

In case of discrepancies between the French and the English text,
the French text shall prevail

Reporting instructions for the «AnaCredit» report

Version 2.3.6

Banque centrale du Luxembourg

Summary of versions

Version	Date	Comments
1.0	26 April 2017	Initial version
2.0	20 July 2017	Updated reporting dates
2.1	26 October 2017	Description of the test phases
2.1.1	10 November 2017	Minor changes
2.3	11 January 2018	Added data collection operation Added data quality management
2.3.1	2 nd February 2018	Updated test phases
2.3.2	26 March 2018	Minor changes
2.3.3	9 April 2018	Minor changes
2.3.4	4 May 2018	Changes related to the starting date of the second test phase
2.3.5	9 August 2018	Resident counterparts without national identifier International organisations Submission types
2.3.6	17 December 2018	Action « Delete » Use of Deltas

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1 Introduction

1.1 Legal basis and reporting perimeter

The legal basis for the AnaCredit report is Regulation (EU) 2016/867 of the European central bank of 18 May 2016 on the collection of granular credit data and credit risk data (ECB/2016/13) (henceforth «the Regulation»). Moreover, the Regulation is transposed in Luxembourg by circular 2017/240 «Introduction of the collection of granular credit data and credit risk data».

The Regulation defines reporting agents' reporting requirements, while the purpose of the reporting instructions below consists solely in providing clarifications on those points in the Regulation which are discretionary. In case of potential divergences or contradictions, only the Regulation is binding.

The Regulation foresees a multi-stage implementation of the AnaCredit project, although only the first stage is addressed in more detail, while the subsequent stages will be re-assessed later. With regard to the reporting perimeter, the first stage only covers credit extended by credit institutions to legal entities.

1.2 Reporting population and reporting requirements

In line with Article 3 of the Regulation, the reporting population in Luxembourg covers all credit institutions and foreign branches resident in Luxembourg (henceforth «reporting agents»), independently of their legal status. However, Article 6 states that in order to avoid double reporting, the competent national central banks (NCBs) can coordinate data collection if both the legal entity and its foreign branch are resident in a reporting Member State. The coordination between competent NCBs consists in granting derogations to the respective branches, if applicable, in order to make sure that only one competent NCB collects the data in question.

Against this background, reporting agents which are legal entities (as per Article 1.5 of the Regulation) will transmit to the Banque centrale du Luxembourg (BCL) the entire data set as laid

out in Annex I of the Regulation. If these reporting agents have foreign branches (as per Article 1.4 of the Regulation) resident in another reporting Member State, they will also transmit to the BCL the entire data set laid out in Annex 1 for these foreign branches, with the exception of those branches that have been granted a derogation. Such a derogation is granted if, and only if, the NCB of another reporting Member State already collects the entire data. If applicable, the concerned reporting agents shall be contacted individually by the BCL.

As for foreign branches located in Luxembourg, these branches shall also transmit the entire data set as laid out in Annex 1 of the Regulation. As with foreign branches resident in another reporting Member State, a derogation shall be granted to foreign branches located in Luxembourg if, and only if, another NCB already collects the entire data. If that is the case, the concerned reporting agents shall be contacted individually by the BCL. It should be noted that the concept of the “single branch” (as per Article 1.4 of the Regulation) is applicable.

The BCL has published on its website a comprehensive list of all reporting Member States.

1.3 Reporting frequency and deadlines

The AnaCredit report consists of several data sets as defined in Annex I of the Regulation.

The first stage begins on September 1, 2018. As stated in Article 2.1 of the Regulation, the first transmission of credit data shall start with data for September 30, 2018.

However, Article 2.2 of the Regulation requires NCBs to collect a first set of counterparty reference data six months prior to the beginning of the first stage.

The BCL establishes and publishes, on its website, a calendar with remittance dates for the AnaCredit report ([Reporting dates 2018](#)). Sections 1.3.1 to 1.3.3 below provide complementary information. It should be noted that all reporting deadlines are provisional and may be subject to revisions.

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1.3.1 Transmission to be carried out prior to the beginning of the first stage

A first transmission of data pertaining to March 31, 2018 shall be carried out by the 15th working day of April 2018. Data set 1 must be transmitted by April 23, 2018.

However, it should be noted that according to Tables 2 and 3 from Annex III, several data attributes may not be required under specific circumstances (see also Section 1.4 below). Column 4 in particular regards instruments originated prior to September 1, 2018.

1.3.2 Monthly transmission to be carried out in the framework of the first stage

Data sets 1, 2, 3, 4, 5, 7, 8, 9 and 10 from Annex I of the Regulation shall be transmitted to the BCL on a monthly basis, at the latest on the 15th working day after the end of the reference period to which they pertain. Thus, the first transmission of monthly data sets shall take place on October 19, 2018.

There is therefore no monthly transmission scheduled between April 23, 2018 and October 19, 2018. However, reporting agents wishing to send new data related to data set 1 during this period may contact the BCL for further instructions. These intermediate transmissions are voluntary.

In this context, it should be emphasised that according to Table 1 from Annex II several data attributes may not be required under specific circumstances (see also Section 1.4 below).

1.3.3 Quarterly transmission to be carried out in the framework of the first stage

Data set 6 from Annex I of the Regulation shall be transmitted to the BCL on a quarterly basis at the latest on the 30th working day after the end of the reference period to which it pertains. Thus, the first transmission of the quarterly data set shall take place on November 12, 2018.

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In this context, it should be emphasised that according to Table 1 from Annex II several data attributes may not be required under specific circumstances (see also Section 1.4 below).

1.4 Specific reporting requirements

1.4.1 Provisions relating to Annex II and III of the Regulation

According to Table 1 from Annex II, as well as Tables 2 and 3 from Annex III, case-specific reporting requirements apply under particular circumstances which do not call for the transmission of the entire data set.

The three above-mentioned tables distinguish between two classifications:

- 1 X – the information is not required, and
- 2 N – subject to individual arrangements, the relevant NCBs may decide not to collect this information from individual reporting agents.

In the absence of any classification, the information must be reported.

In addition, the BCL has decided not to require reporting agents to collect information classified "N" on a mandatory basis. With the exception of some data points classified as «N» which are required in order to enable the identification of counterparties. Thus, in line with circular 2017/240, the following data attributes have to be reported even if they are classified as «N» in columns 1 to 11 of Tables 2 and 3 from Annex III in the Regulation:

- Legal Entity Identifier (LEI)
- National identifier

Reporting agents can transmit information classified as "N", on a voluntary basis, to the BCL. However, it should be noted that once the information classified "N" has been transmitted to the BCL, it is the responsibility of the reporting agents to provide it for each period and with the same quality of the information specifically required by the AnaCredit Regulation. Indeed, this information will be subject to the same qualitative requirements as the mandatory data.

Furthermore, in the context of the provisions in chapter 12.1.2.1 of the AnaCredit Manual – Part II, it should be noted that the BCL has decided to use its right to collect entire reference data on non-debtor MFIs.

1.4.2 Special cases

With regard to the reporting of the "Currency" attribute, the breakdowns are based on the ISO 4217 currency codes. For the particular case of the CNH currency code, it should be noted that the instruments denominated in CNH are to be reported with the CNY currency code and to be converted into Euro at the applicable EUR / CNY rate.

In addition, to convert currencies into Euro, please refer to the ECB's website. In the event that a currency does not appear on the latter, please use the exchange rates provided by Bloomberg.

2 The data to be reported

The data that must be reported, as well as the conditions that must be met with regard to the instruments to be reported, are defined in the Regulation, in particular in Articles 4, 5 and 6.

Moreover, Annexes I, II, III and IV of the Regulation provide comprehensive explanations regarding the data attributes that have to be reported.

The BCL decided not to extend the reporting perimeter beyond the requirements set out in the Regulation.

Additional information and guidance regarding the data to be reported are available on the website of the European central bank by clicking on the following link:

<https://www.ecb.europa.eu/stats/money/aggregates/anacredit/html/index.en.html>

The section entitled «AnaCredit Manual» in particular addresses many conceptual and methodological issues.

2.1 The counterparty identifiers to be used

In line with Article 9 of the Regulation, all counterparties have to be identified by means of their Legal Entity Identifier (LEI) whenever the latter is available.

Furthermore, a national identifier must be reported for each counterparty, even if a LEI has been provided.

The list of national identifiers is available on the ECB's website ([List of national identifiers](#)). For counterparties resident in Luxembourg, the identification number from the Trade and Companies Register («the RCS number») must be used for the data attribute “National identifier” defined in the Regulation. This identifier should be reported as it appears in the Trade and Companies Register and should not have its structure modified.

Each observed agent under the competency of the BCL should be identified with the national identifier listed in the [list of reporting agents](#).

As regards the particular case of public administrations and other public entities for which no RCS number exists, they should be identified by their international VAT number. This also applies to the BCL (VAT number: 15444328).

Regarding investment funds, SIF and SICAR, we draw the attention of reporting agents to the fact that credit granted to these entities must be declared at the level of the sub-funds, unless these entities have a traditional structure.

With regard to the identification of investment funds and their sub-funds, they must be declared using their number assigned by the Commission de surveillance du secteur financier (the «CSSF matricule»).

- Number assigned by the CSSF to UCIs, SIFs, SICARs and sub-funds: the identification number of UCIs, FIS and SICAR is defined by 6 characters and the identification number of the sub-funds is defined by 5 characters.

For example:

- A traditional investment fund without any sub-fund is identified by the ECB by the «CSSF matricule» consisting of: OxxxxxxC00000.
- A sub-fund of an investment fund is identified as: OxxxxxxCxxxxx.

It should be noted that these identification numbers serve as a basis for the establishment of the RIAD code, which is available on the ECB's website ([Official list ECB](#)). However, for the purposes of AnaCredit reporting, the LU prefix is not to be reported.

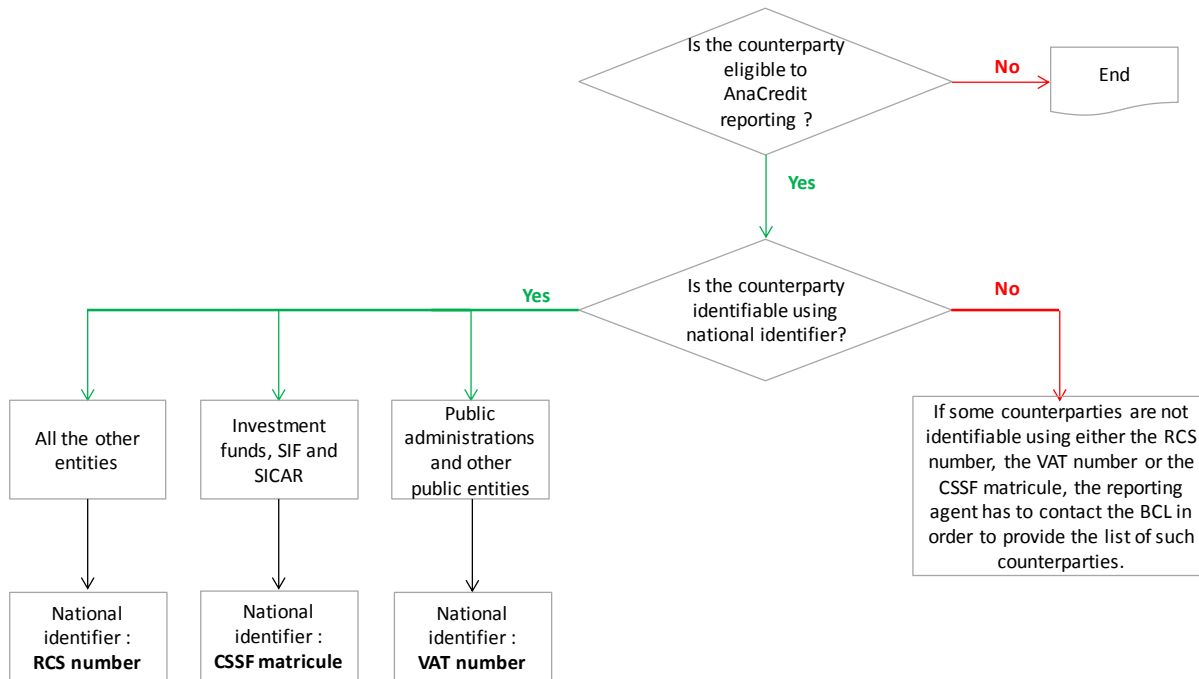
Moreover, for all counterparties, whether resident or not, reporting agents must report the data attribute «Counterparty identifier»¹, which is a unique internal identifier attributed by each reporting agent. It should be noted that this data attribute may, under specific circumstances, overlap with one or several of the following identifiers:

- Reporting agent identifier
- Observed agent identifier
- Head office undertaking identifier
- Immediate parent undertaking identifier
- Ultimate parent undertaking identifier
- Protection provider identifier

Some resident counterparties are not identifiable² with the regular national identifiers including RCS number, VAT code and CSSF code for investment funds, SIF and SICAR. In such cases, a list of those non-identifiable counterparties has to be sent to the BCL in order to assign them a RIAD code. The reference data reporting for resident counterparties is described hereafter:

¹ See, for instance, data set «1. Counterparty reference data», Template 1, Annex I of the Regulation

² This situation is extraordinary. A resident counterparty should be identifiable with the requested national identifier.



2.2 Special values (Non applicable – Not required)

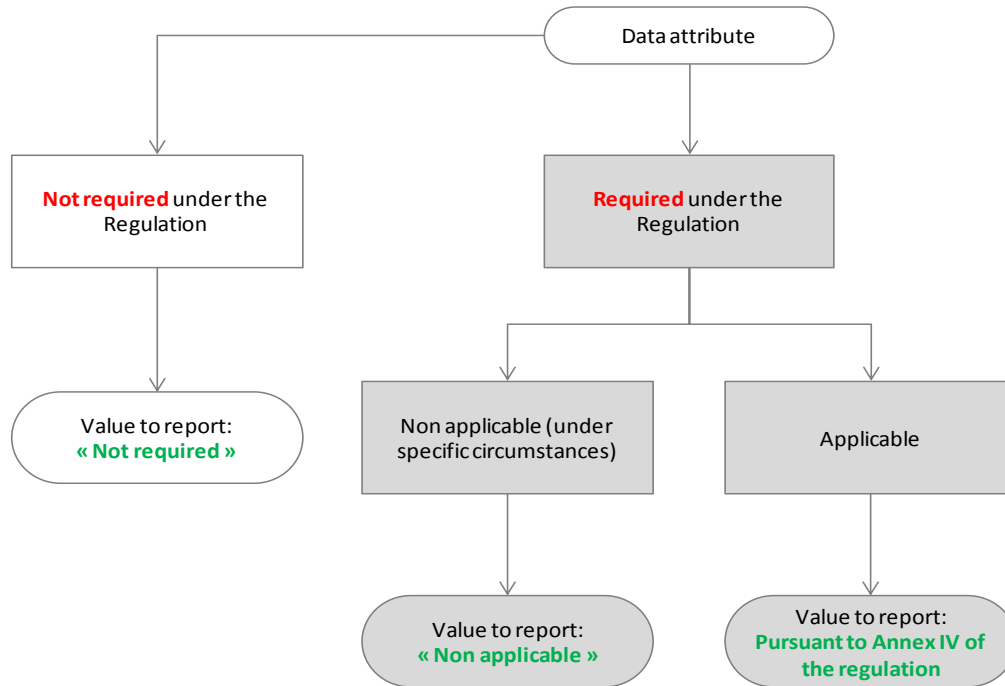
In addition to values as defined in Annex IV of the Regulation, the attributes can also take the following values:

- « Non applicable »
- « Not required »

Specifically, if a data attribute is not required by the Regulation (tables 2 and 3 of Annex III) or by the BCL validation rules (completeness part), then the data attribute has to be reported as « Not required ». However, if no value can actually be provided for an attribute which is considered as required by the Regulation, the value « Non applicable » is accepted.

As an example, the attribute postal code is required by the Regulation. However, for some addresses the postal code doesn't exist. Therefore, the value « Non applicable » can be used for the attribute postal code.

Moreover, the BCL has limited the use of « Non applicable » values. Please refer to the validation rules, sheet « Non applicable ». The following chart explains the use of special values:



2.3 International organisations

In accordance with the regulation, the BCL does not require all reference attributes for international organisations. Indeed, the reporting agent has to provide the unique code (RIAD code) published by the ECB ([List of international organisations](#)). This code has to be sent using the attribute « ENTTY_RIAD_CD ». In addition, the following data are also requested:

- Name
- City
- Country
- Lei (if available)

3 Data collection operation

3.1 Transmission channels

The data must be transmitted to the BCL via the usual secure transmission channels, namely:

- the data transmission platform «e-file»
- the application «SOFIE»

3.2 Transmission principles

3.2.1 Transmission standards

The statistical information exchange standard used for AnaCredit is the SDMX³ (Statistical Data and Metadata eXchange) format. This standard describes and formalizes the statistical data exchange and provides standard data formats, content guidelines and IT architecture for the data exchange. For AnaCredit, the SDMX-ML exchange format (using XML syntax) is required.

A dedicated technical document («Technical specifications AnaCredit») is available on the BCL's website. The purpose of this document is to describe the formats to be used for AnaCredit.

In addition, the SDMX schemes are published on the BCL's website ([Technical specifications AnaCredit](#)).

3.2.2 Submission of SDMX-ML files

One SDMX-ML file must be reported for each:

- Reporting agent (hereafter «RA»)
- Observed agent (hereafter «OA») – for data sets 2 to 10 (credit data)
- Survey (section 3.2.4)

³ Statistical Data and Metadata eXchange (SDMX) is an initiative sponsored by seven institutions (BIS, ECB, Eurostat, IMF, OECD, UN and World Bank) to provide standards for statistical information exchange.

- Reference period
- Submission type

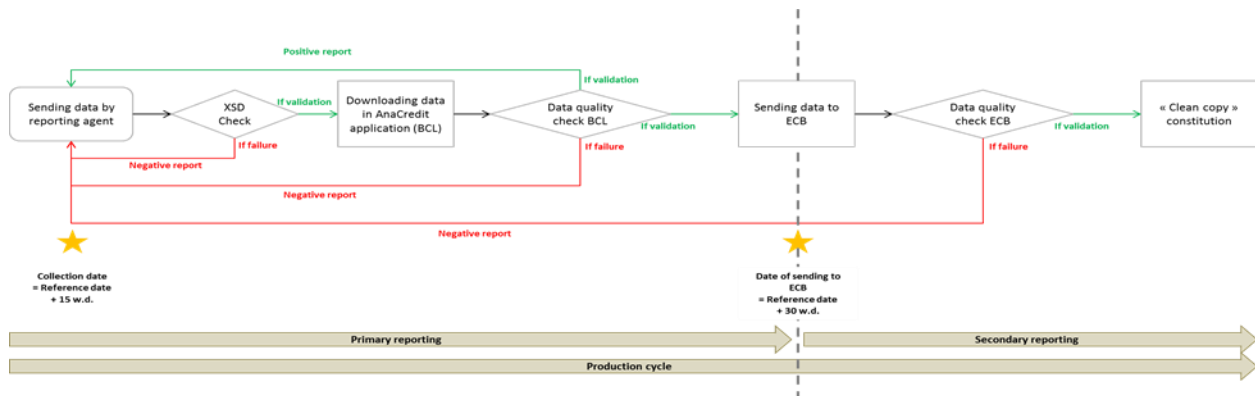
3.2.3 SDMX-ML files reception and reports

Reception of the files will result in the submission of reports. As a first step, these files will be checked for data compliance (XSD). If the checks below are not validated, the file is rejected and the reporting agent is notified. Otherwise, the file is transmitted to the AnaCredit system and no notification is given to the reporting agent at this stage.

Once the first compliance checks have been made and the files have been uploaded to the AnaCredit application, quality checks are performed on all the data. All these checks are further described in chapter 4. They are available on the BCL's website.

If the data reported does not meet the qualitative requirements of the BCL, a negative report is sent to the reporting agent notifying him of the attributes to be corrected and re-sent. In case the data reported satisfy the qualitative requirements of the BCL, a positive report is sent to the reporting agents to notify them of the submission of their data to the ECB. It should be noted that the BCL may return to reporting agents following the transmission to the ECB, even though a positive report has been sent before.

The exchange of reports will take place via the secure Internet exchange protocol Transport Layer Security «TLS».



3.2.4 Characteristics of the transmitted data

AnaCredit data are divided into ten sets, taking into account the static or dynamic properties of the attributes. The following table describes the ten data sets according to their variables' types (dynamic or static):

Data set		Variable type	Survey
1	Counterparty reference data	Static data	BCL_ANCRDT_T1_REF
2	Instrument data	Static data	Template 1 monthly BCL_ANCRDT_T1M
3	Financial data	Dynamic data	
4	Counterparty-instrument data	Static data	
5	Joint liabilities data	Dynamic data	
7	Protection received data	Static data	
8	Instrument-protection received data	Dynamic data	Template 2 monthly BCL_ANCRDT_T2M
9	Counterparty risk data	Dynamic data	
10	Counterparty default data	Dynamic data	
6	Accounting data	Dynamic data	Template 2 quarterly BCL_ANCRDT_T2Q

Static variables group attributes whose values are initialized during the first data transmission and they are in principle assumed to remain constant throughout the life of the instrument. Conversely, a dynamic variable is reset on each monthly transmission.

For example, data set 2 "Instrument data" includes static attributes such as the currency, the date of creation or the floor rate of the instrument, variables which are not likely to change. In data set 3 "Financial data", accounting for accrued interest is considered dynamic.

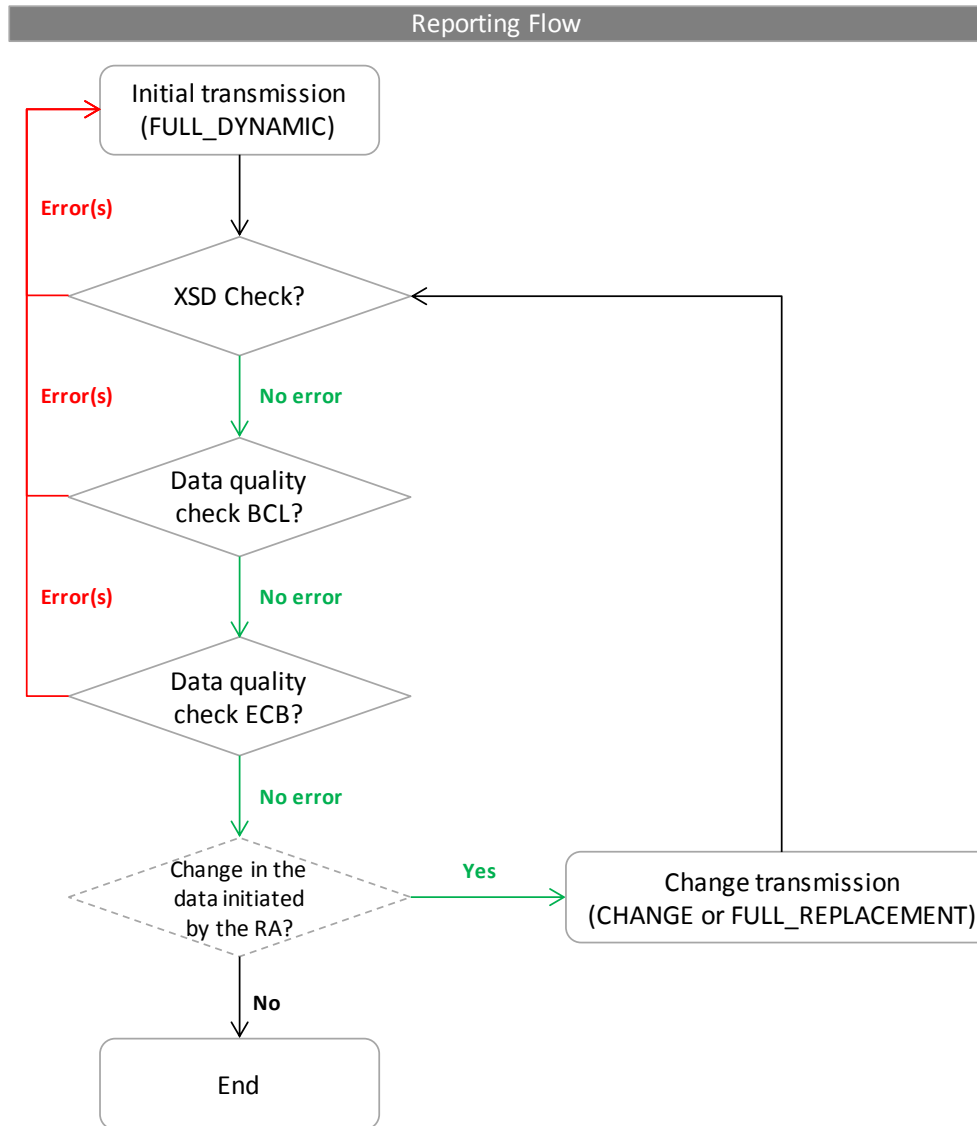
3.2.5 Submission types

Data transmission is done using one of the following three submission types:

- 1 «Full Dynamic»
- 2 «Change»
- 3 «Full Replacement»

The technical details of these submission types are available in the document «Technical specification AnaCredit» ([Technical specifications AnaCredit](#)).

It is important to note that for each reference date only the first submission should be done using «**full dynamic**», even if revisions are made before the submission deadline. The «full dynamic» submission type has to be used for the following transmissions, if and only if, the previous sending has not been validated by the BCL (including XSD validation and persistent validation rules). The « **change** » submission type can only be used when the Reporting Agent wish to correct / change some data after the BCL / ECB validation. The use of « **full replacement** » submission type is exceptional and has to be previously validated by the BCL. The use of submission types can be summaries as below:



3.2.6 Actions “Replace” and “Delete”

The action attribute defines how the system will process the content of that specific DataSet. Two values are allowed:

- « Replace » : This is the value normally expected on the DataSet. The given observations will replace those already existing in the BCL database. If the observations do not exist in the BCL database they are appended.

- « Delete » : This action is used when the Reporting Agent considers that previously transmitted data should be deleted for a specified reference period. Therefore, the "Delete" action allows i) to close an instrument (eg: credit expired) or ii) to correct wrong transmitted information. It is important to note that the entire line of the instrument that is to be deleted must be completed.

3.2.7 Use of deltas

The "Full dynamic" transmission mode includes the full snapshot for the dynamic tables and the deltas for the static tables. "Deltas" refers to including only the records that have changed in comparison with the previous submission, for the corresponding reference date and tables. Due to the difficulty of some reporting agents in setting up the deltas, the BCL also accepts the sending of all the data for the static series. In other words the use of deltas is not mandatory but strongly recommended, especially to facilitate revisions of the static data.

3.2.8 Key attributes

The attributes « Observed Agent Identifier », « Counterparty Identifier », « Contract Identifier », « Instrument Identifier » et « Protection identifier » are consider as key attributes. Therefore, they must be unique and invariable over time.

4 Data quality management

4.1 Reporting agents' awareness regarding data quality

Reporting agents should be aware of the importance regarding the quality of the data submitted to the BCL and of the need to submit the data in accordance with the validation rules available on the BCL's website. Only a rigorous control carried out as soon as the data is produced will enable the quality requirements to be met within the given deadlines. This is all the more important as the data collected will be monitored by the ECB.

4.2 Dimensions of the quality checks

The different AnaCredit validation rules can be classified into several dimensions:

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- 1 Referential integrity
- 2 Consistency
- 3 Completeness
- 4 Uniqueness
- 5 Data specifications
- 6 Plausibility

Note:

The checks presented below may be subject to change. Other validation rules will later complement the document mentioned above. They will include consistency checks with other statistical reports in particular.

4.2.1 Referential integrity

Quality checks regarding the referential integrity of the data ensures that all the attributes of each of the ten data sets exist and are consistent with each other. More specifically, the purpose of these validation rules is to verify that the mutual dependencies between attributes of the same instrument are respected.

4.2.2 Consistency

The consistency rules ensure that the logic of the AnaCredit model is respected. Consequently, the primary objective of these rules is not the verification of individual requirements but the consistency between the reported data. It is therefore necessary to check that the values of one data set are compatible with the values of another data set.

The syntax and notation used are as follows:

Descriptions	Symbols	Algorithms
Assigning a value to an attribute	=	[Dataset.Attribute] = 'Value'
If an attribute must be different from a predefined value	<>	[Dataset.Attribute] <> 'Value'

If multiple values can be assigned to a single attribute	IN	[Dataset.Attribute] IN {'Value1', 'Value2', 'Value...'}
Adding conditions with logical operators	IF, THEN, WHERE,...	IF [Dataset1.Attribute1] = 'Value1' THEN [Dataset2.Attribute2] = 'Value2'
Empty cell	{ }	[Dataset1.Attribute1] <> { }

4.2.3 Completeness

The purpose of these validation rules is to ensure that all the attributes required by the Regulation are submitted to the BCL.

4.2.4 Uniqueness

The uniqueness rules ensure that, depending on the granularity defined, each declared record is uniquely identifiable by a combination of attributes. To do this, the following attributes are considered as «key attributes»:

- 1 Reference date
- 2 RA identifier
- 3 OA identifier
- 4 Counterparty identifier
- 5 Instrument identifier
- 6 Contract identifier

4.2.5 Data specifications

These rules enable to check the validity of the formats used for the values of the attributes. The formats follow the requirements of the «Single Data Dictionary - SDD⁴». The SDD provides a

⁴ The purpose of SDD is to enable NCBS to share the same definitions of concepts and aggregates for data collection and reporting.

definition of AnaCredit variables and formats that must be used for attributes. These formats can have the following specificities:

- **Character string:** succession of characters (letters, numbers, punctuation elements, mathematical symbols or various ...)
- **Alphanumeric:** code based on a sequence of letters and numbers without spaces
- **Numeric:** values made up of real numbers
- **Date:** information allowing to characterize the date of an event with a level of precision going from the year to the day
- **List:** attributes whose values are predefined

4.2.6 Plausibility

Plausibility checks are also implemented. These checks include outlier detection and monitoring the monthly evolution of the credit portfolio.

4.3 Error types

This section discusses actions to be taken when detecting errors in data sets sent by reporting agents. Different measures should be considered, depending on the severity of the errors. The degree of severity is determined by the potential impact of an error on the data quality. The severity of the errors is assessed as follows:

- Type 1 errors: Major error -> Complete rejection of the report
- Type 2 errors: Localized error -> Rejection of the respective lines
- Type 3 errors: Warning -> Acceptance of the report

The reporting agent will have to provide additional information.

The error type is indicated for each validation rule and is available on the website of the BCL.

4.4 Error notifications

Upon transmitting the data to the BCL, each reporting agent will receive a standardized quality report indicating the validation rules that are not satisfied.

4.5 Revision deadlines and data preservation

Reporting agents must keep AnaCredit data and related documents for twenty-four months. The BCL reserves the right to request corrections up to twenty-four months before the reference period of the last declaration.

5 Summary of existing documentation

In the context of AnaCredit, the BCL and the ECB make available the following documents:

Type of document	Entity	Link
Reporting instructions	BCL	[1]
REGULATION (EU) 2016/867 OF THE EUROPEAN CENTRAL BANK of 18 May 2016 on the collection of granular credit and credit risk data (ECB/2016/13)	ECB	[2]
Circular 2017/240 of 21 April 2017	BCL	[3]
AnaCredit reporting manual Part I – General Methodology	ECB	[4]
AnaCredit reporting manual Part II – Datasets and data attributes	ECB	[5]
AnaCredit reporting manual Part III – Case studies	ECB	[6]
SDMX schemas (zip file)	BCL	[7]
Technical specifications AnaCredit	BCL	[8]
BCL validation rules	BCL	[9]
ECB validation rules	ECB	[10]
Reporting dates 2018	BCL	[11]
List of reporting agents	BCL	[12]
List of reporting member states	BCL	[13]
List of legal forms	ECB	[14]
List of national identifiers	ECB	[15]
List of international organisations	ECB	[16]
Examples of complete reports	ECB	[17]
Q&As	ECB	[18]
Non-technical introduction to SMCube methodology	ECB	[19]
SDMX introductory document	SDMX	[20]
SDMX Glossary	SDMX	[21]

6 Contact data at the BCL

The BCL team in charge of AnaCredit can be contacted using the following contact data:

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Gilles LAGRANGE		4774-4313
Peter James ROCH		4774-4541