



ERICA WG  
**ERICA WG**

## **Open Source Tool Mapping from ESEF reports**

Alfredo Maldonado - Banco de España  
ERICA WG Chairperson

June 2025

ECCBSO - ERICA WG



ERICA Working Group  
**eccbsso**  
European Committee of Central  
Balance Sheet Data Offices

# ERICA WG

- WHAT IS ECCBSO & ERICA?
- ERICA PLAYING ROLE IN STATISTICS
- ESEF. DEFINITION. PROS AND CONS
- ERICA. STEPS TAKEN



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## WHAT IS ECCBSO?

The European Committee of Central Balance Sheet Data Offices (ECCBSO) is a consultative body created in 1987 by a group of European National Central Banks managing Central Balance Sheet Data Offices.



### EXPERIENCE USING ACCOUNTING DATA

Statistics  
Economic analysis  
Risk assessment



### COMMON TOOL

Individual Annual Accounts  
Consolidated Annual Accounts



### DIFFERENT GOALS, QUESTIONNAIRES & APPROACHES

Direct Contact (Companies)  
Data received from Banks  
Sources: Official Registers



### 4 WORKING GROUPS

BACH WG  
ERICA WG  
WGRA  
FSA WG



# ERICA WG

## WHAT IS ERICA?

The **European Records of IFRS Consolidated Accounts (ERICA)** is a database of aggregated and harmonized accounting data of non-financial listed groups, based on IFRS accounting standards.



### 8 COUNTRIES



### PERIOD COVERED

2005-2023<sup>(\*)</sup>:

- 3 Size Classes
- Business Sectors

### SAMPLE

1,000 Groups yearly  
Coverage is 95%,  
based on Turnover

**Financial &  
Sustainability Data**

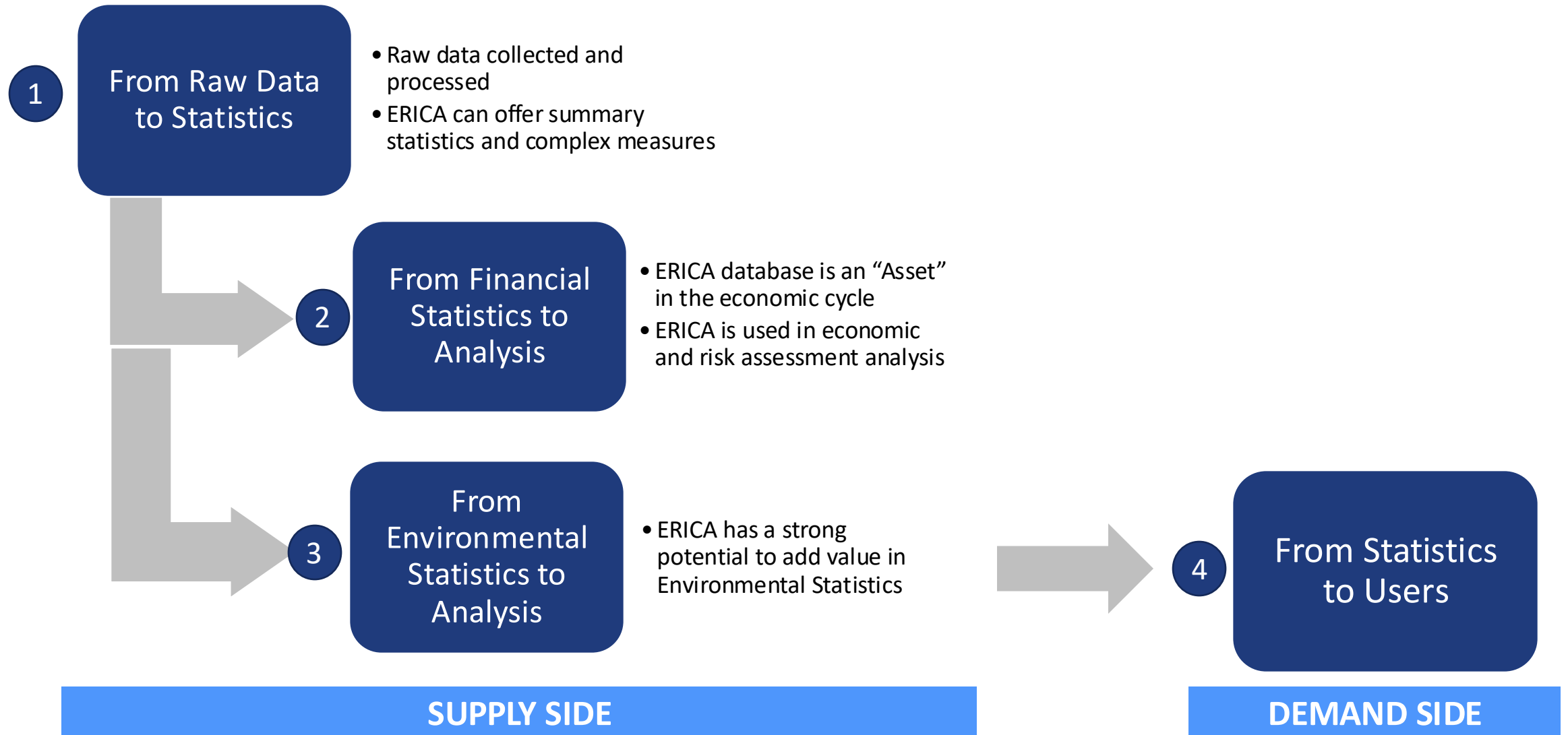
<sup>(\*)</sup> The data of a specific year N are usually made available in February N+2 altogether



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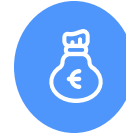




## ERICA database fairly reproduces the population of non-financial listed groups in each European country

European Groups Profiling

High coverage. Harmonized & comparable data



Cross country comparison

High quality statistics of consolidated non-financial listed groups in the EU



Use for statistics, financial stability, research and economic analysis & risk assessment

Analysis of European consolidated non-financial listed groups



Sustainable finance



# ERICA WG

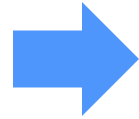
- WHAT IS ECCBSO & ERICA?
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## WHAT IS ESEF?

**ESEF is a electronic format** established by the European Securities and Markets Authority (ESMA) for the presentation of annual financial reports of listed companies in the EU.



### TARGET

To improve the accessibility, transparency, and comparability of financial reports



### TAXONOMY

A set of labels and structures that allow the classification and presentation of financial information in a standardized manner



### COMPONENTS OF THE TAXONOMY

- Elements: Definitions of financial and non-financial data.
- Relationships: How these elements are connected and structured.



## ESEF MIGHT IMPROVE COLLECTION PROCESS

**PROGRESSIVE  
GAIN OF  
EFFICIENCY IN  
THE COLLECTION  
PROCESS BUT....**

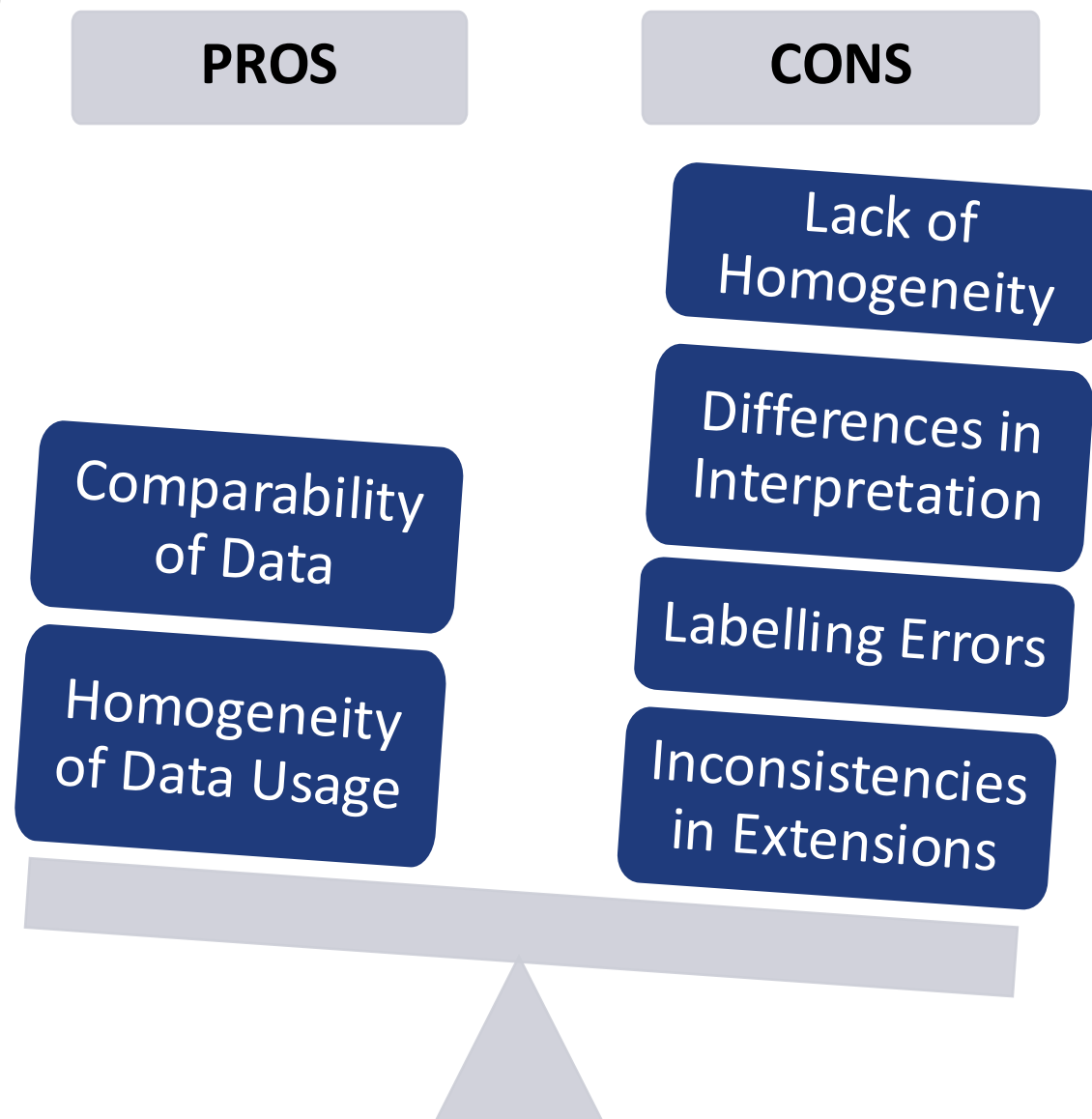
**ESEF is not an XBRL  
tag closed list  
(extensions and  
anchoring)**

**There are options  
to choose by  
reporting  
companies**

**NEED FOR  
MAPPING  
FLEXIBLE  
ELEMENTS TO A  
CLOSED FORMAT  
BECAUSE IT IS ....**

**A must for  
statistical and  
research purposes**

**Convenient for  
supervisor and risk  
analysis**



WHY ESEF IS AN OPPORTUNITY?

2. Consolidated financial statements

2.1 Consolidated income statement

For the year ended December 31

€ million

	Note	2020	2019
<b>Continuing operations</b>			
Net Sales	6	5 052	4 980
Royalty income and fees		96	78
Other revenue	10	155	155
<b>Revenue</b>		<b>5 347</b>	<b>4 913</b>
Cost of sales		-1 268	-1 268
<b>Gross profit</b>		<b>3 984</b>	<b>3 645</b>
Marketing and selling expenses		-1 221	-1 108
Research and development expenses		-1 569	-1 272
General and administrative expenses		-196	-195
Other operating income/expenses (-)	13	95	48
<b>Operating profit before impairment, restructuring and other income and expenses</b>		<b>1 093</b>	<b>1 118</b>
Impairment of non-financial assets	14	0	-2
Restructuring expenses	15	-20	-47
Other income/expenses (-)	16	-102	-1
<b>Operating profit</b>		<b>971</b>	<b>1 068</b>
Financial income	17	14	18
Financial expenses	17	-107	-125
Share of profit/loss (-) of associates		2	-1
<b>Profit before income taxes</b>		<b>880</b>	<b>960</b>
Income tax expense	18	-119	-146
<b>Profit from continuing operations</b>		<b>761</b>	<b>814</b>
<b>Discontinued operations</b>			
Profit/loss (-) from discontinued operations	9	0	2
<b>Profit</b>		<b>761</b>	<b>817</b>



ERICA FORMAT



COUNTRY OF INCORPORATION: 0

NAME OF REPORTING ENTITY: 0

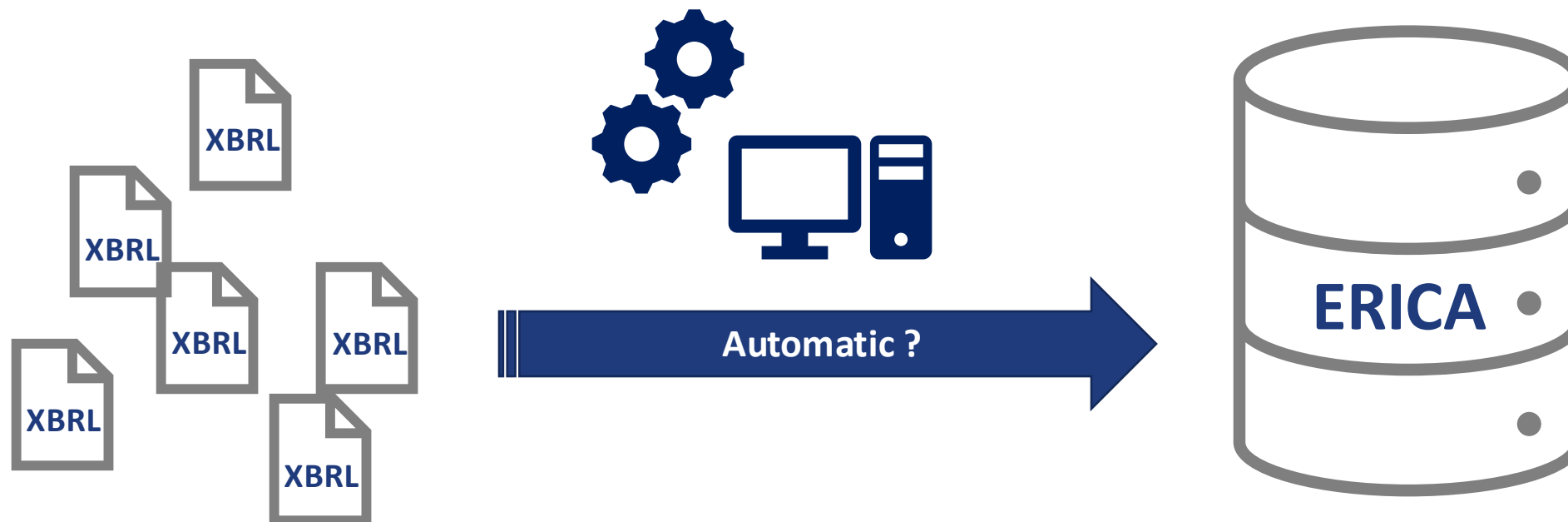
STATEMENT OF PROFIT OR LOSS BY FUNCTION

	IFRS Paragraph	XBRL Taxonomy	CBSO code	Period Current	Period Previous
1a. Gross profit				0.00	0.00
1a.1. (Operating) Revenue	1.82.a, 1.103	IFRS	10_20		
1a.2. (-) Cost of sales	1.99, 1.103	IFRS	20		
1b. Other operating income	1.102, 1.103	IFRS	11		
of which, income from government grants	20.39.b CP	IFRS	112		
of which, impairment reversals	1.99	CBSO-RF	113		
2. (-) Operating expenses	1.103, 1.99	CBSO-RF	21	0.00	0.00
2.1. (-) Distribution costs	1.99, 1.103	IFRS	210		
2.2. (-) Research and development costs	38.128	IFRS	211		
2.3. (-) Administrative expenses	1.99, 1.103	IFRS	212		
2.4. (-) Restructuring costs	1.98.b, 1.97	IFRS	213		
2.5. (-) Other operating expenses	1.103	CBSO-RF	219		
3. Gain (loss) in changes in fair value of non-current assets	40.76.d, 41.40	CBSO-RF	15		
4. Profit (loss) from operating activities	32.IE33	IFRS	10_22	0.00	0.00
5. Net financial result				0.00	0.00
5.1. (-) Finance costs	CP	CBSO-RF	14		
of which, (-) interest expense	1.82.b	IFRS	242		
5.2. Finance income	IFRS 7.20.b	CBSO-RF	2420		
of which, interest income	1.85 CP, IFRS 7.20	IFRS	142		
5.3. Gains (losses) arising from financial instruments	IFRS 7.20.b	IFRS	1420		
5.4. Exchange differences recognised in profit or loss (a)	CP	CBSO-RF	145_147		
5.5. Profit (loss) from investments in related parties	21.52.a	IFRS	950		
of which, share of profit (loss) of associates and joint ventures accounted for equity method	1.82.c	CBSO-RF	141		
6. Other non-operating income (expense)					
7. Profit (loss) before tax	1.103	CBSO-RF	169_269		
8. (-) Income tax expense (income)		IFRS	10_26	0.00	0.00
9. Profit (loss) after tax from continuing operations (before non-controlling interests)	1.82.e.i	IFRS	10_27	0.00	0.00
10. Profit (loss) from discontinued operations, net of tax	IFRS 5.33.a.i, IFRS 5.33.b.i, 1.82.e, 1.98.e	IFRS	18		
11. Profit (loss) (before non-controlling interests)	1.82.f, 1.106.d.i, 1.81a	IFRS	10_28	0.00	0.00
12. (-) Profit (loss) attributable to non-controlling interests	1.83.a.i, 1.81b.a.i, IFRS 12.12e	IFRS	29		
13. Profit (loss) attributable to owners of parent	1.83.a.ii, 1.81b.a.ii	IFRS	10_29	0.00	0.00

Version 2021



## WHY ESEF IS AN OPPORTUNITY?



## WHY ESEF IS AN OPPORTUNITY?



- Collaboration between XBRL Spain, Eurofiling, ERICA WG and Banco de España for the benefit of ERICA WG
- Development of an **ESEF-ERICA Mapper**

## RATIONALE OF A ESEF-ERICA MAPPER

- 1** To harmonize and make possible the comparison of the publicly available financial statements of European non-financial listed groups in ESEF format
- 2** Using a standard European common format: ERICA
- 3** It includes mapping decisions (from ESEF XBRL tags to the ERICA format) derived from the experience of the use of consolidated accounts by members of the ERICA WG



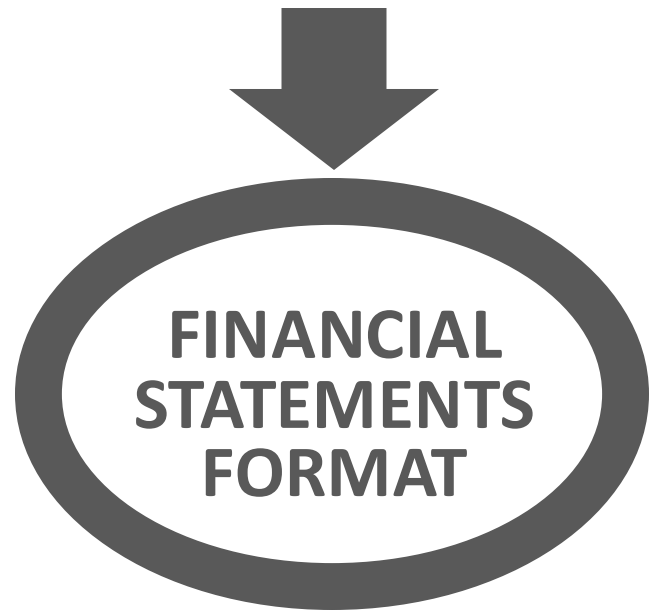
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## ERICA. STEPS TAKEN

### WHAT HAS THE ERICA WG DONE?



ERICA EXPERTS



EUROFILING FOUNDATION  
& XBRL SPAIN

## ERICA FINANCIAL STATEMENTS FORMAT

## Harmonized and Electronic Format is a MUST

ASSETS	IFRS Paragraph	XBRL Taxonomy	CBSO cod	EUR Period	
				Current	Previous
<b>I.ASSETS, NON-CURRENT, TOTAL</b>	<b>1.66, 31.56</b>	<b>IFRS</b>	<b>3</b>		
<b>1. Property, plant and equipment</b>	<b>1.54.a, 16.73.d</b>	<b>IFRS</b>	<b>30</b>		
1.1. Land and buildings	16.37.b	IFRS	300		
1.2. Plant and equipment	16.73.e	CBSO-RF	301		
1.3. Remaining property, plant and equipment	<a href="#">Help</a> 16.37	CBSO-RF	309		
1.4. Construction in progress and payments in advance	16.73.e	IFRS	303		
<b>2. Investment property</b>	<a href="#">Help</a> 1.54.b, 40.79.c, 40.76, 40.8.e	<b>IFRS</b>	<b>310</b>		
<b>3. Intangible assets and goodwill</b>	<b>1.54.e, 1.55 CP</b>	<b>IFRS</b>	<b>32</b>		
3.1. Goodwill	IFRS 3.B67.d	IFRS	320	2.892,00	3.202,00
3.2. Development costs	38.119.g	IFRS	321		
3.3. Computer software, copyrights, patents and other industrial property rights, service and operating rights	38.119.c, 38.119.e	CBSO-RF	322, 323		
3.4. Remaining intangible assets	<a href="#">Help</a> 38.119	CBSO-RF	328		
<b>4. Rights of Use</b>	<b>16.53 (j)</b>	<b>IFRS</b>	<b>38</b>		
<b>5. Biological assets, total</b>	<a href="#">Help</a> 1.54.f	<b>IFRS</b>	<b>33, 42</b>		
<b>6. Investments in related parties</b>	<a href="#">Help</a> 7.38, 1.54.e, 27.40, 1.55 CF	<b>IFRS</b>	<b>34</b>		
of which, equity accounted investments			340		
<b>7. Deferred tax assets</b>	<b>1.54.o, 12.81.g.i</b>	<b>IFRS</b>	<b>35</b>		
<b>8. Other financial assets, non-current</b>	<a href="#">Help</a> 1.54.d	<b>IFRS</b>	<b>36</b>		
of which, derivatives (including hedging assets), non-current	1.55 CP	IFRS	37		
<b>9. Remaining assets, non-current</b>	<a href="#">Help</a> 1.78.b, 1.66.d, CP	<b>CBSO-RF</b>	<b>39</b>		
of which, non-current trade receivables	1.78.b	IFRS	390		

1 ERICA format is the Core Information

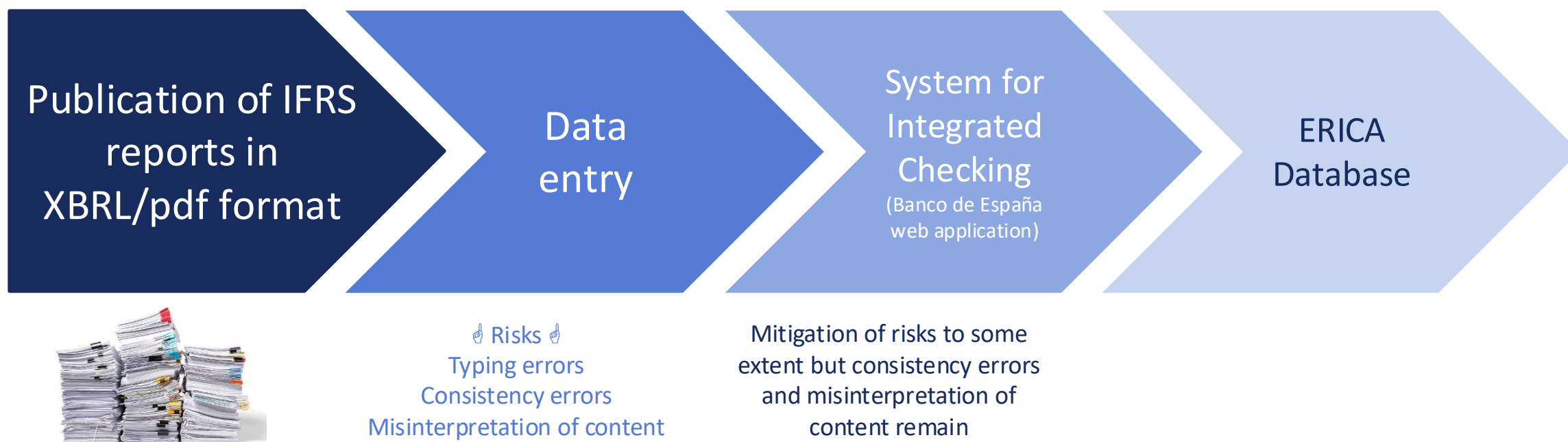
2 Accounting information of a company, in a specific period and from a specific source

3 ERICA format composed of key codes (data)

4 Validation checks to have data of high quality

5 Consistency analysis to detect possible mistakes

## COLLECTION OF ERICA DATA



## TARGETS

**MAXIMUM AUTOMATIC FILL  
IN ERICA ELEMENTS FROM  
THE ESEF TAXONOMY**

### **ALLOW FINE TUNNING:**

- 1) Reduce the workload**
- 2) Learning curve how taxonomy is being used**

## FROM A SINGLE FORMAT (ESEF) TO A HARMONIZED FORMAT (ERICA)

## BALANCE SHEET FROM COMPANY ANNUAL REPORT

## ■ Consolidated Balance Sheet (million euro)

	Note	31.12.2020	31.12.2019
<b>Assets</b>			
Intangible assets	5	5,575	7,713
Goodwill		2,892	3,202
Other intangible assets		2,683	4,511
Property, plant and equipment	6	16,128	19,647
Right-of-use assets	7	1,388	1,416
Investments recorded using the equity method	8	813	731
Non-current financial assets	9	361	738
Other non-current assets	10	691	581
Deferred tax assets	21	1,635	1,525
<b>Non-current assets</b>		<b>26,591</b>	<b>32,351</b>
Non-current assets held for sale	11	4,835	73
Inventories	12		
Trade and other receivables	10		
Trade receivables for sales and services			
Other receivables			
Current tax assets		37	281
Other current financial assets	9	558	333
Cash and cash equivalents	13	3,927	2,685
<b>Current assets</b>		<b>12,954</b>	<b>8,787</b>
<b>Total assets</b>		<b>39,545</b>	<b>41,138</b>

## ERICA FORMAT (BALANCE SHEET ASSETS SIDE)

ASSETS	IFRS Paragraph	XBRL Taxonomy	CBSO code	EUR Period	Current	Previous
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<b>2. Investment property</b>	<b>1.54.b, 40.79.c, 40.76, 40.8.e</b>	<b>IFRS</b>	<b>310</b>			
<b>2. Intangible assets and goodwill</b>	<b>1.54.c, 1.55.CP</b>	<b>IFRS</b>	<b>32</b>			
3.1. Goodwill	IFRS 3.B67.d	IFRS	320		2,892.00	3,202.00
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3.4. Remaining intangible assets	38.119	CBSO-RF	328			
<b>7. Deferred tax assets</b>	<b>1.54.o, 12.81.g.i</b>	<b>IFRS</b>	<b>35</b>			
<b>8. Other financial assets, non-current</b>	<b>1.54.d</b>	<b>IFRS</b>	<b>36</b>			
of which, derivatives (including hedging assets), non-current	1.55.CP	IFRS	37			
<b>9. Remaining assets, non-current</b>	<b>1.78.b, 1.66.d, CP</b>	<b>CBSO-RF</b>	<b>39</b>			
of which, non-current trade receivables	1.78.b	IFRS	390			

CBSO code	IFRS - Mapping option 1	IFRS - Mapping option 2
320	ifrs-full:Goodwill	

## ESEF TAXONOMY

There are more than 3.000 thousand ESEF Elements.



Mapping  
Tool

## ERICA ELEMENTS

ASSETS	IFRS Presentation	XBRL Taxonomy CBO and Current	EU Parked Elements
<b>ASSETS, NON-CURRENT, TOTAL</b>	154, 155	IFRS	3
<b>1. Property, plant and equipment</b>	154 a, 162, 16	IFRS	29
1.1 Land and buildings	16.25	IFRS	20
1.2 Plant and equipment	16.26	IFRS	20
1.3 Other non-current assets	16.27	IFRS	20
1.4 Construction in progress and assets in advance	16.28	IFRS	20
<b>2. Investment property</b>	154 b, 162, 16, 163 a	IFRS	29
<b>3. Intangible assets and goodwill</b>	154 c, 155 CP	IFRS	32
3.1 Goodwill	155.1	IFRS	20
3.2 Intangible assets	155.2	IFRS	20
3.3 Computer software, patents and other intangible assets	155.3	IFRS	20
3.4 Other intangible assets	155.4	IFRS	20
<b>4. Rights of use</b>	154 d	IFRS	29
<b>5. Biological assets, total</b>	154 e	IFRS	29
<b>6. Investments in related parties</b>	154 f, 154 g, 154 h, 154 i	IFRS	29
<b>7. Deferred tax assets</b>	154 j, 154 k	IFRS	29
<b>8. Other financial assets, non-current</b>	154 l	IFRS	29
<b>9. Other financial assets, current</b>	154 m	IFRS	29
<b>10. Other financial assets, non-current</b>	154 n, 154 o, 154 p	IFRS	29
<b>11. Other financial assets, current</b>	154 q	IFRS	29

Available for download in Openfiling: <http://www.openfiling.info/esef/>



[ESEF](#) ▾ [ESRS](#) [IXBRL](#) [DPM](#) ▾ [XBRL](#) [BLOCKCHAIN](#) [GREENFILING](#) [MORE PROJECTS](#) ▾ [ABOUT US](#) ▾ [HOME](#)



## ESEF-ERICA mapper

This mapping Excel tool has been created to harmonize and make possible the comparison of the publicly available financial statements of European non-financial listed groups in ESEF format, using to that aim ERICA, a standard European common format. It includes mapping decisions (from ESEF XBRL tags to the ERICA format) derived from the experience of the use of consolidated accounts by members of the ERICA WG.

The ERICA format (*European Records of IFRS Consolidated Accounts*) is managed by the [ERICA WG](#) of the European Committee of Central Balance Sheet Data Offices ([ECCBSO](#)). The tool has been created with the support of the [Eurofiling Foundation](#) and [XBRL Spain](#).

### Downloads (last update 2025-04-11):

- .- Open Source **Tool** (using *easyREADER*, see description above)
- .- Basic version **ToolB** (using *lite easyINSTANCE*, half lines of code)
- .- **User Manual** (*mapping tool*) and **Technical Reference** (*ESEF instance / reader*)

This project started on July 5th 2021, with a public call in the event [ESEF mapping challenge](#). The go live and final presentation was December 7th 2021 at the event [Extending ESEF opportunities](#)

View and download most of the ESEF Annual Reports at [filings.xbrl.org/](https://filings.xbrl.org/)





## POWERFUL REPOSITORY FOR ANALYTICAL PURPOSES

	TOPIC	CURRENT	FUTURE
1	STABILITY IN TIME OF TAXONOMY ELEMENTS FOR ANNUAL REPORTS	Previous Internal Mapping + minor adjustments	Increase in efficiency Less time consumption to collect data in ERICA Format Increased usefulness for statistics
2	IDENTIFICATION OF MOST FREQUENTLY USED ESEF ELEMENTS	Common practices (sector / auditor)	Synergies for update on Taxonomy Synergies for internal ESEF-ERICA mapping
3	OTHER POTENTIAL USERS	Academic, professional institutions	Enhancement of Financial Statement Analysis through Digital Reporting

## **Contact details:**

Alfredo Maldonado García-Verdugo

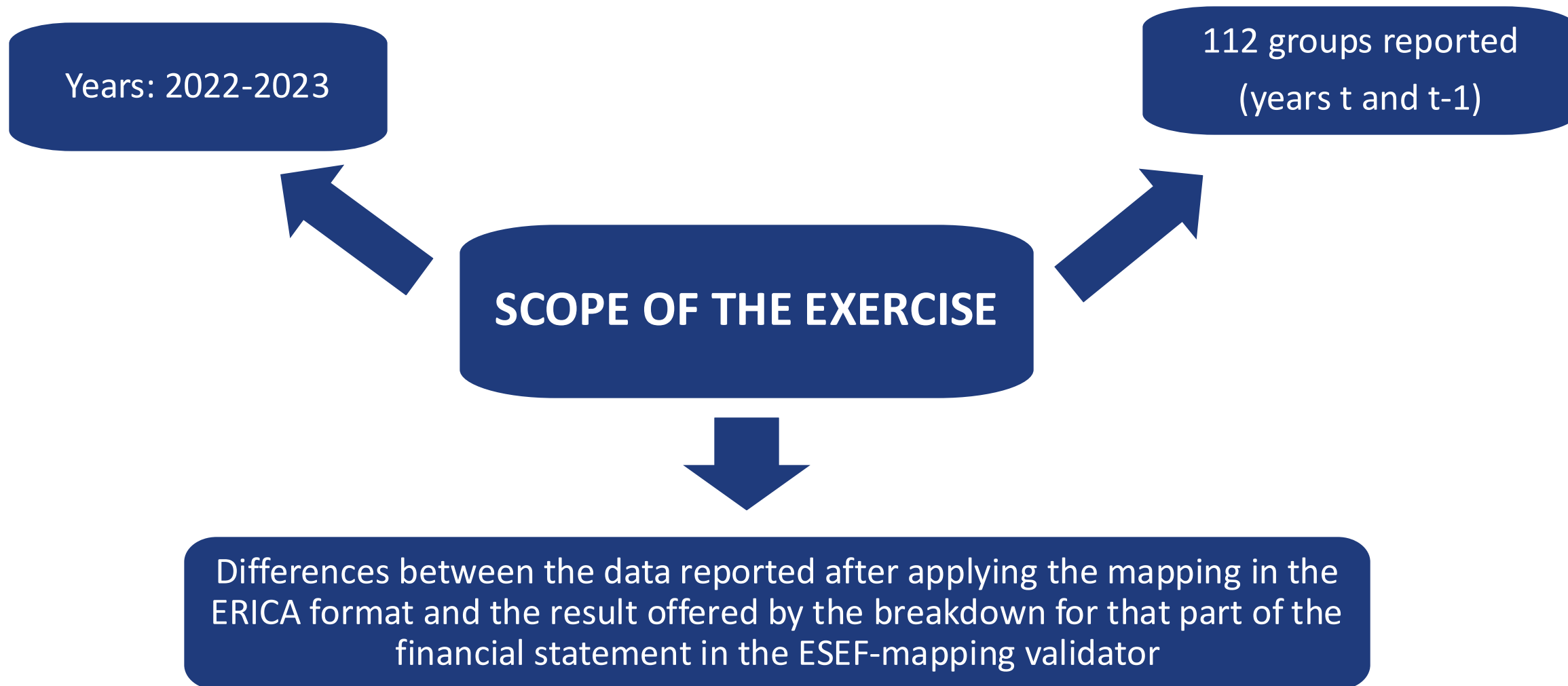
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## Profit and Loss Account (\*)

■ Number of companies



(\*) Draft data. A higher reported number indicates a more negative impact



**THANK YOU FOR YOUR ATTENTION**

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from ESEF reports**

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**ERICA WG Chairperson**

June 2025



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**ECCBSO website**  
<https://www.eccbsso.org/wba/publications>

**ECCBSO - ERICA WG**  
**ERICA website** (free account required)  
<https://www.bach.banque-france.fr/?lang=en>