GAP ANALYSIS BETWEEN THE ECB ABS LOAN-LEVEL DATA TEMPLATES AND THE DRAFT TEMPLATES PROPOSED BY ESMA ON 22 AUGUST 2018

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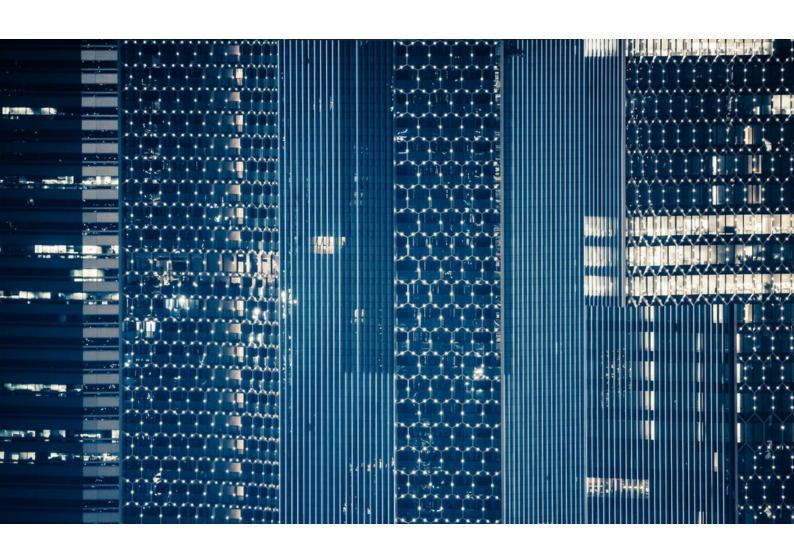






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1 INTRODUCTION

European DataWarehouse GmbH (ED) has performed a comprehensive analysis of the draft European Securities and Markets Authority (ESMA) reporting templates published on 22 August 2018 as an Annex to the final report on the technical standards on disclosure requirements under the Securitisation Regulation (EU) 2017/2402¹. The methodology of this analysis is described below, and the analysis can be found in specific Microsoft Excel files accompanying this document. This version of the gap analysis has been performed with the information available on the ESMA website as of 31 August 2018.

NOTE: This is a sample document only. To purchase the full report, please contact enquiries@eurodw.eu

¹ The final draft ESMA reporting templates can be found at the following link: https://www.esma.europa.eu/sites/default/files/library/esma33-128-474_final_report_securitisation_disclosure_technical_standards.pdf



2 SUMMARY OF THE KEY DIFFERENCES

2.1 CHANGES IN THE TEMPLATES

The draft underlying exposures templates published in the final report by ESMA are based on the European Central Bank (ECB) Asset-Backed Securities (ABS) loan-level data templates² and are taking into account other data reporting standards (Bank Integrated Reporting Dictionary) and the reporting under different regulations such as MiFID II and MiFIR. In summary, the following points are illustrations of the key differences between the proposed final ESMA templates and the existing ECB templates.

- a) Format changes: The format type of some of the data fields has changed to be as closely aligned as possible with the ISO 20022 format. For example, all data fields with {DATEFORMAT} now require day precision. Also, fields with {LIST} format have been converted from numerical to four-character options. Finally, ESMA introduced the {MONETARY} format for the numerical fields.
- b) Removal of fields: The ESMA final draft templates include only mandatory fields. Some of the optional fields in the ECB templates were converted to mandatory fields and other optional fields have been removed from the ESMA final draft templates. According to ESMA, mandatory fields that were deemed not to be necessary or can be calculated in a straightforward manner have also been removed from the templates. For example, the Amortisation Profile section in the ECB template for SME (field codes AS150-AS1349) has been removed. All the 'Postcode' fields (field codes AR129, CS16, AS16) have been removed while the relevant 'Geographic Region' fields have now become mandatory in the ESMA final draft templates.
- c) Regulatory fields: Fields related to the classification of enterprises by size should be in accordance with the definition in the Annex to Commission Recommendation 2003/361/EC, which is also in line with other regulatory reporting requirements, e.g. AnaCredit Regulation (EU) 2016/867. To ensure consistency with these regulatory reporting requirements, the following fields have been adjusted accordingly: revenue, amortisation type, payment frequency, interest rate type, interest rate index.
- d) Risk-related fields: The definitions of default have been expanded in the ESMA final draft templates to reflect default under regulatory definitions such as e.g. CRR definitions (Art.178) or more bespoke definitions set out in the transaction documentation.
- e) **Arrears information:** The field 'Number of Months in Arrears' has been replaced with the field 'Number of Days in Arrears' allowing better comparability given that, according to ESMA, servicers already track loan arrears on a daily basis.
- f) New fields: New fields have been added to the templates, such as the 'Legal Entity Identifier (LEI) of the Originator and the Original Lender'. On a similar note, the original lender name, the originator name and the names of the counterparties should match with the registered names in the Global Legal Entity Foundation (GLEIF) database

² The ECB ABS loan-level data templates can be found at the following link: https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html



(www.gleif.org) if a LEI exists. The field 'Primary Income Type' has been added to the templates to indicate the type of income reported in the respective field.

- g) Energy performance fields: Two new fields, the 'Energy Performance Certificate Value' and the 'Energy Performance Certificate Provider', have been added to the Residential, Automobile and Consumer underlying exposures templates. This is in line with the transparency requirements under Article 22(4) of the Securitisation Regulation (EU) 2017/2402. However, these two fields are not relevant for the ESMA completeness score.
- h) Change in the structure: The structure of the ESMA final draft template for residential mortgages has been adjusted to include a new section for the collateral in line with the collateral sections of the Corporate/SME template and the template for commercial mortgages.
- No Data allowance: In the annexes of the final report published by ESMA on 22 August 2018 two columns have been added to the ESMA final draft templates to indicate where No Data (ND1 – ND4 and ND5) options are allowed.
- j) Static vs. dynamic: Unlike the ECB data templates, the final draft ESMA templates do not include the distinction between static and dynamic data fields. According to ESMA, the information reported should be accurate at each data cut-off date.

2.2 NO DATA OPTIONS

In line with the ECB loan-level requirements³, ESMA has proposed five 'No Data' options to explain the reasons for the unavailability of the data. While ECB included two additional 'No Data' options (ND,6 and ND,7), according to ESMA these two data fields have been rarely used and are deemed not to be necessary. Apart from this change, the suggested ND options do not contain commas ("ND1" instead of "ND,1"). The table below displays the proposed ESMA options for field values when data is not available and provides a comparison to the ND options in the ECB data templates. In addition, where ESMA templates allow, the reporting entity shall report ND5 where the required information is not applicable.

	ESMA DRAFT TEMPLATES	ECB DATA TEMPLATES		
ND1	Data not collected as not required by the lending or underwriting criteria	ND1	Data not collected as not required by the under- writing criteria	
ND2	Data collected on underlying exposure application but not loaded into the originator's reporting system	ND2	Data collected at application but not loaded into the reporting system on completion	
ND3	Data collected on underlying exposure application but loaded onto a separate system from the originator's reporting system	ND3	Data collected at application but loaded in a separate system from the reporting one	
ND4- YYYY- MM-DD	Data collected but will only be available from YYYY-MM-DD (YYYY-MM-DD shall be completed)	ND4	Data collected but will only be available from YYYY-MM	
			Not relevant at present time	
	Not applicable	ND6	Not applicable for the jurisdiction	
ND5		ND7	Only for CMBS loans with a value less than EUR 500 000, i.e. the value of the whole commercial loan balance at origination	

³ For more information on the ECB 'No Data' options please use the following link: https://www.ecb.europa.eu/paym/coll/loanlevel/implementation/html/index.en.html



The table below shows the breakdown of the ND1-ND4 and ND5 allowance by underlying exposures template:

	RESIDENTIAL REAL ESTATE		RESIDENTIAL REAL ESTATE AUTOMOBILE		CORPORATE	
	ND1-ND4 allowed?	ND5 allowed?	ND1-ND4 allowed?	ND5 allowed?	ND1-ND4 allowed?	ND5 allowed?
Yes	39	58	32	44	33	72
No	69	50	52	40	88	49
Total	10	08	8	4	12	21

Source: ED calculations

2.3 ADDITIONAL UNDERLYING EXPOSURES TEMPLATES - CLO, ESOTERIC AND NPE

In addition to the underlying exposures templates for the existing underlying exposure types captured under the existing ECB ABS templates, ESMA has developed two new reporting templates: one for CLO securitisations4 and one for esoteric and an add-on template for Non-Performing Exposures (NPE).

GAP ANALYSIS METHODOLOGY 3

The gap analysis between the ECB ABS loan-level data templates⁵ and the final draft underlying exposures templates proposed by ESMA on 22 August 2018, conducted by ED aims to assist reporting entities to better understand the adjustments between the respective templates. ESMA announced that the XML schema for the templates will be made available in the coming months. The analysis can also be read from originators, sponsors, securitisation special purpose entities or other relevant parties as a guide to make the necessary adjustments to the IT and other systems to prepare for the upcoming regulatory requirements. ED has not only flagged the changes that involve a programmability adjustment but has also highlighted the fields which have remained the same and do not require a change in the output. The key points identified by ED can be grouped under:

- 1) The optional and mandatory ECB template fields eliminated in the final draft templates proposed by ESMA. These fields can be identified in the Annex through the comment "Dropped field" under the column "ED Comments".
- 2) New fields added to the draft templates proposed by ESMA. These fields can be identified in the Annex through the comment "New field" under column "ED Comments".
- 3) Fields that exist in both the ECB and proposed ESMA templates. Out of these, ED has highlighted:
 - Fields that have changed in definition and require a programmability adjustment. For example, for the field "Amortisation Type" in the residential mortgages template, this is how the change of definition has been flagged:

The Corporate/SME template has been adjusted to capture the information for CLO securitisations

Excluding CMBS



FIELD DEFINITION & CRITERIA (ECB)	FIELD DESCRIPTION (ESMA)	ED COMMENTS	CAN BE MAPPED 1 TO 1?
Principal payment type: Annuity (1) Linear (2) Increasing instalments (3) Fixed instalments (changing maturity) with structural protection (4) Fixed instalments (changing maturity) without structural protection (5) Bullet (6) Bullet + Savings deposit (7) Bullet + Life insurance (8) Bullet + Investment portfolio (9) Bi-annual (10) Tri-annual (11) Offset mortgage (12) Other (13) No Data (ND)	Type of amortisation of the underlying exposure including principal and interest. French - i.e. Amortisation in which the total amount — principal plus interest — repaid in each instalment is the same. (FRXX) German - i.e. Amortisation in which the first instalment is interest-only and the remaining instalments are constant, including capital amortisation and interest. (DEXX) Fixed amortisation schedule - i.e. Amortisation in which the principal amount repaid in each instalment is the same. (FIXE) Bullet - i.e. Amortisation in which the full principal amount is repaid in the last instalment. (BLLT) Other (OTHR)	Please note that as per ECB FAQ definitions: "Annuity (1)" corresponds to the option "French (FRXX)" under ESMA's Template, "Linear (2)" corresponds in what ESMA describes as "Fixed amortisation schedule (FIXE)". ESMA template does not authorise the use of the ND5 option. New option in the list Existing option that is dropped	N

- b. Fields that have not changed definition and can be directly mapped from ECB's template to the proposed ESMA templates. In the annex, these can be identified through the column "Can be mapped 1 to 1?", where "Y" indicates that the field does not need further adjustments⁶ before being reported under its corresponding counterpart field in the final draft templates proposed by ESMA.
- c. Fields that have not changed definition but require some adjustment in the format.

DATA TYPE / FORMAT (ECB)	FIELD FORMAT (ESMA)	ED COMMENTS	CAN BE MAPPED 1 TO 1?
YYYY-MM	{DATEFORMAT}	Change of format, ESMA requires day precision.	Υ

d. Fields that, even though the definition has been modified when compared to the ECB template, require the same input as before.

In the Microsoft Excel files accompanying this document, five worksheets can be found: 'Gap Analysis', 'ECB Template', 'ESMA Template', 'No Data' and 'Disclaimer'. In the first sheet, the white columns belong to the ECB template, the blue columns to the ESMA template and the grey columns contain input from ED. The parts highlighted in orange indicate that the explanation does not exist in ECB's templates or when there is a change in the description between the two templates. The parts of ECB's field definition highlighted in red indicate that the part of the explanation does not exist in ESMA's templates. For list fields, new list options are highlighted in green and eliminated list options are highlighted in red. For cases where the list field re-mapping is not straightforward, ED has added the relevant explanations, based on its understanding, with suggestions on how to proceed.

⁶ Except for the necessary changes of the field code (e.g. AR1 to RREL1) and the general changes of the ND options (e.g. "ND,1" changes to "ND1")



4 ADDITIONAL INFORMATION REGARDING THE FINAL ESMA REPORT ON DISCLOSURE REQUIREMENTS FOR NON-ABCP SECURITISATIONS

4.1 ITEM TYPES AND CODES

In the final report ESMA specifies the information that the reporting entities should make available for public transactions to a securitisation repository as per the disclosure requirements set out in the Article 7(1) of the Securitisation Regulation (EU) 2017/2402. The technical standards prescribe the following set of item codes to be used by the reporting entities when making the information available to a securitisation repository.

ITEM TYPE	ARTICLE(S) OF REGULATION (EU) 2017/2402	ITEM CODE
Underlying exposures or underlying receivables or credit claims	7(1)(a)	1
Investor report	7(1)(e)	2
Final offering document; prospectus; closing transaction documents, excluding legal opinions	7(1)(b)(i)	3
Asset sale agreement; assignment; novation or transfer agreement; any relevant declaration of trust	7(1)(b)(ii)	4
Derivatives and guarantees agreements; any relevant documents on collateralisation arrangements where the exposures being securitised remain exposures of the originator	7(1)(b)(iii)	5
Servicing; back-up servicing; administration and cash management agreements	7(1)(b)(iv)	6
Trust deed; security deed; agency agreement; account bank agreement; guaranteed investment contract; incorporated terms or master trust framework or master definitions agreement or such legal documentation with equivalent legal value	7(1)(b)(v)	7
Inter-creditor agreements; derivatives documentation; subordinated loan agreements; start-up loan agreements and liquidity facility agreements	7(1)(b)(vi)	8
Any other underlying documentation that is essential for the understanding of the transaction	7(1)(b)	9
Simple, transparent and standardised notification pursuant to Article 27 of Regulation (EU) 2017/2402	7(1)(d)	10
Inside information relating to the securitisation that the originator, sponsor or SSPE is obliged to make public in accordance with Article 17 of Regulation (EU) No 596/2014 of the European Parliament and of the Council	7(1)(f)	11
A significant event, such as:		
(i) a material breach of the obligations provided for in the documents made available in accordance with Article 7(1)(b) of Regulation (EU) 2017/2402, including any remedy, waiver or consent subsequently provided in relation to such a breach;		
(ii) a change in the structural features that can materially impact the performance of the securitisation;	7(1)(g)	12
(iii) a change in the risk characteristics of the securitisation or of the underlying exposures that can materially impact the performance of the securitisation;		
(iv) in the case of STS securitisations, where the securitisation ceases to meet the STS requirements or where competent authorities have taken remedial or administrative actions;		
(v) any material amendment to transaction documents.		

Source: ESMA

4.2 INVESTOR REPORT TEMPLATE FOR NON-ABCP SECURITISATIONS

The final report includes a standardised non-ABCP Investor Report template proposed by ESMA which is required to be made available pursuant to Article 7(1)(e) of the Securitisation Regulation (EU) 2017/2402. The investor report template is divided into 3 sections: the securitisation/programme, the tests/events/triggers



and the cash-flow information section. The following table shows the breakdown of the non-ABCP investor report template by number of fields and template section.

Investor report	Securitisation/ Programme	Tests/Events/ Triggers	Cash-flow
Non-ABCP securitisation	44	9	6

A key difference between the ESMA underlying exposures templates and the investor report template is the ND allowance. The use of 'No Data' options ND1-ND4 is prohibited in the investor report template. Only the use of ND5 option is allowed. According to ESMA, the information is essential to the securitisation and although there is information that requires a regular update, it should not be difficult for the reporting entities to obtain the information. In ESMA's view, even the information related to the counterparty ratings is necessary in order to asses any tests/trigger events related to the transaction.

The information that was reported in the bond information section under the existing ECB ABS reporting templates is partially captured under the ESMA proposed investor report information. The majority of the tranche information that forms part of the existing ECB ABS reporting templates is now captured under the significant event template (see paragraph 4.3).

4.3 SIGNIFICANT EVENT & INSIDE INFORMATION TEMPLATES FOR NON-ABCP

ESMA has developed two additional reporting templates: the significant event template and the inside information template covering the information pursuant under Article 7(1)(g) and 7(1)(f) respectively.

According to ESMA the significant event template includes information on any changes in the structural features or the risk characteristics, or of the underlying exposures of the securitisation that can materially impact the performance of the securitisation. The template is separated in multiple sections including information on securitisation, tranche/bond-level information, account-level information and counterparty-level information section, among others. The significant event template includes two additional sections for CLO securitisations, covering information on the CLO securitisations and the CLO managers. Finally, for synthetic securitisations, due to their distinct risk profiles, two additional significant event sections should be completed with details on the synthetic coverage and issuer collateral information.

The details on the inside information relating to the securitisation, that the originator sponsor or SSPE is obliged to make public on insider dealing and market manipulation, have also been specified in the final report.

The same ND allowance logic as for the investor report template applies also for the significant event and for the inside information templates. The use of ND1-ND4 is prohibited while ND5 is allowed in a set of fields.

The table below displays the breakdown of the significant event and inside information templates by number of fields and template section.

Significant event & inside information	Securi- tisation/ Programme	Tranche/ Bond	Account	Counter- party	Inside informa-	CLO add-on	Synthetic add-on
Non-ABCP securitisation	24	42	7	9	4	48	71



TRANSITION OF ECB DATA TEMPLATES TO THE FINAL DRAFT **ESMA TEMPLATES**

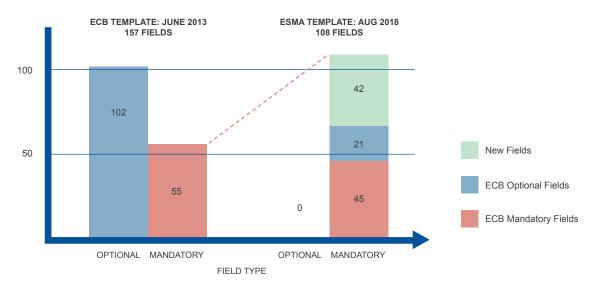
TECHNICAL ADJUSTMENTS (ALL ASSET CLASSES)

The table below highlights the key differences from a technical standpoint between the ECB and the final draft ESMA reporting templates.

	ECB 2013/2014	ESMA AUGUST 2018	
ND Options	ND,1-ND,7	ND1-ND5	
File Format	XML	XML similar ISO 20022	
Field Format	Numeric fields of varying lengths	Consistent (standardised monetary and percentage)	
Loan Identifiers	Single field (original, new)	Separate fields for original and new identifiers	
Static/Dynamic Distinction	Yes	No	
Data Sections	Loan, Collateral, Bond	Loan, Collateral, Investor Report, Inside Information, Significant Events, Non-Per- forming Exposures	

5.2 TRANSITION FROM THE ECB RMBS TEMPLATE TO THE FINAL DRAFT ESMA UNDERLYING **EXPOSURES TEMPLATE FOR RESIDENTIAL REAL ESTATE**

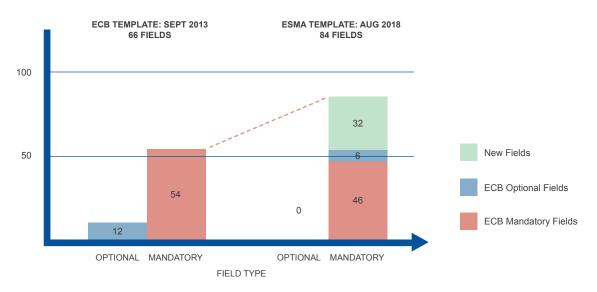
The following chart shows an evolution of the number and type of fields from the ECB RMBS to the final draft ESMA templates for Residential Real Estate underlying exposures





5.3 TRANSITION FROM THE ECB AUTO ABS TEMPLATE TO THE FINAL DRAFT ESMA UNDERLYING EXPOSURES TEMPLATE FOR AUTOMOBILE

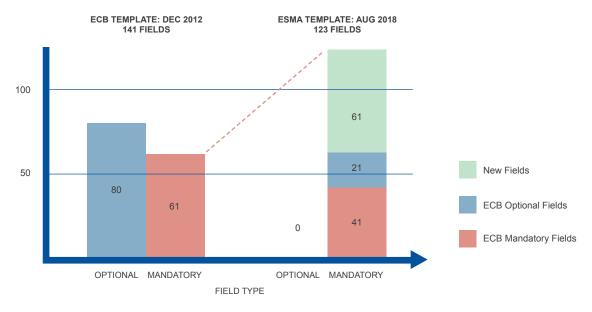
The following chart shows an evolution of the number and type of fields from the ECB Auto ABS to the final draft ESMA templates for Automobile underlying exposures



Source: ED calculations

5.4 TRANSITION FROM THE ECB SME TEMPLATE TO THE FINAL DRAFT ESMA UNDERLYING EXPOSURES TEMPLATE FOR CORPORATE

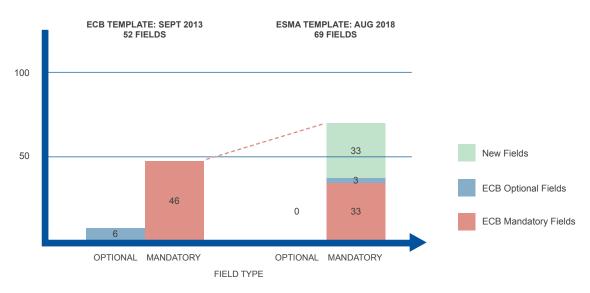
The following chart shows an evolution of the number and type of fields from the ECB SME to the final draft ESMA templates for Corporate underlying exposures





5.5 TRANSITION FROM THE ECB CONSUMER FINANCE ABS TEMPLATE TO THE FINAL DRAFT ESMA UNDERLYING EXPOSURES TEMPLATE FOR CONSUMER

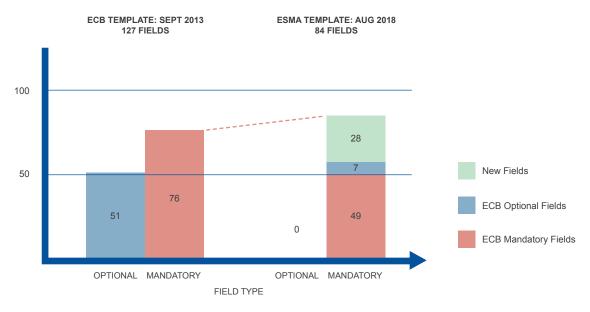
The following chart shows an evolution of the number and type of fields from the ECB Consumer to the final draft ESMA templates for Consumer underlying exposures



Source: ED calculations

5.6 TRANSITION FROM THE ECB LEASING ABS TEMPLATE TO THE FINAL DRAFT ESMA UNDERLYING EXPOSURES TEMPLATE FOR LEASING

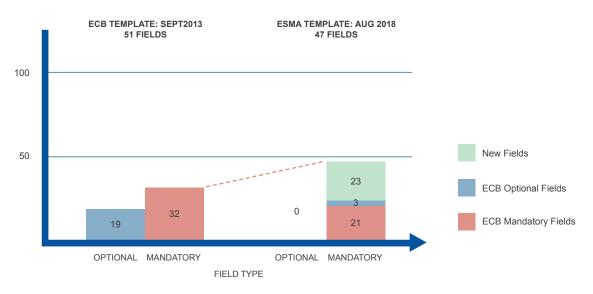
The following chart shows an evolution of the number and type of fields from the ECB Leasing templates to the final draft ESMA templates for Leasing underlying exposures





5.7 TRANSITION FROM THE ECB CREDIT CARD ABS TEMPLATE TO THE FINAL DRAFT ESMA **UNDERLYING EXPOSURES TEMPLATE FOR CREDIT CARDS**

The following chart shows an evolution of the number and type of fields from the ECB Credit Cards to the final draft ESMA templates for Credit Cards underlying exposures





12 CONTACT DETAILS

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