directly from the business rules that are defined in the logical data model, where they are attached to the artefact that they act upon. Also, within the logical data model, there is a pseudo code expression giving hints on how to check the validity.

Code	Name	Comment	Business Rule Classification	Business Rule Scope	Severity
omc0009	bank scv delivery omc0009 all identification by bank relation number from one issuing country	In case the bank guarantees, which is subject to confirmation by the external auditor, that it has a fully de-duplicated administration of accountholders/depositors it can use the 'BANK_RELATIE_NUMMER' type of (non) natural person identifier. The required 'issuing country' attribute may only be one valid country code for all depositors (e.g. only 'NL'). In this situation 'issuing country' isn't really an issuing country for the bank relation number, however as this is a mandatory field it's required to be provided. Next to this the uniqueness of the bank relation number can only be validated if the, so called "issuing country" of the bank relation number is one and the same value for each depositor. Once the bank decides to use this identifier it must use it for each depositor, which is validated by omc0010. Uniqueness of the bank relation number is validated by omc0001.	other model constraint	Checked within the data delivery	blocking

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Code	Name	Comment	Business Rule Classification	Business Rule Scope	Severity
omc0010	depositor omc0010 (non) natural person identification by bank relation number	In case the bank guarantees, which is subject to confirmation by the external auditor, that it has a fully de-duplicated administration of accountholders/depositors it can use the 'BANK_RELATIE_NUMMER' type of (non) natural person identifier. Once the bank decides to use this identifier it must use it for each depositor. The required 'issuing country' attribute may only be one valid country code for all depositors (e.g. only 'NL'), which validated by omc0009 Uniqueness of the bank relation number is validated by omc0001.	other model constraint	Checked within the data delivery	blocking
omc0031	delivery omc0031 reporting reference date must match dnbmetadata.xml	The reporting reference date must match the date given as the reporting reference date in the dnbmetadata.xml that is part of the data delivery set.	other model constraint	Checked within the data delivery	blocking
omc0999	entity type delivery omc0999 rowcounts of entity type delivery must match the actual rowcounts of the entities	The entity type delivery rowcounts must match the actual rowcounts of the entities supplied in the files. rowcounts are required for every logical entity in the logical datamodel. The full list of logical entities is provided in the reference metadata sets file that is published on DNB's website.	other model constraint	Checked within the data delivery	blocking
smc0000	missing bank scv delivery for logical data model	This validation is to ensure the bank scv delivery data has been submitted. As this is the content that defines the delivery, its validation has been assigned to the logical data model entity	sub set model constraint	Checked within the data delivery	blocking
smc0002	missing entity type delivery for bank scv delivery	This validation checks whether entity type delivery has been submitted for the scv delivery	sub set model constraint	Checked within the data delivery	blocking
smc0003	missing entity type delivery for entity type	This validation checks whether entity type delivery is submitted for each entity type	sub set model constraint	Checked within the data delivery	blocking
smc0004	missing party for bank scv delivery	This validation checks whether party is submitted for the bank scv delivery	sub set model constraint	Checked within the data delivery	blocking
smc0005	missing bank account for bank scv delivery	This validation checks whether bank account is submitted for the bank scv delivery	sub set model constraint	Checked within the data delivery	blocking
smc0007	missing bank account ownership for depositor	This validation checks whether bank account ownership is submitted for each depositor	sub set model constraint	Checked within the data delivery	blocking
smc0008	missing bank account ownership for bank account	This validation checks whether bank account ownership is submitted for each bank account	sub set model constraint	Checked within the data delivery	blocking
spc0001	party spc0001 type of party	type of party must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0002	address spc0002 structured address indicator	structured address indicator must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking

Code	Name	Comment	Business Rule Classification	Business Rule Scope	Severity
spc0003	party role spc0003 role of party	role of party must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0004	depositor spc0004 depositor qualification	depositor qualification must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0005	natural person spc0005 identifier indicator np	identifier indicator must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0006	non natural person spc0006 identifier indicator nnp	identifier indicator must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0007	bank account spc0007 blocked account indicator	blocked account indicator must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0008	identification by document spc0008 identifier indicator np2	identifier indicator must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking
spc0009	depositor representation spc0009 depositor qualification2	depositor qualification must correspond to the subtype that is used.	specialisation model constraint	Checked within the data delivery	blocking

APPENDIX B –SIGNALLING AND PLAUSIBILITY RULES THAT MIGHT LEAD TO A NEW OBLIGATION TO RESUBMIT

The rules listed in this appendix will not influence the status of the reporting obligation. It can however lead to a new reporting obligation to resubmit the data for a given period.

Two types of signalling rules are identified:

[1]   Signalling rules that have a binary outcome (True/False);
[2]   Plausibility rules that need human interpretation. These rules should assess the plausibility of the DGS SCV data delivered. In general, these rules can consist of outlier detection based on predefined thresholds and can also consist of consistency checks against other datasets. More information on these types of rules will follow as soon as possible.

These signalling and plausibility rules are derived directly from the business rules that are defined in the logical data model, where they are attached to the artefact that they act upon. Also, within the logical data model, there is a pseudo code expression giving hints on how to check the validity.

Code	Name	Description	Business Rule Classification	Business Rule Scope	Severity
dmc0000	<attribute> dmc0000 mandatory value missing	This generic validation checks whether a value is submitted and results in a violation when an attribute value is null or empty. The validation rule can be applied on each attribute in the LDM Note: due to the fact that this rule is applied to multiple attributes per entity, the return rule code will be concatinated with the attribute code and 2 underscores, with the following logic: <attribute_code>+"__"+<rule_code> e.g.: "account_label__dmc0000"	domain constraint	Checked within the data delivery	signalling
dmc0001	registration number dmc0001 format must comply with the type of non natural person identifier	The format of the registration number must comply with the type of non natural person identification. When the type of non natural person identifier = RSIN then the registration number must have 9 numeric characters and the registration number must pass the check digit test. When the type of non natural person identifier = KVK then the registration number must have 8 numeric characters	domain constraint	Checked within the data delivery	signalling
dmc0002	identification number dmc0002 format must comply with the type of natural person identifier	The format of the identification number must comply with the type of natural person identifier. When the type of natural person identifier = BSN then the identification number must have 8 or 9 numeric characters and the identification number must pass the check digit test.	domain constraint	Checked within the data delivery	signalling
dmc0003	date with exceptions dmc0003 format must match the iso8601 or the exceptions	The date with exceptions format must match the iso8601 standard or the exceptions. Note: due to the fact that this rule could be applied to multiple attributes, the return rule code will be concatinated with the attribute code and 2 underscores, with the following logic:	domain constraint	Checked within the data delivery	signalling

Code	Name	Description	Business Rule Classification	Business Rule Scope	Severity
		`<attribute_code>+"__"+<rule_code>` e.g.: "date_of_birth__dmc0003"			
dmc0004	country dmc0004 country code must be in the iso 3166 country list	validation rule corresponding to the domain iso 3166 country, that ensures that only valid country codes are used. Note: due to the fact that this rule is applied to multiple attributes, the return rule code will be concatinated with the attribute code and 2 underscores, with the following logic: `<attribute_code>+"__"+<rule_code>` e.g.: "country__dmc0004"	domain constraint	Checked within the data delivery	signalling
dmc0005	currency dmc0005 currency code must be in the iso 4217 currency list	validation rule corresponding to the domain iso 3166 country, that ensures that only valid country codes are used. Note: due to the fact that this rule could be applied to multiple attributes, the return rule code will be concatinated with the attribute code and 2 underscores, with the following logic: `<attribute_code>+"__"+<rule_code>` e.g.: "currency__dmc0005"	domain constraint	Checked within the data delivery	signalling
dmc0006	participation percentage dmc0006 value must be higher than 0 and less than 100 percent	Percentages must be provided without a decimal delimiter, nor a thousand separator, thus, when provided, the participation percentage must be a value higher than 0 and less than 1000000. Note: due to the fact that this rule could be applied to multiple attributes, the return rule code will be concatinated with the attribute code and 2 underscores, with the following logic: `<attribute_code>+"__"+<rule_code>` e.g.: "participation_percentage__dmc0006"	domain constraint	Checked within the data delivery	signalling
etc0001	count of depositors etc0001 must equal the count of bank account ownership	The bank account count of depositors value must equal the count of bank account ownership	entity type constraint	Checked within the data delivery	signalling
etc0002	participation percentage etc0002 is mandatory when one of the bank account ownership participation percentage	When, for a single bank account ownership a participation percentage is provided, a participation percentage is required for each bank account ownership for that bank account.	entity type constraint	Checked within the data delivery	signalling
etc0003	participation percentage etc0003 must sum up to 100	The total of participation percentage for each bank account that has participation percentage filled in in bank account ownership must total 100.	entity type constraint	Checked within the data delivery	signalling
etc0004	bank account etc0004 eligibility must be consistent for each type of bank account and account label combination	The eligibility indicator must be set in a consistent way for each combination of type of bank account and account label.	entity type constraint	Checked within the data delivery	signalling
omc0001	depositor omc0001 reliable depositor validation	The reliable depositor validation checks whether the reliable 'golden triangle' combinations are valid. When the depositor is a natural person and the reliability indicator is set to reliable (BETROUWBAAR): > it is required to have: - a birthname, and - a valid date of birth in the format yyyy-mm-dd (validated by tmc0003 and	other model constraint	Checked within the data delivery	signalling

Code	Name	Description	Business Rule Classification	Business Rule Scope	Severity

		dmc0003)
		And
		  - one or more valid (dmc0002) natural person identifiction numbers (including a valid (tmc0002) issuing country), and
		  - each natural person identifiction number that is provided (i.c.w. its issuing country) must be unique within the depositor population.
		
		When the depositor is a non-natural person and the reliability indicator is set to reliable (BETROUWBAAR):
		
		> it is required to have:
		  - a registered name, and
		  - a registered place, and
		  - a registered country.
		
		And
		  - one or more valid (dmc0001) non-natural person registration numbers (including a valid (tmc0001) issuing country), and
		  - each non-natural person registration number that is provided (i.c.w. its issuing country) must be unique within the depositor population.			

omc0002	non natural person identification omc0002 at least one issuing country must match registered country	At least one issuing country must match the non natural person registered country.	other model constraint	Checked within the data delivery	signalling
omc0005	depositor omc0005 unqualified depositors	Unqualified depositors are those who require representation. Validation will occur on: non natural persons who are depositors minors who are depositors	other model constraint	Checked within the data delivery	signalling
omc0006	depositor representation omc0006 representation count according to type of representation competence	Representation count must be according to the type of representation competence If value = 'GEZAMENLIJK_BEVOEGD' (Jointly competent) then count of representatives for the depositor representation must be 2 or higher; If value = 'VOLLEDIG_BEVOEGD' (Fully competent) then count of representatives for the depositor representation must be 1 or higher	other model constraint	Checked within the data delivery	signalling
omc0007	type of natural person identifier omc0007 BSN mandatory for natural persons with address country NL	A BSN is required for dutch citizens. Although valid reasons may exist that people that reside in The Netherlands do not have a BSN. When 'address'.'country' = 'NL' One of natural person identification.type of natural person identifier = 'BSN'	other model constraint	Checked within the data delivery	signalling
omc0008	depositor representation omc0008 self representation is not allowed	For a single customer view it's not allowed that a representative is the same party as the depositor to which it is linked. This will be validated by matching each identifying property of the depositor party against all identifying properties of the representation party.	other model constraint	Checked within the data delivery	signalling
omc0011	depositor omc0011 natural person is	A depositor who is a natural person is always eligible for DGS, hence no or	other model constraint	Checked within the	signalling

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Code	Name	Description	Business Rule Classification	Business Rule Scope	Severity
	always eligible for DGS	doubtful eligibility may only be applied to non natural persons.		data delivery	
omc0012	representative omc0012 representative who is a natural person must be of legal age	All representatives that are natural persons, must be of legal age	other model constraint	Checked within the data delivery	signalling
smc0001	non natural person without identifier smc0001 zero occurances	Each non natural person must have at least one of the types of non natural person identifier, therefore:

There may not be any non natural person without identifier | sub set model constraint | Checked within the data delivery | signalling |
smc0006	missing address for party	This validation checks whether address is submitted for each party	sub set model constraint	Checked within the data delivery	signalling
smc0009	missing depositor representation for representative	This validation checks whether depositor representation has been submitted for each representative	sub set model constraint	Checked within the data delivery	signalling
smc0010	missing bank account blockage for blocked bank account	This validation checks whether bank account blockage has been submitted for each blocked bank account	sub set model constraint	Checked within the data delivery	signalling
smc0011	missing unqualified depositor representation for unqualified depositor	This validation checks whether unqualified depositor representation has been submitted for each unqualified depositor	sub set model constraint	Checked within the data delivery	signalling
smc0012	missing non natural person identification for non natural person with identifier	This validation checks whether non natural person identification has been submitted for each non natural person with identifier	sub set model constraint	Checked within the data delivery	signalling
smc0013	missing mandatory identification by document for natural person without national identifier	This validation checks whether mandatory identification by document has been submitted for each natural person without national identifier	sub set model constraint	Checked within the data delivery	signalling
smc0014	missing natural person identification for natural person with national identifier	This validation checks whether natural person identification has been submitted for each non natural person with national identifier	sub set model constraint	Checked within the data delivery	signalling
smc0015	missing party role for party	This validation checks whether party role is submitted for each party	sub set model constraint	Checked within the data delivery	signalling
tmc0001	non natural person identification tmc0001 issuing country must correspond to the type of non natural person identifier	The issuing country must correspond to the type of non natural person identifier

When RSIN or KVK is provided the issuing country must be 'NL'

When BUITENLANDS_TIN or BUITENLANDS_KVK is provided the issuing country may not be 'NL' | tuple constraint | Checked within the data delivery | signalling |
| tmc0002 | natural person identification tmc0002 issuing country must correspond to the type of natural person identifier | The issuing country must correspond to the type of natural person identifier

When BSN is provided the issuing country must be 'NL'

When BUITENLANDS_TIN or BUITENLANDS_NATIONAAL_ID is provided the issuing country may not be 'NL' | tuple constraint | Checked within the data delivery | signalling |
| tmc0003 | date of birth tmc0003 between 1900-01-01 and the reporting reference date | The date of birth must be prior than the reporting reference date and later than or equal to 1900-01-01 in order to be a valid date of birth. | tuple constraint | Checked within the data delivery | signalling |
| tmc0004 | party tmc0004 mandatory telephone number or mobile number | For each party either a telephone number or a mobile number must be submitted | tuple constraint | Checked within the data delivery | signalling |

APPENDIX C – EXAMPLE ENTITY TYPE DELIVERY

The entity type delivery file must contain a rowcount for each logical entity in the model, so including entities that are not required to be delivered as csv file, all enumeration lists and data delivery validation model entities. The table below is an example of the content of an entity type delivery csv file.

bank identifier	reporting reference date	logical data model code	entity type code	check-sum	row-count
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	address		120
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	attribute		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	attribute_combination		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	attribute_combination_delivery		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	attribute_combination_type		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	attribute_delivery		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	bank		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	bank_account		116
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	bank_account_blockage		13
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	bank_account_ownership		122
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	bank_scv_delivery		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	blockage_reason		6
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	blocked_bank_account		13
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	delivery		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	delivery_control_type		4
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	depositor		88
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	depositor_representation		33
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	eligibility_indicator		3
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	enterprise_size		3
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	entity_type		55
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	entity_type_delivery		55
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	enumeration		66
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	enumeration_type		16
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	gender		2
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	identification_by_document		43
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	legal_capacity		2
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	logical_data_model		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	mandatory_identification_by_document		0
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	natural_person		85
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	natural_person_identification		111
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	natural_person_with_national_identifier		84
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	natural_person_without_national_identifier		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	non_blocked_bank_account		103
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	non_natural_person		35
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	non_natural_person_identification		60
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	non_natural_person_with_identifier		34
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	non_natural_person_without_identifier		1
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	optional_identification_by_document		43
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	party		120
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	party_role		121
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	qualified_depositor		57
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	qualified_depositor_representation		7
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	reliability_indicator		2
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	representative		33
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	structured_address		102
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_bank_account		7
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_identification_document		4
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_natural_person_identifier		4

bank identifier	reporting reference date	logical data model code	entity type code	check-sum	row-count
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_non_natural_person_identifier		5
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_representation_competence		2
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	type_of_third_party_account		3
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	unqualified_depositor		31
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	unqualified_depositor_representation		26
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	unstructured_address		18
NL1234	2019-05-01	DNB_STAT_DGSXSCVXX_GLO_K	vital_status		2

bank identifier	reporting reference date	logical data model code	entity type code	check-sum	row-count

APPENDIX D – NAMING CONVENTIONS AND ABBREVIATIONS

#	Title	Description
1	Case	file names, XML tags, entity types and attributes are give in lower case, unless explicitly indicated otherwise.
2	Underscore (_)	Spaces, asterisks "*", brackets "(" and ")" and slashes "/" and "\" in file names, XML tags, entities and attributes must always be replaced by an underscore, "_".
3	DGS SCV	Capitals
4	..	..

#	Abbreviation	Meaning
1	CSV	Comma Separated Values
2	DDA	Data delivery agreement
3	DNB	De Nederlandsche Bank
4	ECB	European Central Bank
5	GLO	[Dutch]Gegevens Leverings Overeenkomst – synonym DDA
6	LDM	Logical data model
7	XML	Extensible Markup Language
8	SCV	Single Customer View
9	DGS	Depositogarantiestelsel
10	omc	Other model constraint
11	tmc	Tuple constraint
12	dmc	Domain constraint
13	etc	Entity type constraint
14	spc	Specialisation model constraint
15	smc	Sub set model constraint
16	DLR	Digitaal Loket Rapportages