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## EuMAR Stakeholder Event – Agenda

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10:00 - 10:05	Welcome	<i>Carlos Calhaz-Jorge</i>
10:05 – 10:15	The EuMAR Project, rationale, main aims and work packages	<i>Christine Wyns</i>
<b>Session 1</b>	<b>The EuMAR project – Laying the basis</b>	<i>Chairs: Carlos Calhaz-Jorge, Christian De Geyter</i>
10:15 – 10:30	Work package 3 - NCA survey results and data flow analysis	<i>Cristina Magli</i>
10:30 – 10:45	Work package 4 - Defining MAR parameters and ensuring harmonization	<i>Jesper Smeenk</i>
10:45 – 11:00	EuMAR's potential to create value for patients	<i>Bojana Santic</i>
11:00 - 11:30	Discussion	
11:30 – 12:00	Coffee Break	
<b>Session 2</b>	<b>The EuMAR project – Facing data protection</b>	<i>Chairs: Jesper Smeenk, Veerle Goossens</i>
12:00 – 12:15	GDPR considerations for EuMAR (health data registries)	<i>Jolien Clemens &amp; Ruben Roex (Timelex)</i>
12:15 – 12:30	Work package 5 - IRCC Concept & EuMAR registry prototype	<i>Christine Wyns</i>
12:30 - 13:00	Discussion	
13:00 – 14:00	Networking Lunch	
<b>Session 3</b>	<b>The EuMAR project – The next steps</b>	<i>Chairs: Christine Wyns, Cristina Magli</i>
14:00 – 14:15	Work package 6 - Embarking on the next steps with the Pilot Study	<i>Christian De Geyter</i>
14:15 – 14:35	EuMAR and the EU SoHO Platform	<i>DG SANTE</i>
14:35 – 14:50	Work package 7 - Perspectives of interoperability and innovation	<i>Jesper Smeenk</i>
14:50 - 15:20	Discussion	
15:20 – 15:30	Work package 2 - Spreading knowledge: Leveraging project dissemination resources	<i>Laura Rossignoli</i>
15:30 – 15:40	Closing remarks	<i>Carlos Calhaz-Jorge</i>

Please note changes may occur.



# EuMAR

## European monitoring of Medically Assisted Reproduction

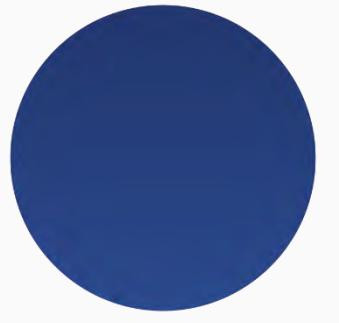
[www.eshre.eu/eumar](http://www.eshre.eu/eumar)

Stakeholder event 5 December 2023



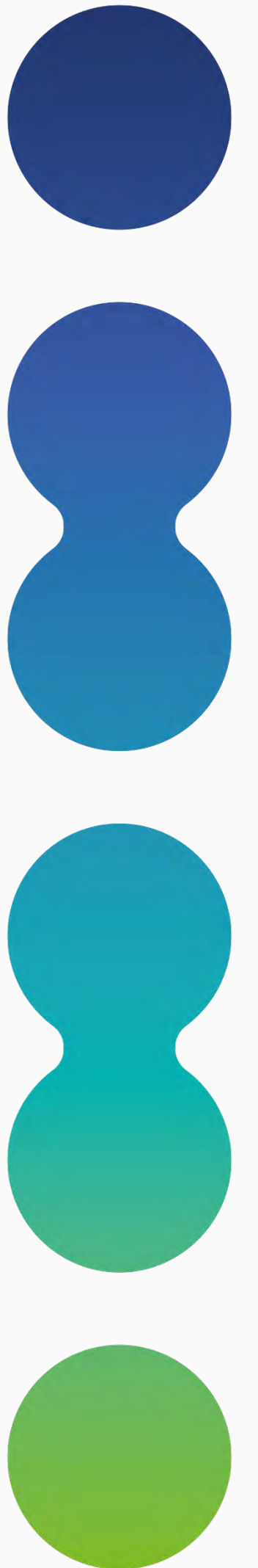
Co-funded by the European Union.

Project: 101079865 — EuMAR — EU4H-2021-PJ2



# The EuMAR project, rationale, main aims and word packages

Christine Wyns



# Introduction



- Increased number of individuals and couples seeking medical care for infertility and fertility preservation  $\approx$ 25 million people in the EU
- Significant impact of MAR on the number of pregnancies and births in EU countries ( $\approx$ 3.1% ranging from 0.9% to 6.3% for ART in 2018)
- Increasing variation/innovation in MAR treatment modalities/technologies

→ Need for surveillance and vigilance to assess MAR treatment efficacy and the safety of procedures

# Introduction



## Data collections in MAR across Europe

Eurocet	<u>2005:</u>	→ unknowns on MAR treatment details and consequences for individuals involved
SARE	<u>2008:</u>	→ unknown denominators (= activity data)
EIM	<u>1997:</u>	→ retrospective, aggregated data from a fragmented legislative and socio-economical landscape  → contains activity data and SARE (underreported)

# Introduction



## EIM data collection: overview on systems/flows



**Figure 1: Current MAR data collection systems in EU countries.**

Note: "Personal initiative" means that, in countries without a registry, an individual voluntarily takes up the task to collect all the data and report them to the EIM.  
Source: EIM data from 2018.

# Introduction



## EIM data collection: overview on types of data

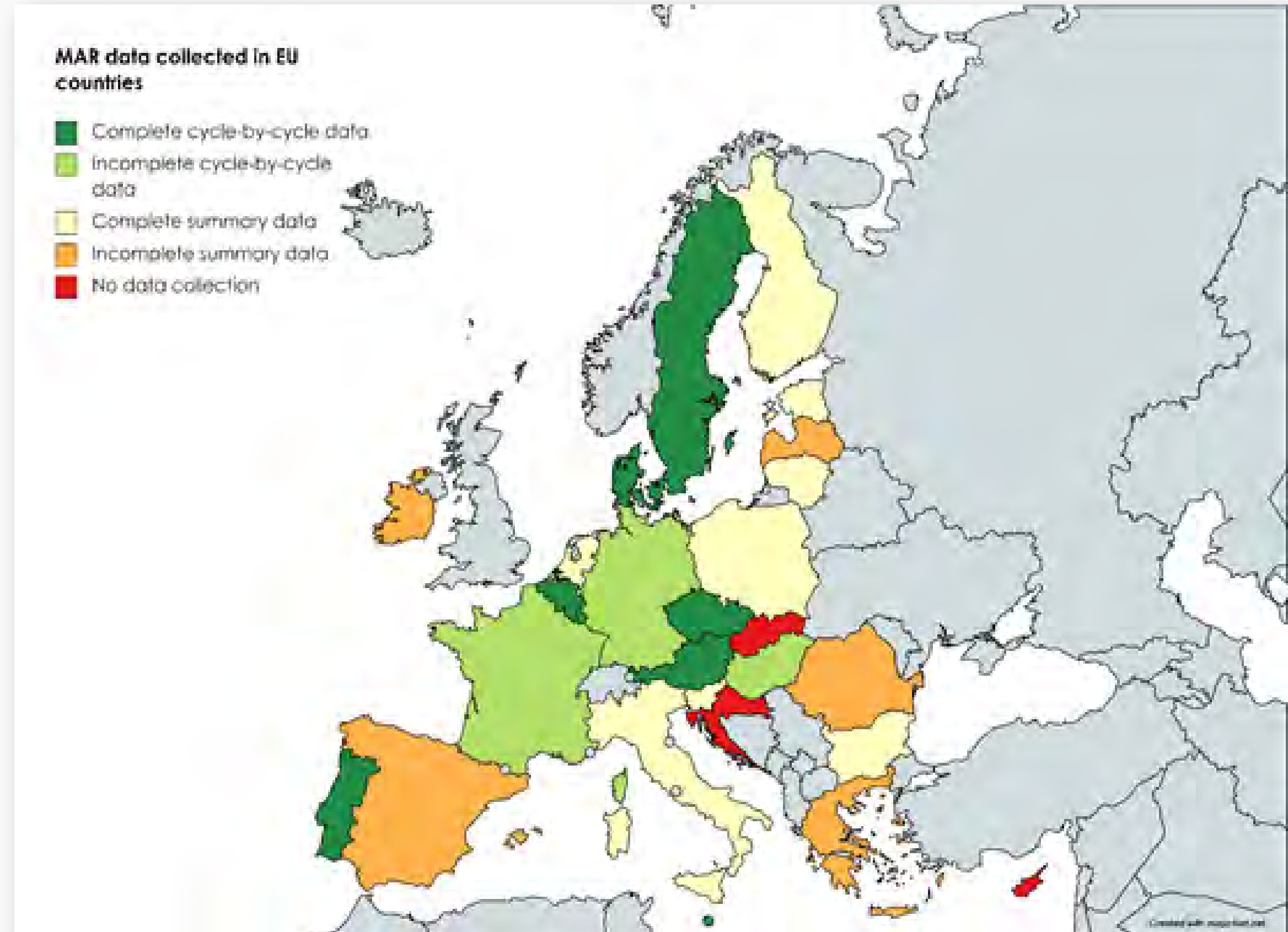


Figure 2: MAR data currently collected in EU countries



# Introduction

## International registries in MAR: challenges

Different **data collection systems** and **organisations** that manage data

- Unified approach
- Unique European platform

Different **measurement properties**

- Harmonised data

Different **regulations** (e.g. mandatory reporting, socio-economical issues)

- Legal basis (SoHO Regulation)

Different **technological evolutions/innovations**

- Timely uptake

Sequential treatment → **cross-border care/exchange** of biological material

- Identification of procedures linked to the same patient/treatment cycle covering all countries in Europe
- Longitudinal follow-up over long periods



# Towards a unified approach of MAR data collection over Europe



## The EuMAR project

### Aim of the project

To establish the first 'overarching' European, standardised, web-based data registry, containing high-quality cycle-by-cycle data entries from medical professionals across the EU, facilitating data sharing for open science across institutes and allowing the longitudinal and cross-border follow up of medically-assisted reproduction (MAR) data.

- **Type of action:** EU4H-PJG
- **Project coordinator:** European Society of Human Reproduction and Embryology (ESHRE)
- **Timeframe:** start 1 January 2023, running for 3 years
- **Funding programme:** EU4Health

# The EuMAR project: general objectives



- Moving the data collection from retrospective aggregated to prospective cycle-by-cycle
- Making data FAIR for all stakeholders (patients, public, competent authorities at country and EU levels)
- Covering cross-border care
- Achieving full traceability of MAR treatments
- Interoperating with other EU initiatives (SoHO platform, EHDS) to avoid duplication of work

# The EuMAR project: specific objectives



## SO1: Data flow

Develop a **flexible data flow model** that can be implemented in the local contexts of all Member States

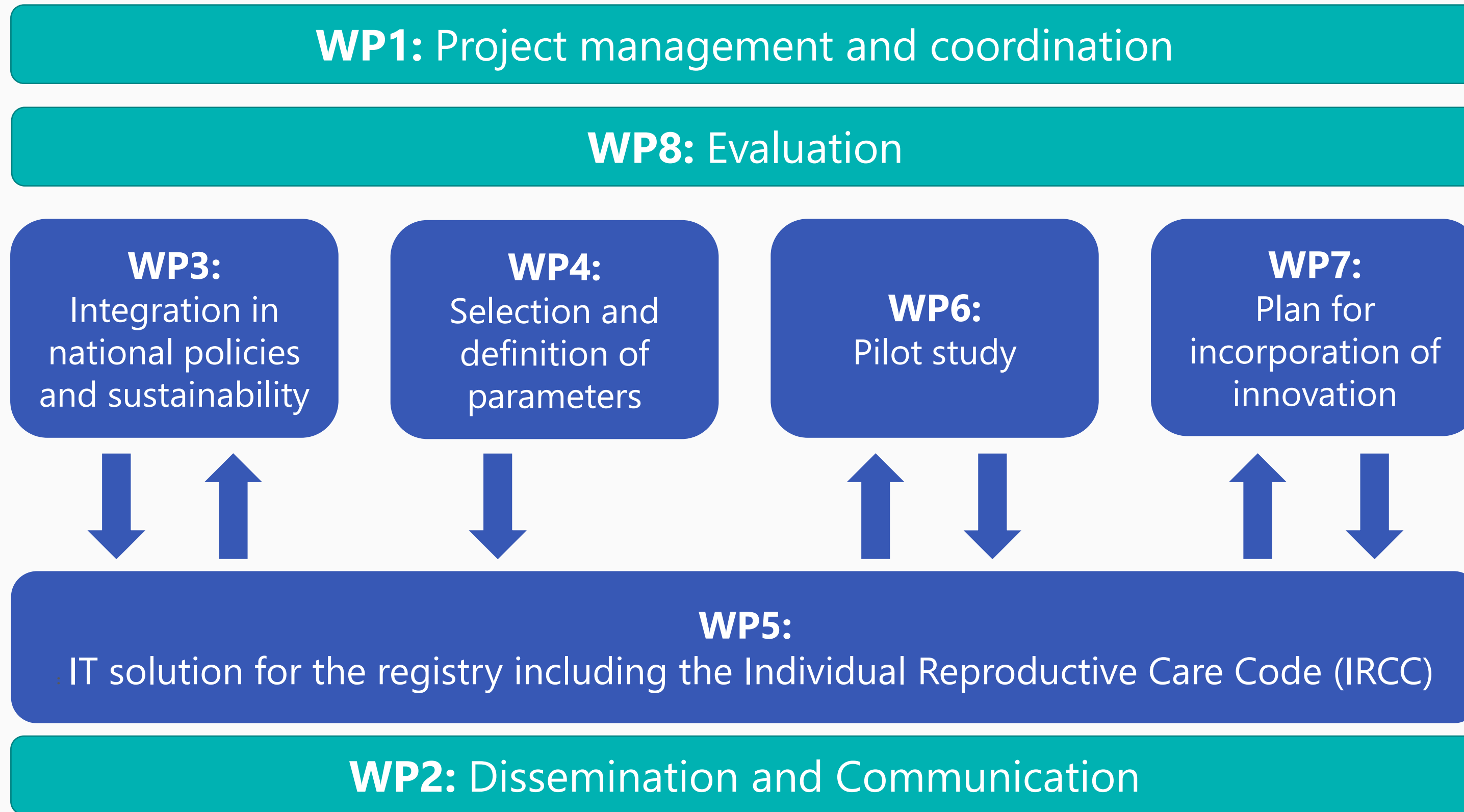
## SO2: Core parameters

Develop a **list of core, standardised parameters** with corresponding definitions on which data is to be collected

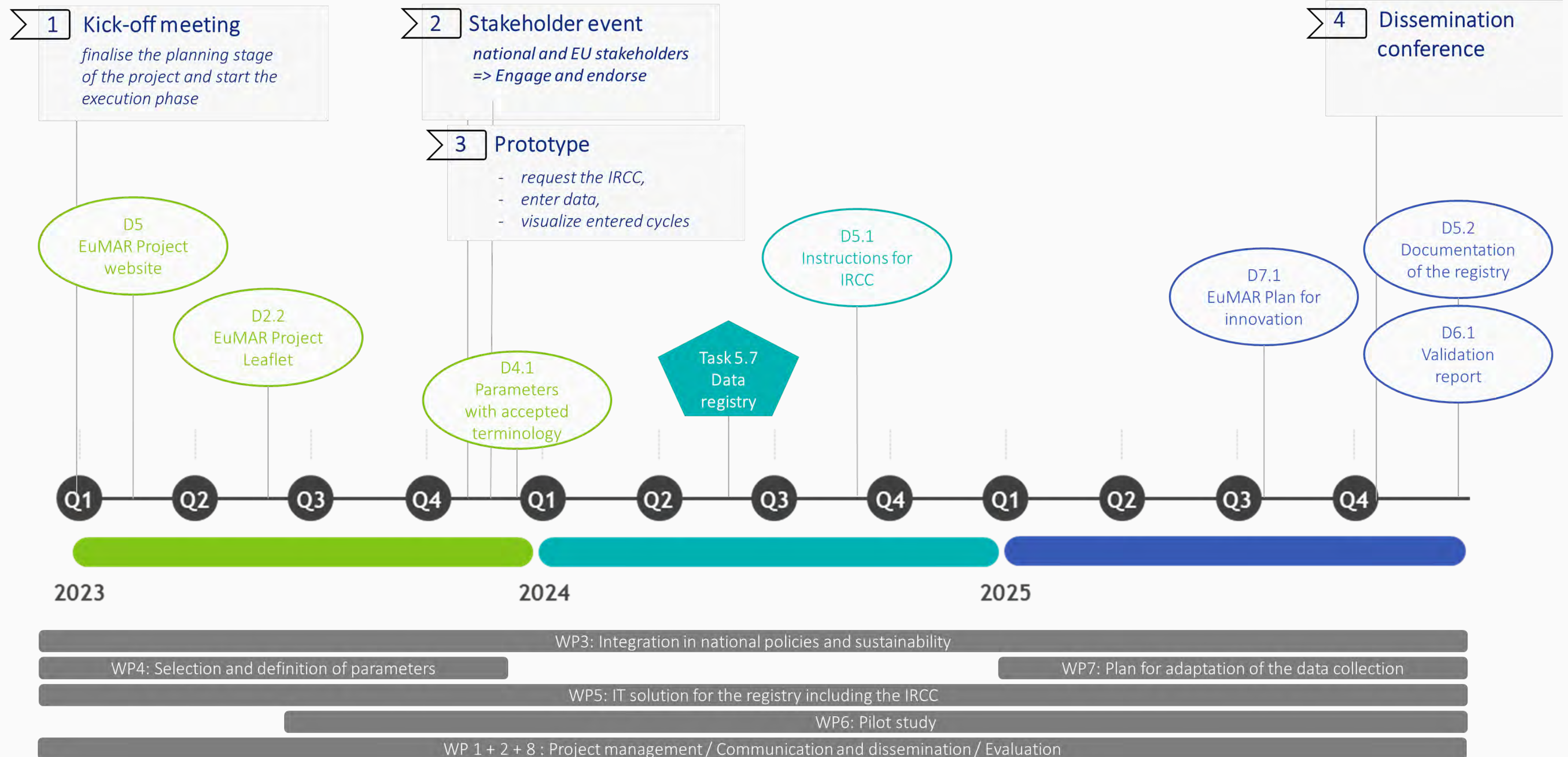
## SO3: Technical solution

Establish a transnational web-based data registry to collect and store cycle-by-cycle and case-based harmonised MAR data, including a unique **Individual Reproductive Care Code (IRCC)** for MAR patients

# The EuMAR project: 8 work packages



# The EuMAR project timeline



# Benefits of EuMAR per stakeholder



Benefit	Stakeholder
<b>Quality assurance</b> Improving performance based on benchmarking (including safety)	Centres
<b>Compliance</b> towards efficient reporting	NCAAs
<b>Outcomes</b> (cumulative including cross-border)	Patients Centres NCAAs EU
<b>Transparency</b> of data Open science	Patients Centres NCAAs Researchers

# Conclusion



**EuMAR is designed for MAR data**

- **acquisition (standardised-centralised)**
- **use**
- **sharing**

**For all stakeholders**



**Thank you!**

[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)  
European Society of Human Reproduction and Embryology



# WP3 - NCA survey results and data flow analysis

M. Cristina Magli



Co-funded by the European Union.

Project: 101079865 — EuMAR — EU4H-2021-PJ2



# WP3 - Integration in national policies and sustainability

## T3.1

Extend existing stakeholder community with national competent authorities and policy makers

## T3.3

Prepare and facilitate national endorsement

## Main objective

Connect with National Competent Authorities and policymakers to prepare the implementation of the EuMAR data registry, gathering their feedback and examining their needs.

## T3.2

Map of current data flows and information requirements at the EU Member States

## T3.4

Write policy recommendations

# WP3 members



Cristina Magli  
WP Leader



Elena Achótegui Sebastián  
Project Support



Susanne Hultsch  
Project Support



Johanna Tassot  
Project Support



Thomas Ebner  
WP3 Member



Edgar Mocanu  
WP3 Member



Anja Pinborg  
WP3 Member



Carlos Plancha  
WP3 Member



Nikolaos Polyzos  
WP3 Member



Ioana Rugescu  
WP3 Member



Thomas Strowitzki  
WP3 Member

# Data flow methodology



## EuMAR survey

Understand the current MAR data collection processes of all EU Member States to develop a platform tailored to the needs of all relevant stakeholders.



## Follow-up calls

Semi-structured interviews to define how EuMAR, as an EU-wide, centralised MAR registry, could be integrated into the national context by establishing data flows per country.

May 2023

October 2023

**Target group:** institutions managing national registries (National Competent Authorities and national professional associations).

# Data flow methodology



## EuMAR survey

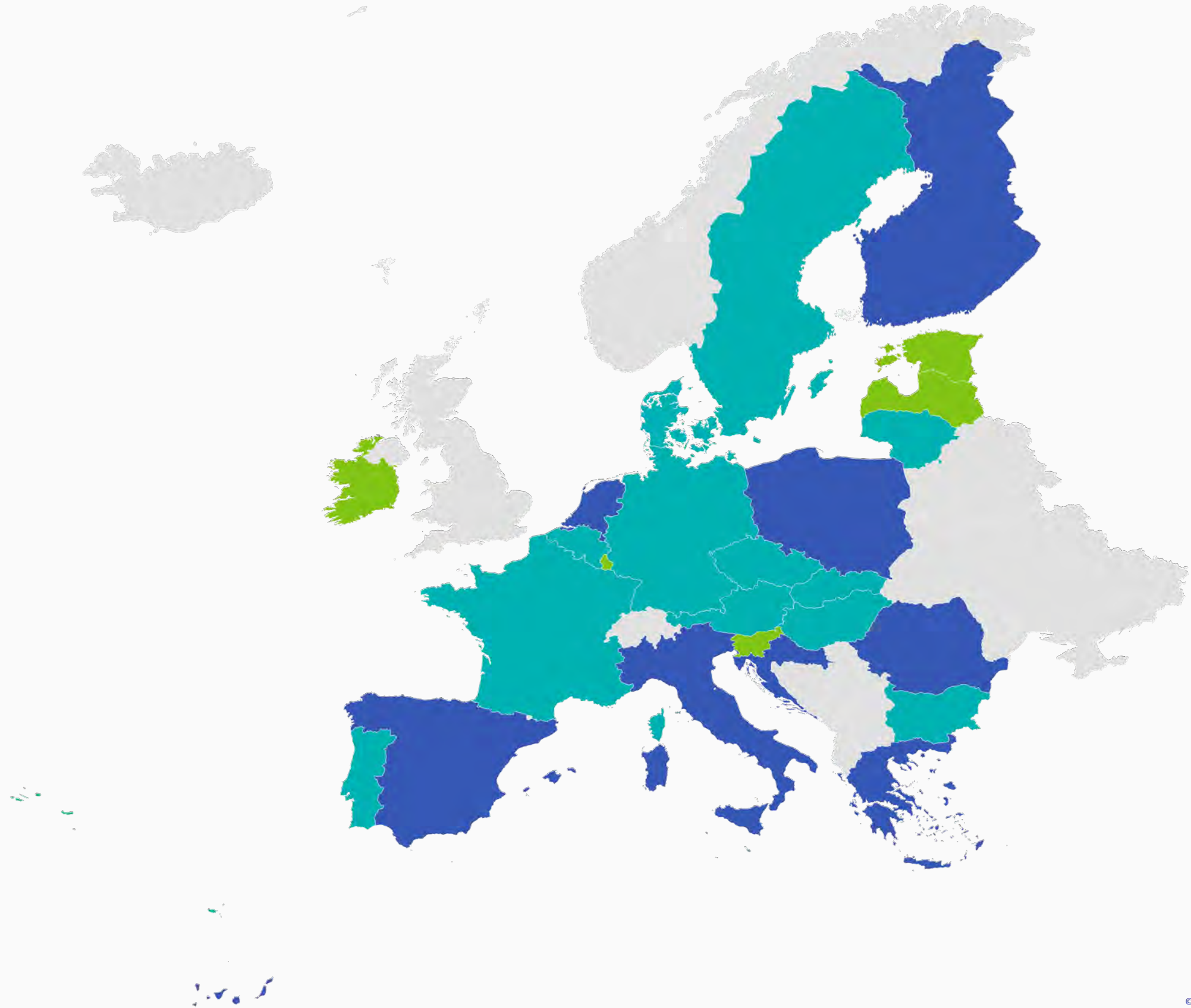
**35** questions in **5** thematic blocks

- General information
- Information on MAR data collection
- Type of data collected
- Legal requirements and data access
- Perception towards EuMAR

**26/27**

Member States **completed** the survey

# Type of data collected per country

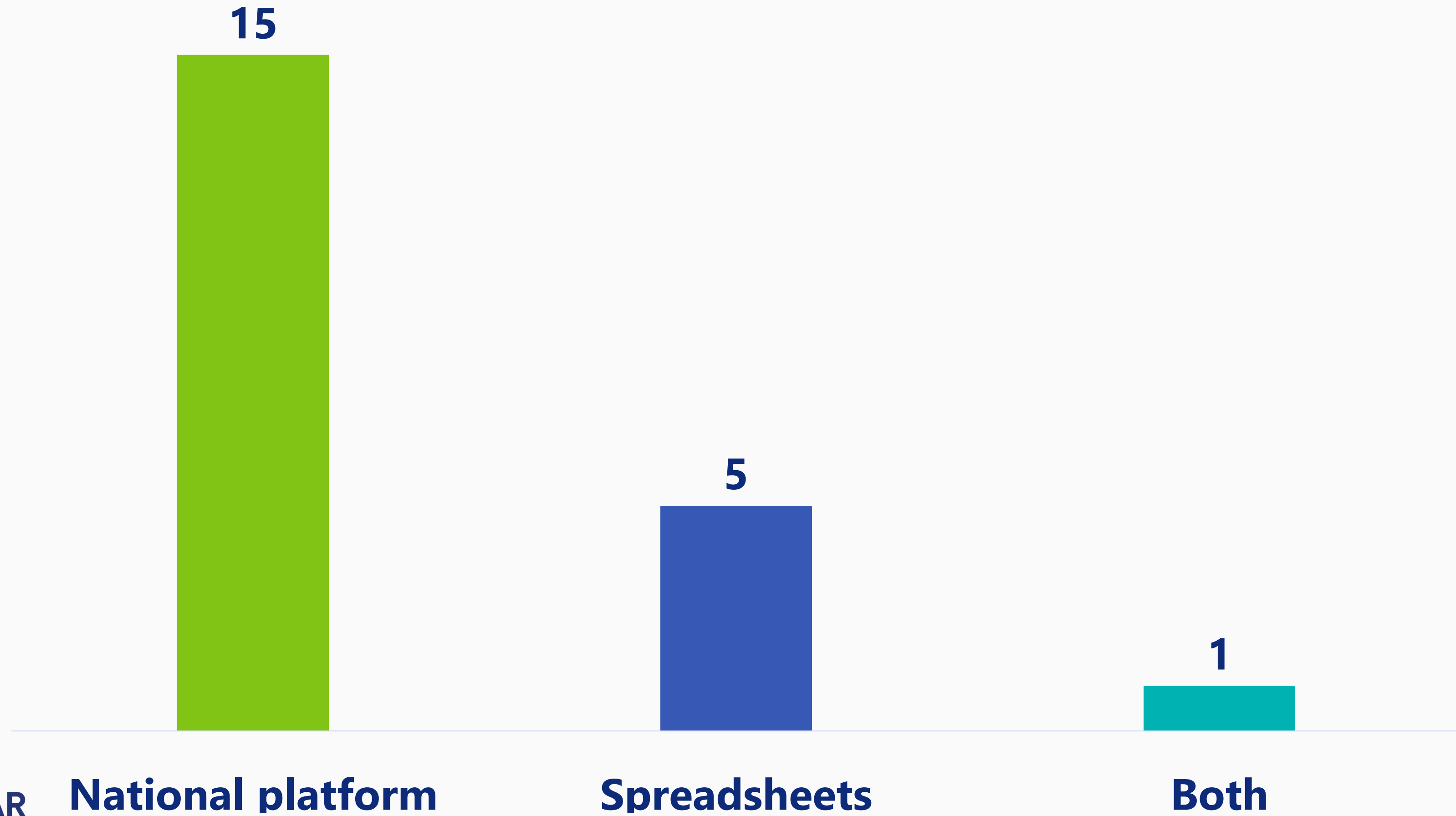


- Cycle by cycle **13**
- Aggregated **8**
- No national registry **5**

# Institutions managing voluntary and mandatory national registries

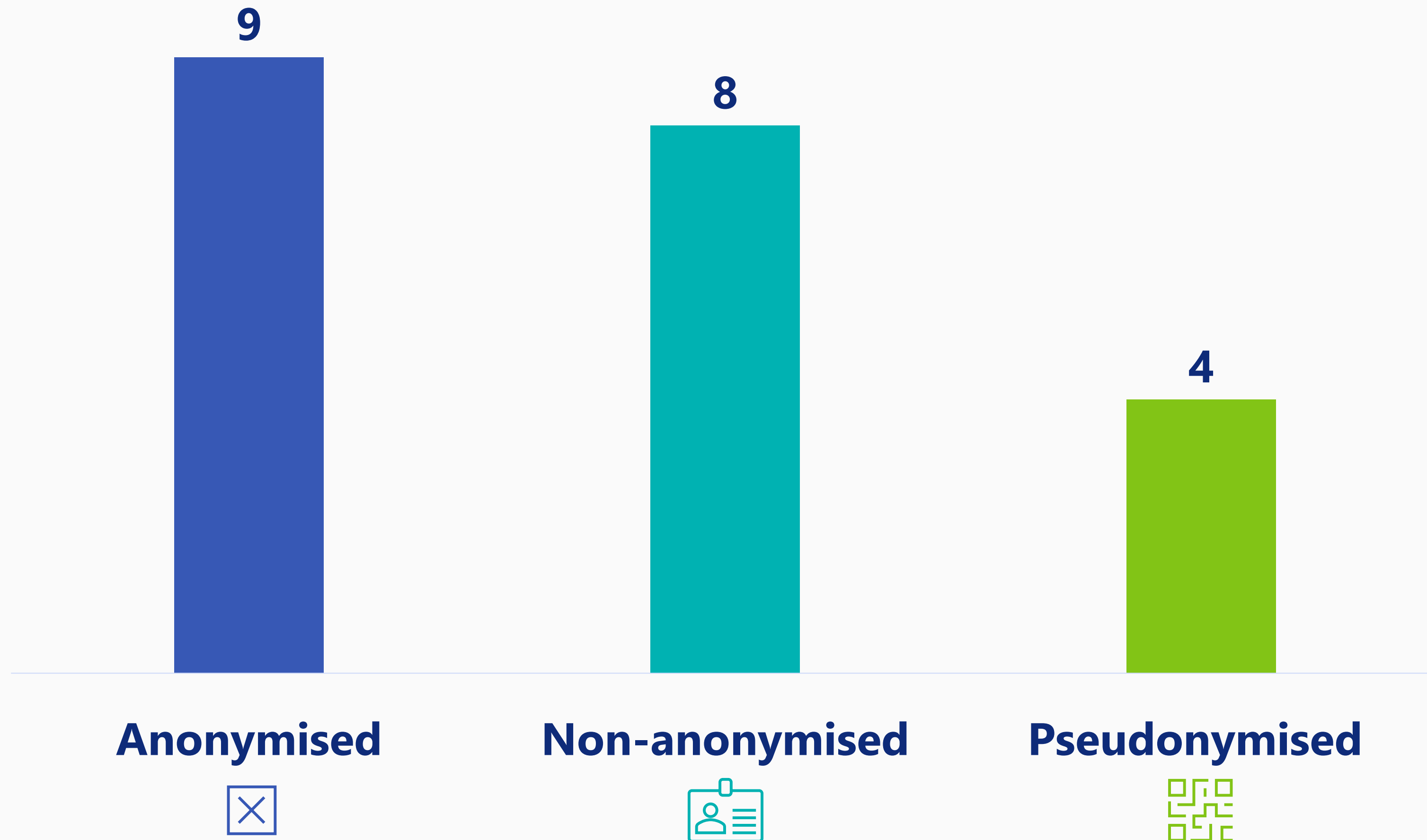


# Tools used to collect MAR activity data





# Level of data protection in national registries



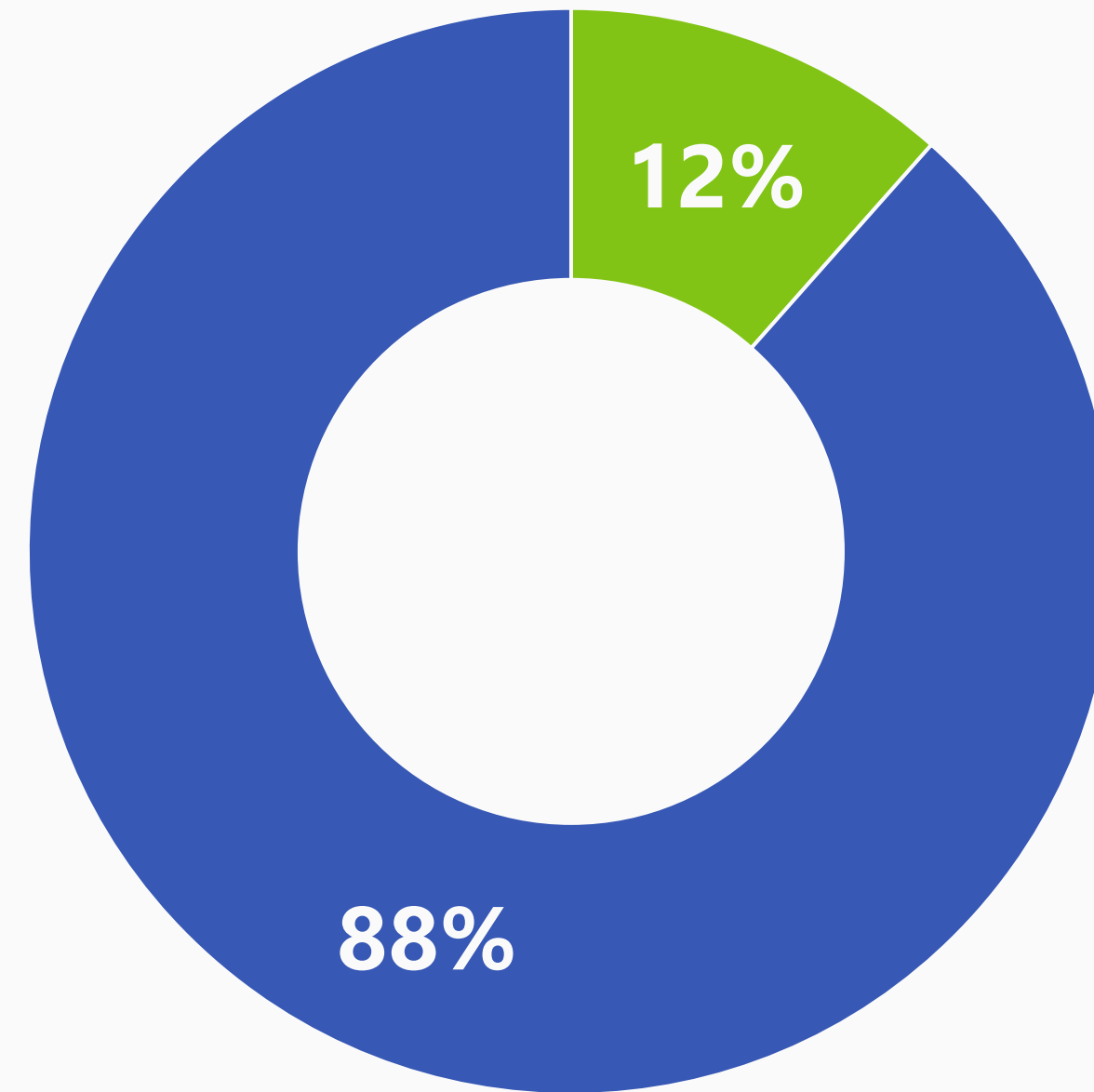
# Countries with a national registry that do not collect but would find cross-border data valuable



■ No answer

■ Would like to collect cross border data

# Perceptions towards EuMAR



- Unable to join
- Interested in the project

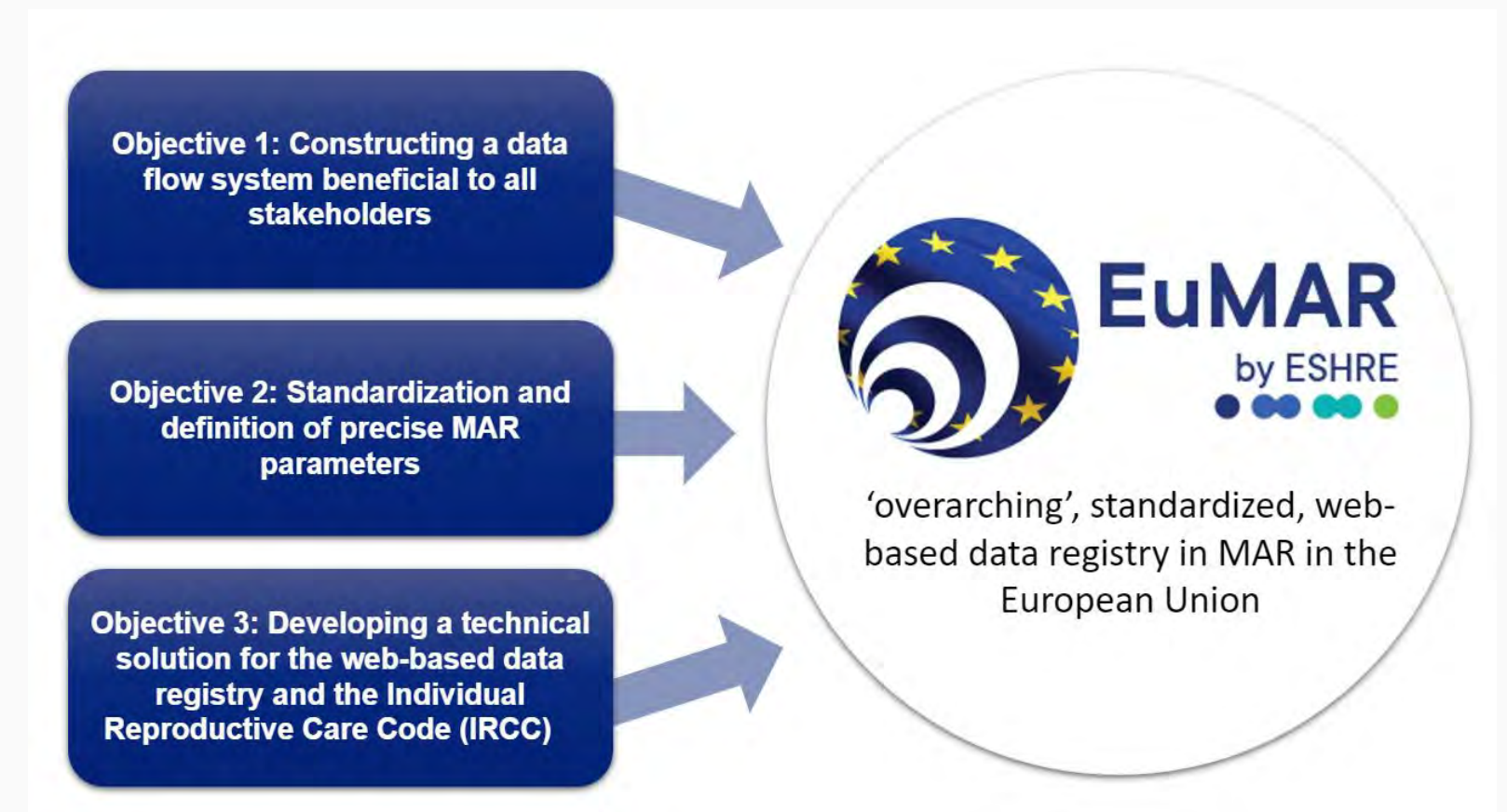
# Data Flow



## Building a data flow system is EuMAR's Objective 1

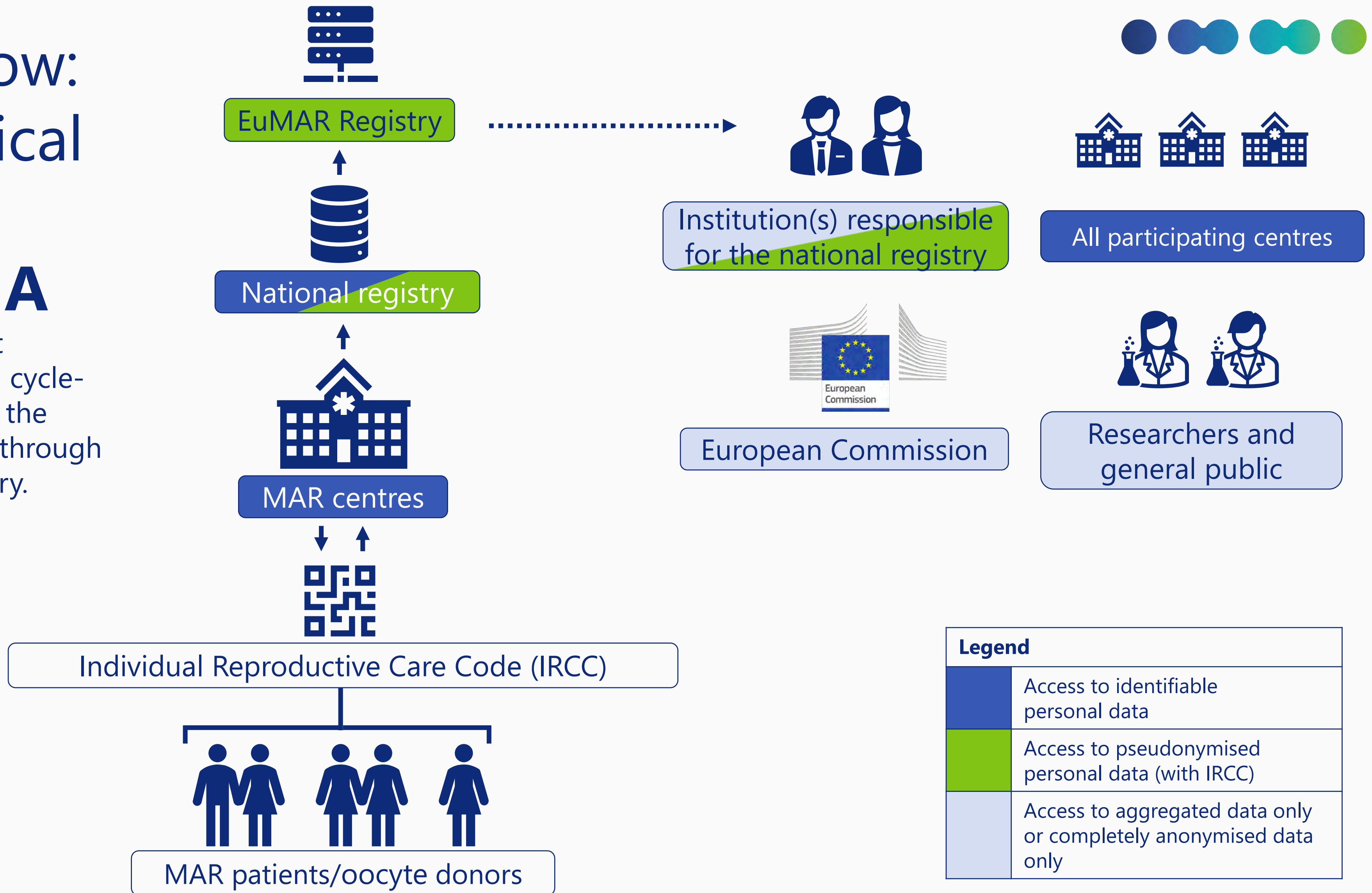
Establishing a model that is compatible with specific country regulations.

Consultations with National Competent Authorities and national professional associations to define the appropriate data flow in each country once the EuMAR registry is adopted.



# Data Flow: theoretical model **option A**

Countries report pseudonymised, cycle-by-cycle data to the EuMAR registry through a national registry.



# Data Flow: theoretical model

## option A

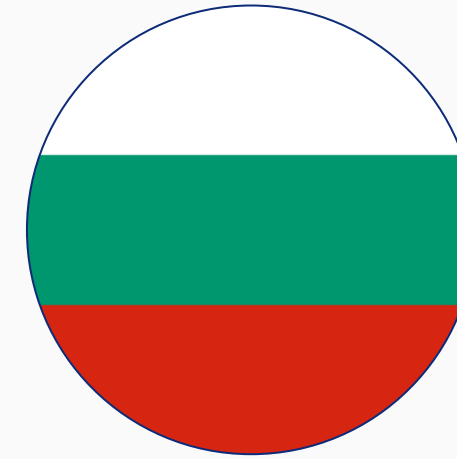
Countries report  
pseudonymised, cycle-  
by-cycle data to the  
EuMAR registry through  
a national registry.



Austria



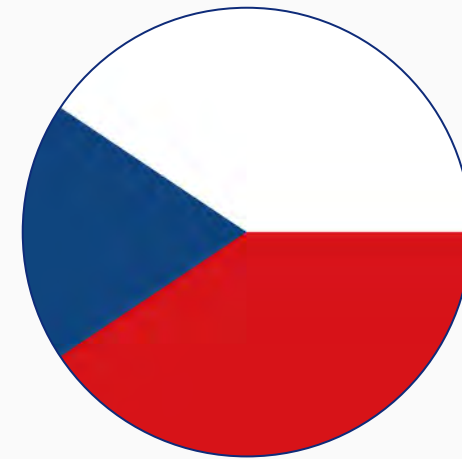
Belgium



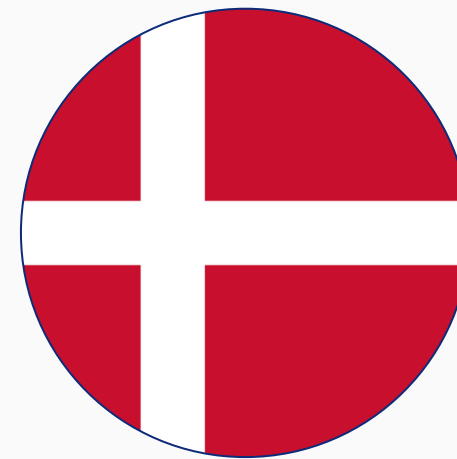
Bulgaria



Croatia



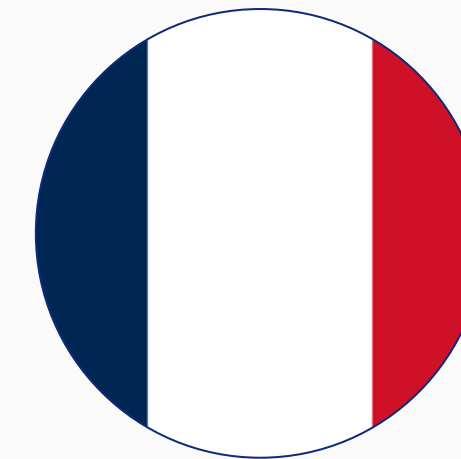
Czech Republic



Denmark



Finland



France



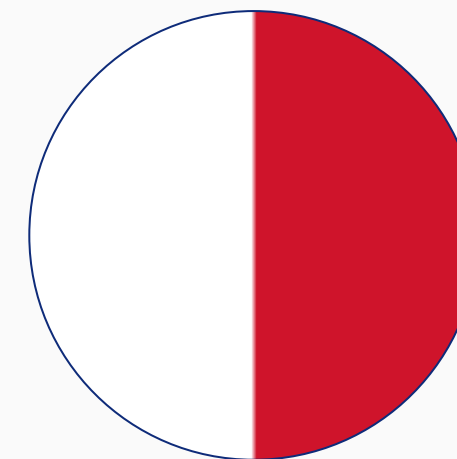
Germany



Hungary



Italy



Malta



Portugal



Slovakia

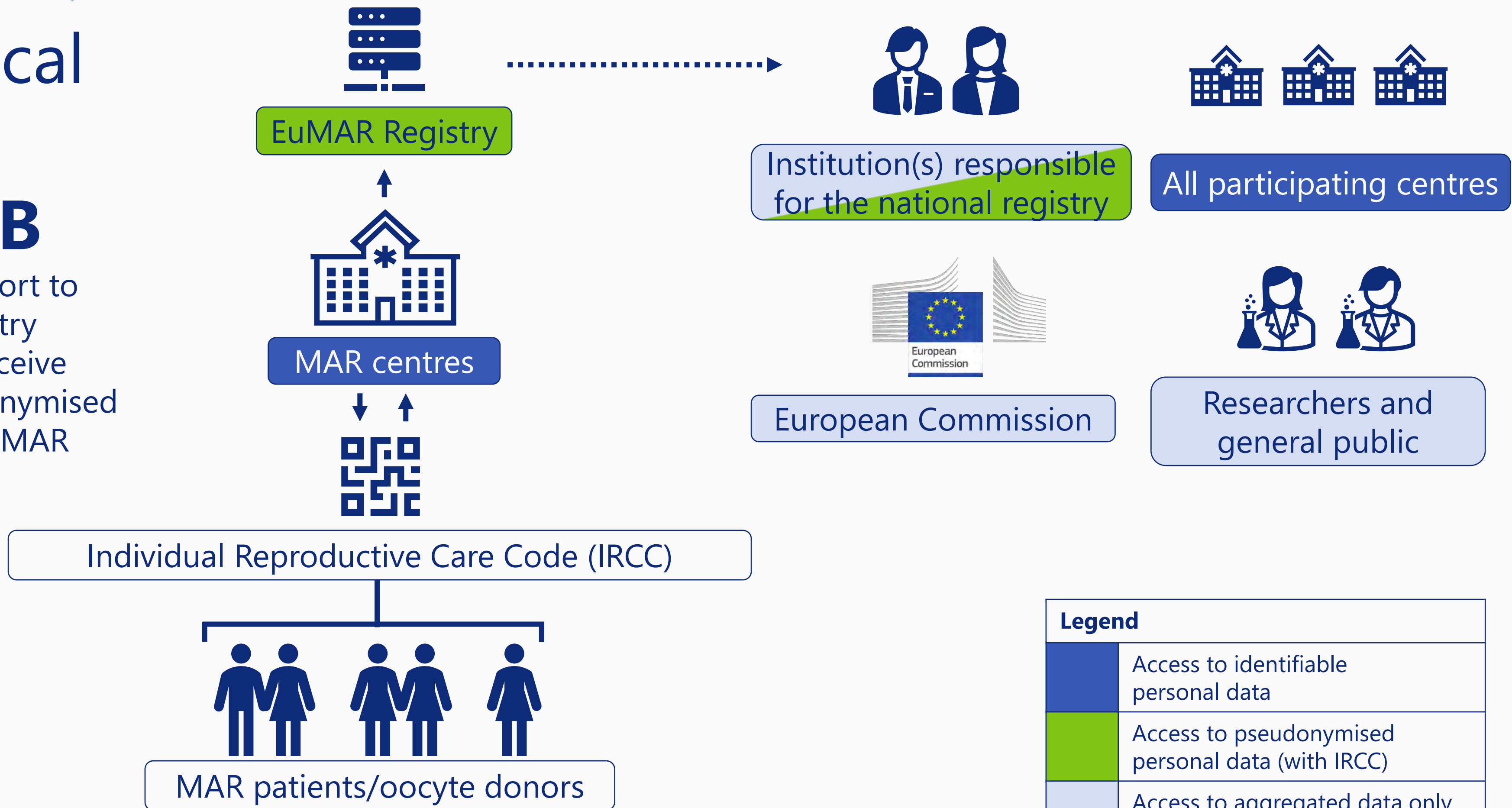


Sweden

# Data Flow: theoretical model

## option B

MAR centres report to the EuMAR registry directly. NCAs receive national, pseudonymised data from the EuMAR registry.

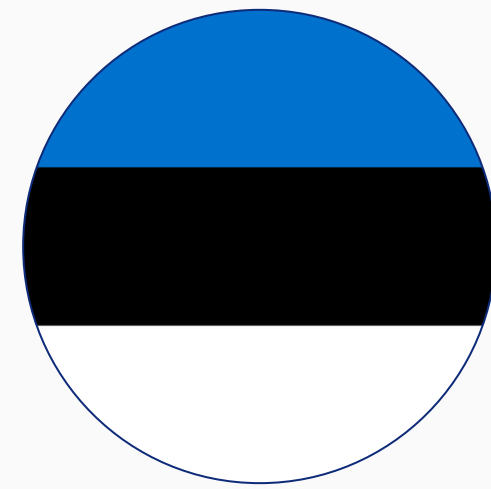
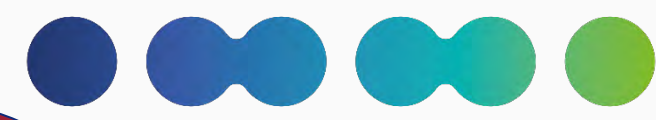


Legend	
	Access to identifiable personal data
	Access to pseudonymised personal data (with IRCC)
	Access to aggregated data only or completely anonymised data only

# Data Flow: theoretical model

## option B

MAR centres report to the EuMAR registry directly. NCAs receive national, pseudonymised data from the EuMAR registry.



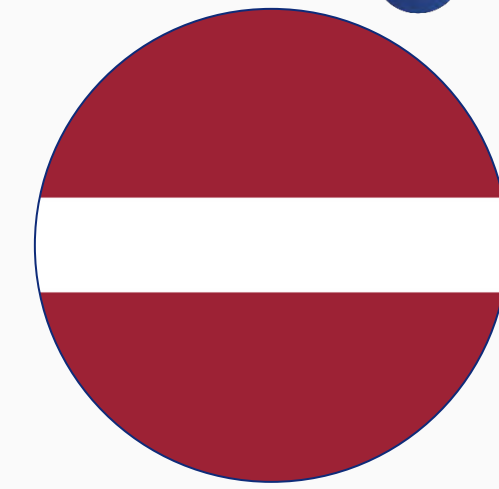
Estonia



Greece



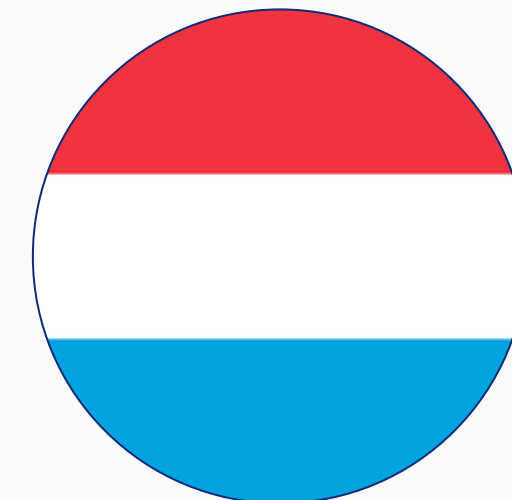
Ireland



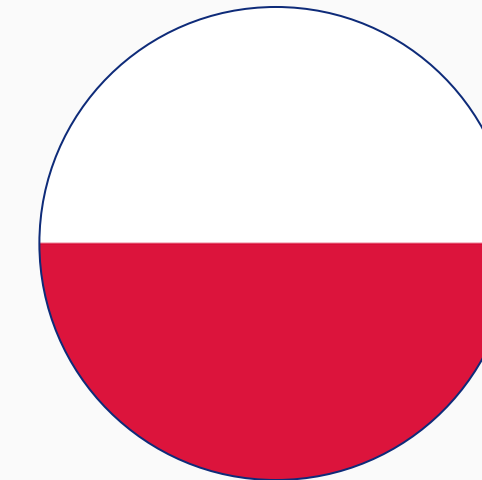
Latvia



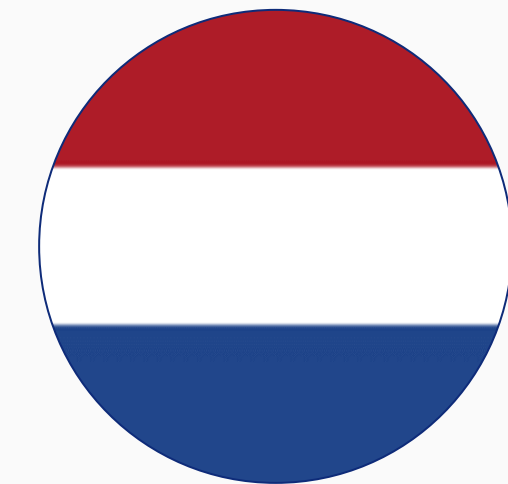
Lithuania



Luxembourg



Poland



Netherlands



Romania



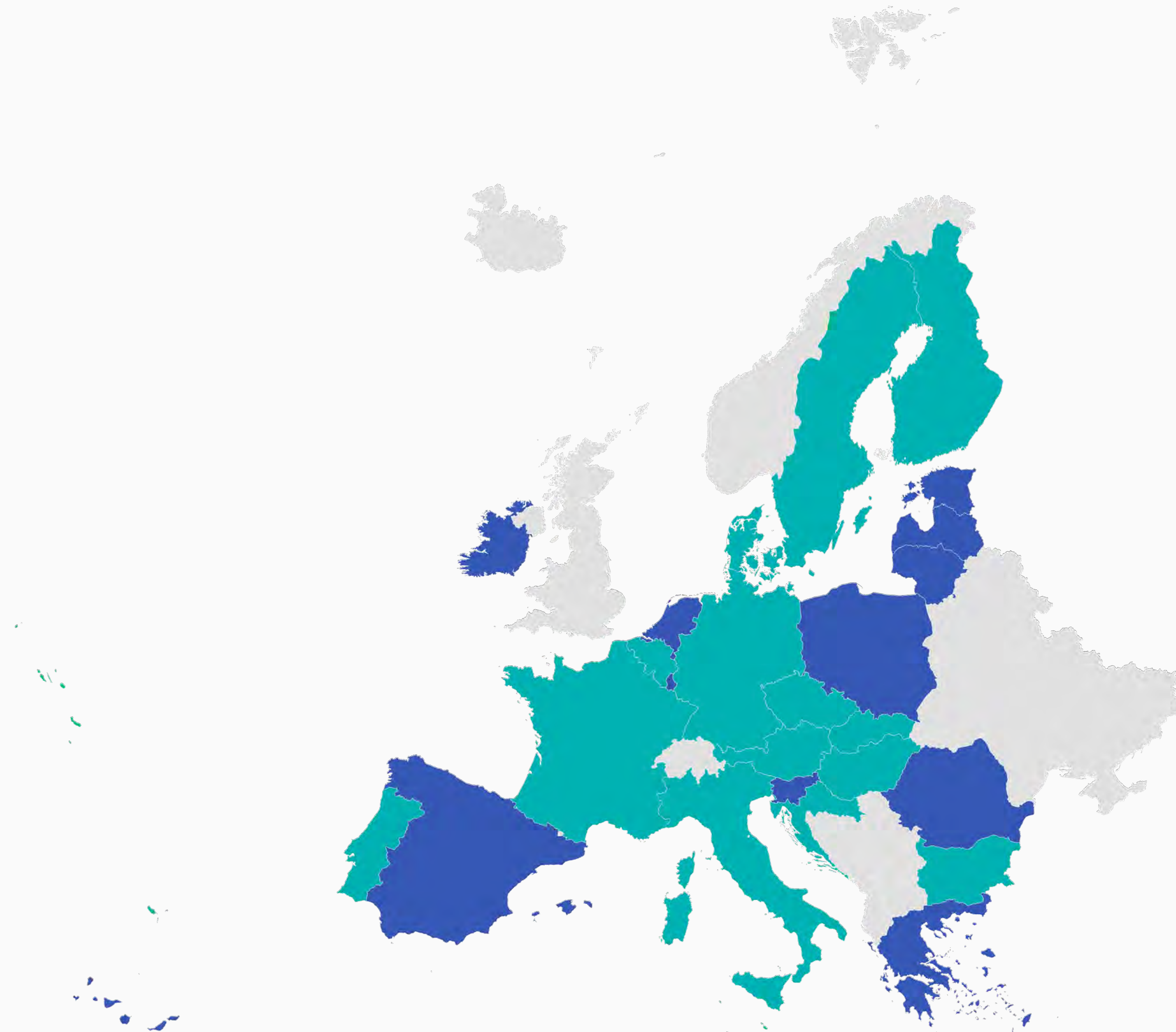
Slovenia



Spain



# Data Flow: theoretical model **Option A and option B countries**



- Option A
- Option B

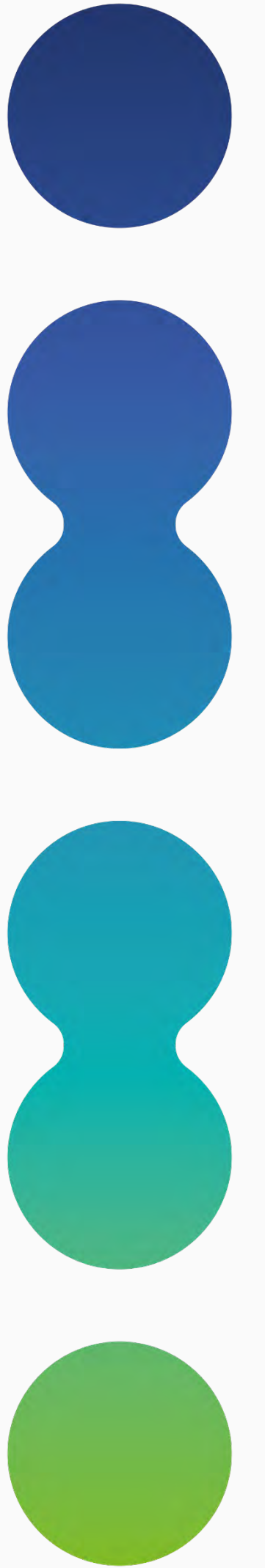


**Thank you!**

[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)  
European Society of Human Reproduction and Embryology

# Work package 4 – Parameters and definitions

Jesper Smeenk



# WP4 members



Veerle Goossens  
Project Support  
Belgium



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WP Leader  
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Susanne Hultsch  
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Nathalie Vermeulen  
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Christina Bergh  
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Mika Gissler  
WP4 Member  
Finland



Borut Kovacic  
WP4 Member  
Slovenia



Roberto De Luca  
WP4 Member  
Italy

# WP4 : Selection and definition of parameters

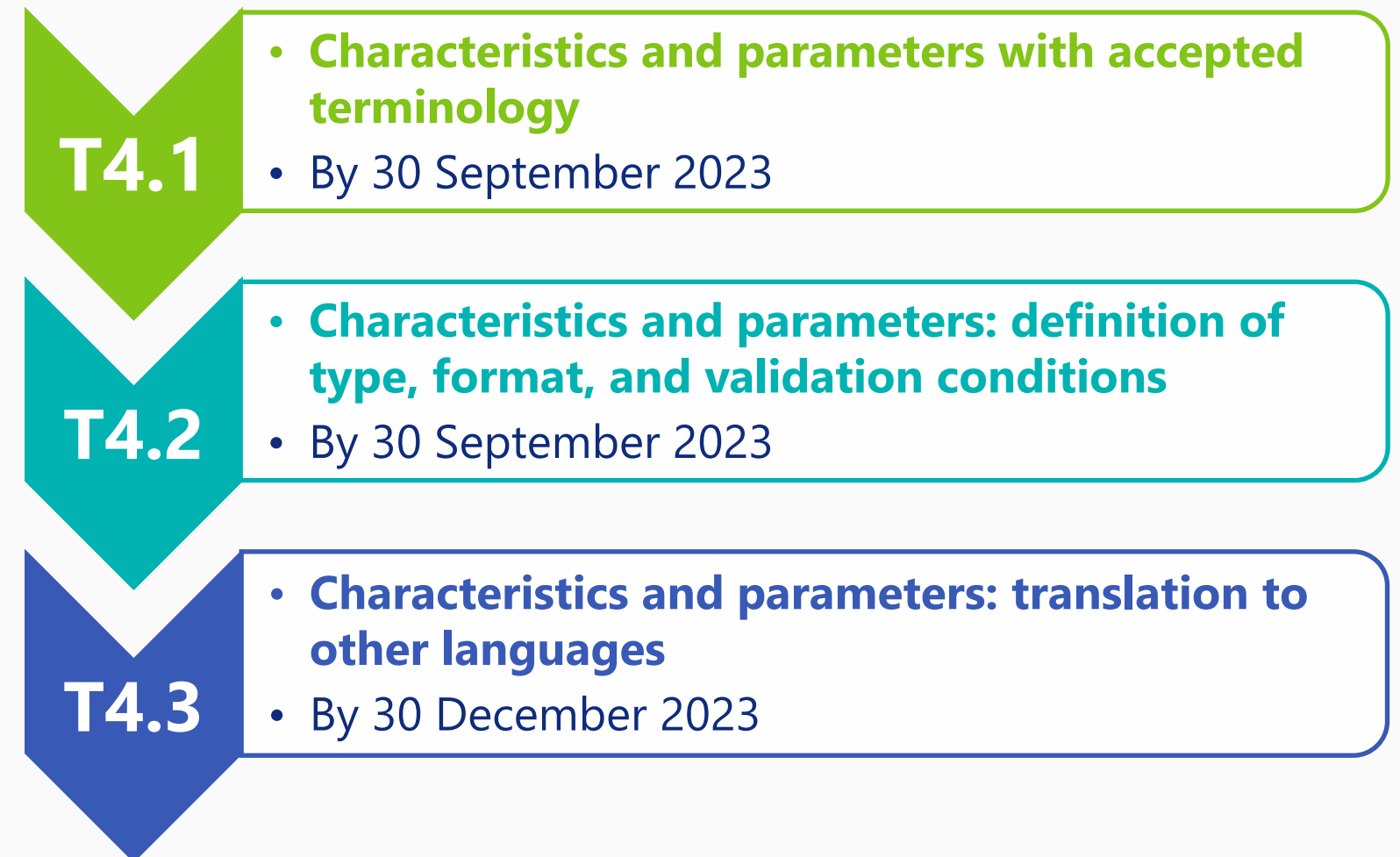
## Aims

- Identify and define relevant MAR parameters, including fertility preservation (Objective 1)

## Specific aims

- To identify relevant items to be registered taking into account the different stakeholders (tissue establishments, country, and EU competent authorities ensuring surveillance and biovigilance, patients/donors).
- To create a glossary of standardised definitions in order to ensure proper data harmonisation.

## Tasks



# WP4 : Selection and definition of parameters

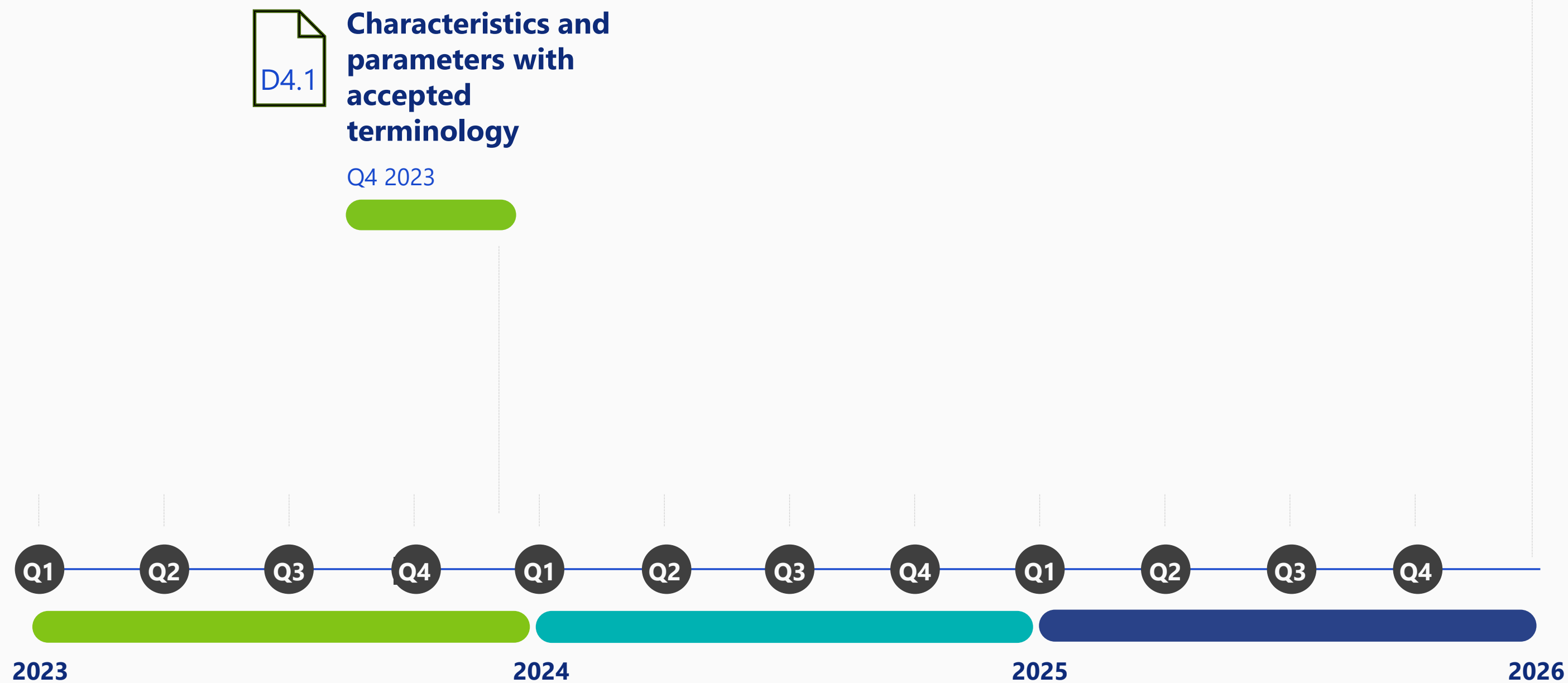


M1-M12

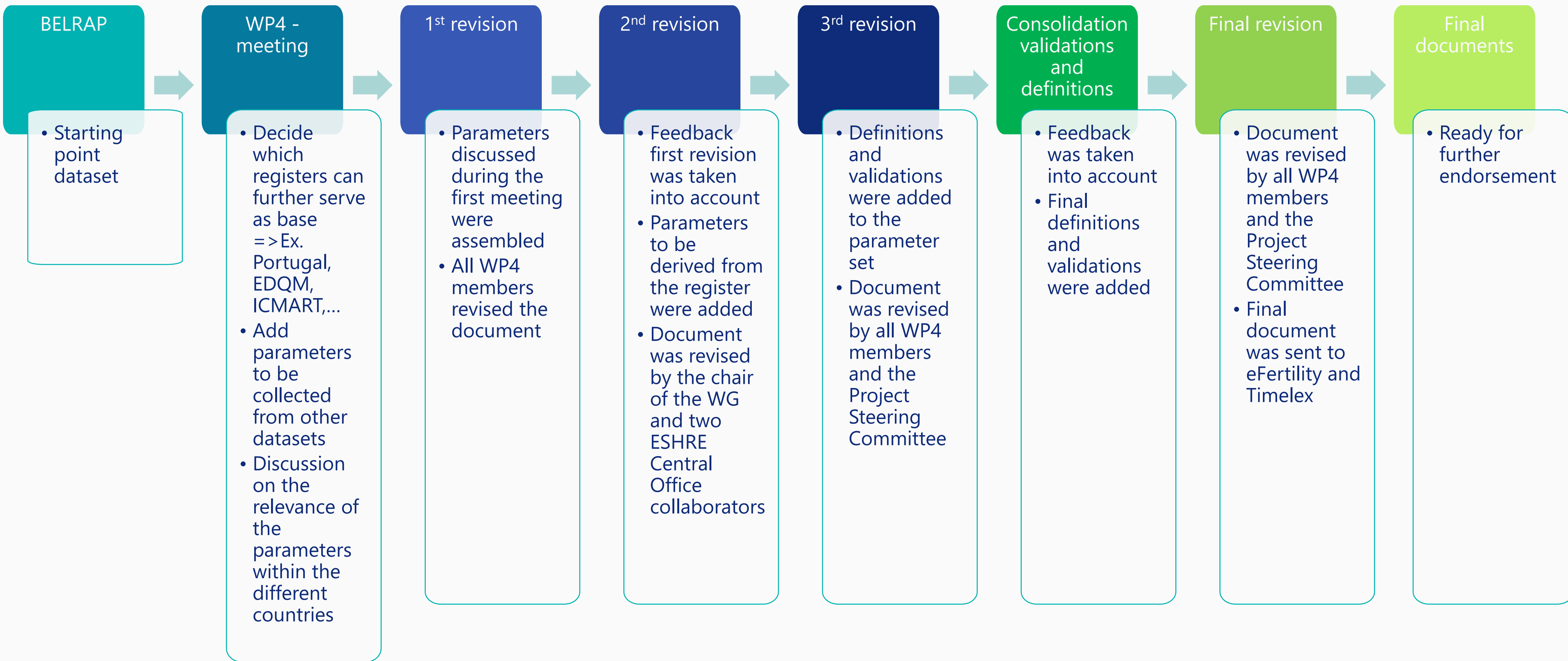
## Milestones

### Deliverables

D4.1 - Characteristics and parameters with accepted terminology



# Decision making - timeline



# Parameters – set-up

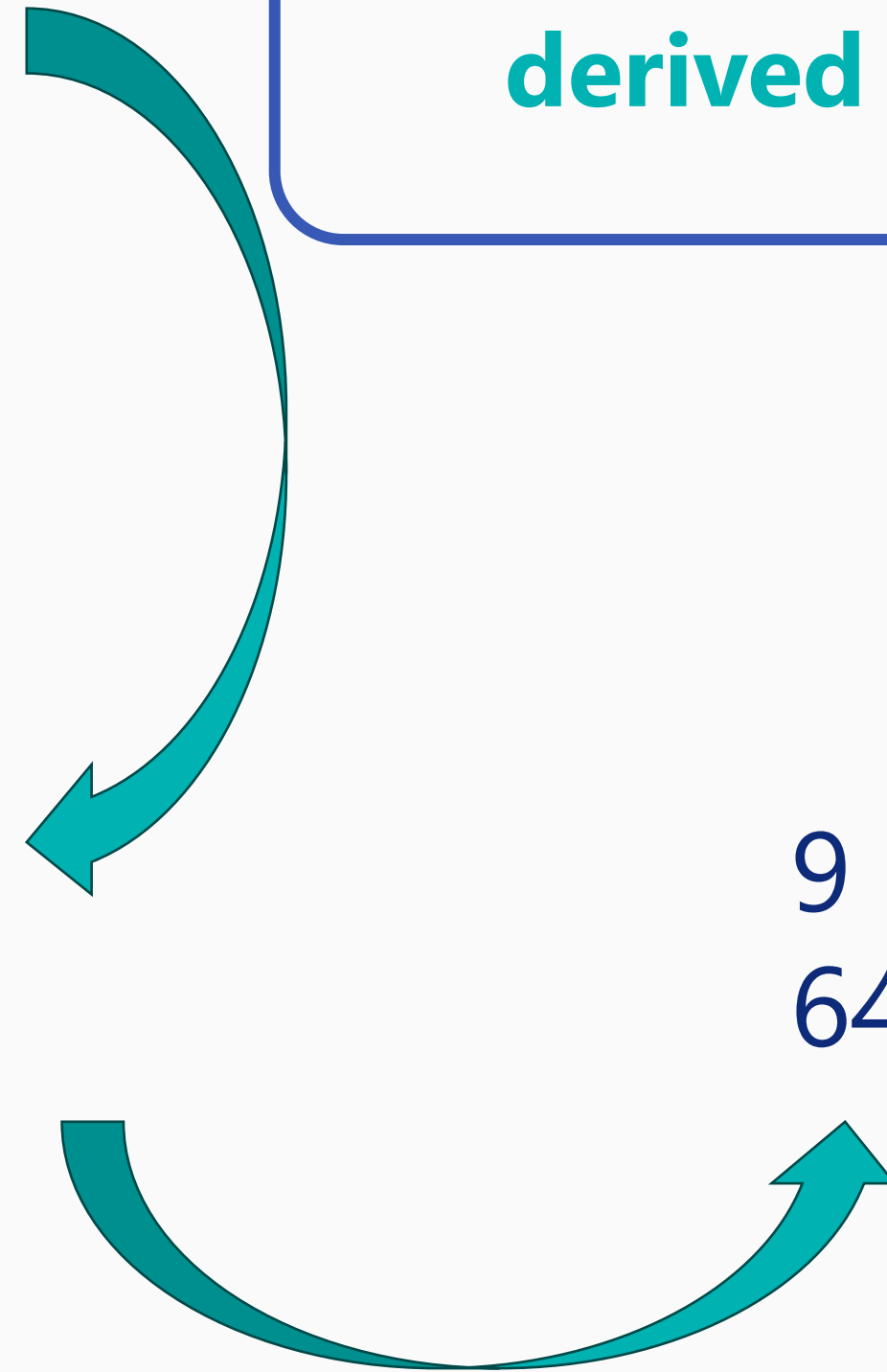


## Part 1: Parameters to be included in the register

- Module 1 – Identification
- Module 2 – Patient variables
- Module 3 – Cycles with ovarian stimulation
- Module 4 – Laboratory data
- Module 5 – Embryo transfer
- Module 6 – Complications during pregnancy
- Module 7 – Pregnancy and outcome
- Module 8 – IUI
- Module 9 – Fertility preservation

## Part 2: Parameters to be derived from the register

9 Modules  
64 Parameters





# 9 Different modules: 1-2-3



## **Module 1 - Identification**

1. EuMAR IRCC
2. Cycle identification

## **Module 2 – Patient variables**

3. Country of current residence
4. Female Date of Birth
5. Female Body Mass Index (BMI)
6. Female current smoking status
7. Male Date of Birth
8. Male Body Mass Index (BMI)
9. Male current smoking status
10. Indication for treatment

## **Module 3 – Cycles with ovarian stimulation**

11. Ovarian stimulation
12. Date of start cycle
13. Treatment Protocol
14. Cancellation prior to Ovum Pick Up (OPU)
15. OPU Cancellation cause
16. Date of ovum pick-up
17. N of cumulus oocytes retrieved
18. In-vitro maturation (IVM)
19. Number of oocytes cryopreserved
20. Reasons for oocyte cryopreservation
21. Number of oocytes donated

# 9 Different modules: 4-5



## **Module 4 – Laboratory data**

22. Source of sperm
23. Source of oocytes
24. Date of insemination
25. Insemination technique
26. N of oocytes inseminated (IVF)
27. N of oocytes injected (ICSI)
28. N of 2 pronuclei (2pn) – IVF
29. N of 2pn – ICSI
30. N of embryos developed (IVF and ICSI)
31. Total N of embryos cryopreserved
32. Optional: N of cleavage stage embryos cryopreserved
33. Optional: N of blastocysts cryopreserved
34. Reasons for embryo cryopreservation
35. Pre-implantation Genetic Testing

## **Module 5 – Embryo transfer**

36. Embryo transfer
37. Embryo transfer with:  
Use of fresh embryos
38. Date of embryo transfer
39. Number of cleavage stage embryos transferred
40. Number of blastocysts transferred.
41. Embryo Transfer Outcome  
Use of frozen embryos
42. Date of thawing
43. Frozen embryo transfer protocol (FET)
44. Embryo Transfer
45. Date of embryo transfer (link to OPU if available)
46. Number of cleavage stage embryos transferred
47. Number of blastocysts transferred
48. Embryo Transfer Outcome
49. Cause of no embryo transfer

# 9 Different modules: 6-7-8-9



## **Module 6 – Complications during pregnancy**

- 50. Complications
- 51. Causes

## **Module 7 – Pregnancy and outcome**

- 52. Highest number of intra-uterine gestational sacs on ultrasound scan
- 53. Details of twin pregnancy
- 54. Fetal reductions
- 55. Pregnancy outcome
- 56. Date of delivery
- 57. N of children born
- 58. of stillbirths
  - Liveborn Child 1
  - 59. Sex
  - 60. Birth weight
  - 61. Neonatal outcome
  - 62. Neonatal malformations
- Questions for every liveborn child
- Child 2/3

## **Module 8 - IUI**

Parameters 4/5/6/7/9/18/19/20/21/

- . Indications
- . Age male/female
- . BMI/smoking
- . Stimulation
- . Own/donor sperm

Link to complications and pregnancy

## **Module 9 – Fertility preservation**

- 63. Method of fertility preservation
- 64. Reason for fertility preservation

# Details parameters



## Module 2 – Patient variables

### 1. Country of current residence

Validation cell: drop down list

Validation crosslink: /

Definition:

Residence: The place where one actually lives, which may be different from one's domicile.

(<https://www.law.cornell.edu/wex/residence#:~:text=1.,to%20residents%20of%20the%20state.>)

### 2. Indication for treatment

#### a. Female

- a. Unexplained infertility
- b. Tubal pathology
- c. Ovulatory disorder
- d. Endometriosis
- e. Psychosexual (can be an indication for IUI and occasionally IVF)
- f. Premature Ovarian Insufficiency (POI)/oocyte issue (these are women who need donor eggs)
- g. Uterine absence or dysfunction (female who needs surrogacy)
- h. Medical contraindication to pregnancy (surrogacy for medical disorders)
- i. Other

#### a. Male

- a. Unexplained
- b. Sperm factor
- c. Psychosexual (can be an indication for IUI and occasionally IVF)
- d. Other

#### a. Relationship status

- a. No male partner (same-sex and single women)
- b. No female partner (same-sex and single males)

#### a. Genetic reasons

- a. Genetic disorder (Need Preimplantation Genetic Testing - PGT)

## Module 2 – Patient variables

Validation cell: tick boxes, multiple options possible on the different levels

Validation crosslink: Depending on whether you tick Female/male/... different list of options appears  
Combinations possible (eg female + male or male + genetic reason,...)

Definitions:

*Unexplained infertility:* Infertility in couples with apparently normal ovarian function, Fallopian tubes, uterus, cervix and pelvis and with adequate coital frequency; and apparently normal testicular function, genito-urinary anatomy and a normal ejaculate. The potential for this diagnosis is dependent upon the methodologies used and/ or those methodologies available (IG)

*Tubal pathology:* Tubal abnormality resulting in dysfunction of the Fallopian tube, including partial or total obstruction of one or both tubes (proximally, distally or combined), hydrosalpinx and/or peri-tubal and/or peri-ovarian adhesions affecting the normal ovum pick-up function. It usually occurs after pelvic inflammatory disease or pelvic surgery. Tubal disease due to endometrial adhesions is classed as endometriosis. (IG)

*Ovulatory disorder:* a group of disorders in which ovulation fails to occur or occurs on an infrequent or irregular basis. Ovulatory disorders are one of the leading causes of infertility.

[Shadygrovefertility.com/infertility-causes/ovulatory-disorder](https://shadygrovefertility.com/infertility-causes/ovulatory-disorder)  
[PCOS guideline ?](#)

*Endometriosis:* A disease characterized by the presence of endometrium-like epithelium and stroma outside the endometrium and myometrium. Intrapelvic endometriosis can be located superficially on the peritoneum (peritoneal endometriosis), can extend 5 mm or more beneath the peritoneum (deep endometriosis) or can be present as an ovarian endometriotic cyst (endometrioma) (IG)

[Guidelines](#)

*Premature Ovarian Insufficiency (POI):* A condition characterized by hypergonadotropic hypogonadism in women younger than age 40 years (also known as premature or primary ovarian failure). It includes women with premature menopause.

Uterine absence or dysfunction (female who needs surrogacy - males needing surrogacy): congenital anomalies, adenomyosis

Medical contraindication to pregnancy (surrogacy for medical disorders eg severe renal disease, heart disease, Turner syndrome, ...):

Genetic disorder (Need PGT): An inherited medical condition caused by a DNA abnormality.

Surrogacy: gestational carrier

# Parameters – set-up



**Part 2: Parameters to be derived from the register**

**Part 2: Number of Parameters**

25 parameters

Totals

Timeframes

Rates

Cumulative rates



# of treated individuals	# of individual persons that had at least one treatment cycle intervention (IUI, IVF/ICSI and/or FET) completed
Age of the individual	Date of start cycle minus date of birth
# of couples that had at least one treatment cycle intervention (IUI, IVF/ICSI and/or FET) completed	# of couples that had at least one treatment cycle intervention (IUI, IVF/ICSI and/or FET) completed
# of treatment cycles without stimulation	# of cycles without ovarian stimulation (includes hormone substituted cycles) that ended up with one of the interventions
Cumulative pregnancy rate	The number of oocyte retrievals resulting in at least 1 clinical pregnancy within 1 year of the oocyte retrieval cycle divided by the total number of oocyte retrieval cycles that had at least 1 fresh or frozen embryo transfer.



**Thank you!**

**[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)**  
European Society of Human Reproduction and Embryology

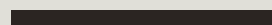
ESHRE EuMAR Stakeholder Event

Brussels, 5 December 2023

# On Perspectives: Revealing EuMAR

EuMAR's Potential to Create Value for Patients

Bojana Santic, Croatia



# On Perspectives: Revealing EuMAR





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More than 25 million citizens

1 in 6

Up to 10% of children

# Your story

# My story

# Access to treatment vs. practice





---

## Anonymous donation vs. child rights

“The needs and life goals of potential and intended parents should be acknowledged and accommodated in a broad interdisciplinary aspect of medical and socio-economic care.”

# THE IMPERATIVE OF EQUAL ACCESS TO FERTILITY TREATMENTS ACROSS EUROPE

Fertility Europe and the European Parliamentary Forum  
for Sexual and Reproductive Rights White Paper

BRUSSELS, JUNE 2023

## 12 recommendations for European policymakers

1. Creating safe and inclusive regulations considering the rights of all parties
3. Establishing and maintaining a legal obligation for EBM treatments
12. Creating a central and mandatory European register



---

Disclosing success rates,  
costs, and potential risks fosters  
a culture of transparency



# EuMAR

Transparency

Standardisation

Patient-center approach



# Recommendation 1

## Creating Safe and Inclusive Regulations

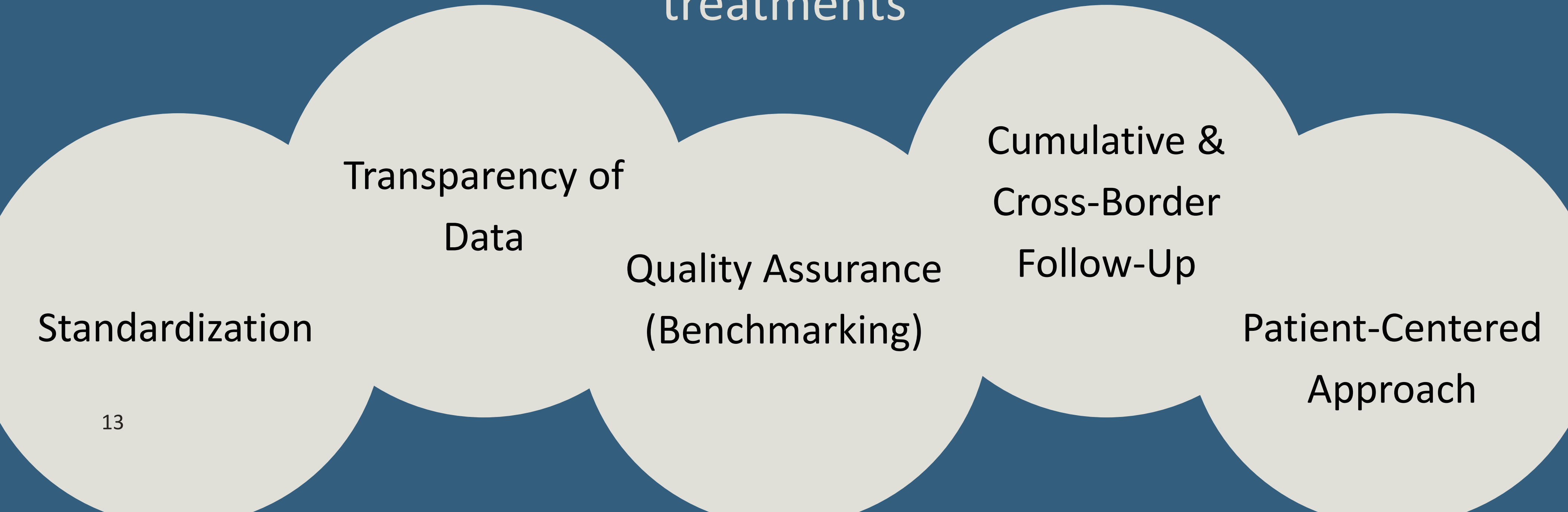
Cumulative &  
Cross-Border  
Follow-Up

Transparency of  
Data



## Recommendation 3

Establishing and maintaining a legal obligation for EBM treatments



## Recommendation 12

# Creating a Central and Mandatory European Register



“A view from outside”



EuMAR aims to bring transparency, standardisation, and a patient-centered approach to the European landscape of medically assisted reproduction

On Perspectives: Revealing EuMAR

EuMAR's Potential to Create Value for Patients

Brussels, 5 December 2023

Thank you

[bojana.sf@roda.hr](mailto:bojana.sf@roda.hr)

[roda.hr](https://roda.hr)

Photo courtesy of: Pexels, Pixabay, private album

# GDPR CONSIDERATIONS FOR EUMAR (HEALTH DATA REGISTRIES)

EuMAR Stakeholder event

5 December 2023

Ruben Roex & Jolien Clemens



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# LEADING BELGIAN NICHE LAW FIRM

Information  
technology

Privacy & data  
protection

Intellectual  
property

Media &  
entertainment

Policy &  
legislation

Research &  
innovation

## Sources say:

*“High marks for expertise and prompt, well-executed work.”*

*“In data protection, I doubt that there are other firms more aware of the key compliance and regulatory issues than this firm.”*

*“This TMT boutique is highly praised for its IT and data protection expertise.”*



# PERSONAL DATA IN EUMAR?

Question: can the IRCC be considered personal data?

# IRCC IN EUMAR

- Data collected in EuMAR is registered using **an Individual Reproductive Care Code (IRCC)**
  - Patient is not identifiable in EuMAR
  - The code used in EuMAR differs from the IRCC that the national registry and/or MAR centre uses to register cycle data
  - The EuMAR registry does not save any data that would make it possible to identify the patient

# THE CONCEPT OF PERSONAL DATA IN THE GDPR

- **Personal data (article 3 GDPR):** information relating to an identified or identifiable person
  - So, also data that relates *indirectly* to a person
- **Possibility of identification (recital 26 GDPR):** you must take into account all means that can be reasonably used by the controller or by another person to identify the person directly or indirectly
  - The question is whether any party may be able to identify the person
- **Extremely broad definition**



# DEFINITION OF PERSONAL DATA IN CASE LAW OF COURT OF JUSTICE

- Previous case law

## Nowak case

personal data is 'personal' if by means of their content, purpose or effect it can be linked to an identifiable natural person

## Breyer case

IP-address is considered personal data for a website owner if it has legal means to access identifying data from the internet service provider (ISP) → the identifiable information was held by a third party

# NEW APPROACH IN CASE LAW OF THE COURT OF JUSTICE (2)

## EDPS v. SRB case

- Facts
  - **The Single Resolution Board (SRB)** adopted a resolution scheme for Banco Popular Espanol
  - The affected shareholder could provide comments on this resolution scheme
  - **Phase 1 of feedback:** registration via online registration form (including proof of identity and ownership of capital instruments)
  - **Phase 2 of feedback:** unique link to an online form containing questions
  - Submitted forms linked to an alphanumeric code
  - **Deloitte** was used as external valuer → did not receive the information to link the comments to the individual
- Question: does the information that was provided to Deloitte constitute personal data?

# NEW APPROACH IN CASE LAW OF THE COURT OF JUSTICE (3)

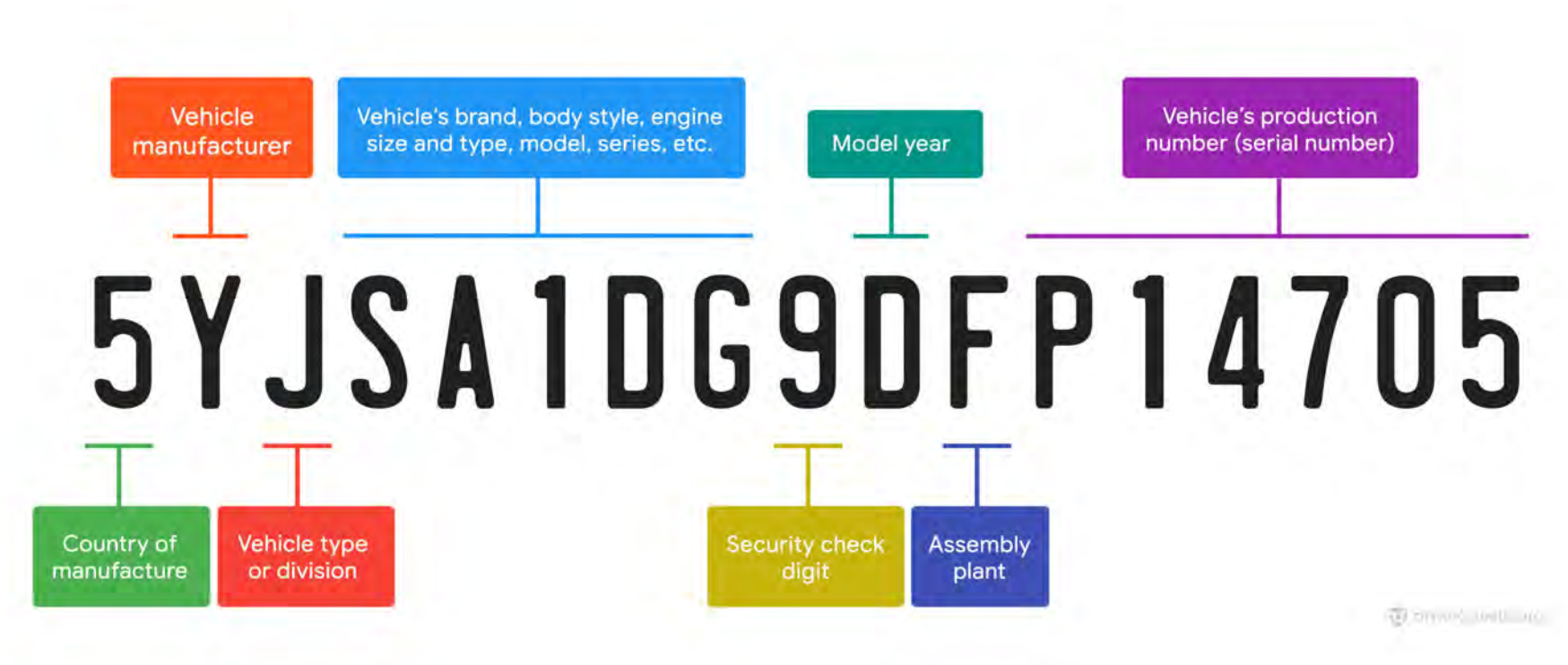
## EDPS v. SRB case

- Findings of the ECJ:
  - The assessment of the identifiability should be done from *the perspective of the data recipient* (in this case = Deloitte)
  - It should be assessed whether Deloitte had any legal means to get the additional information held by SRB to re-identify the data subjects

# NEW APPROACH IN CASE LAW OF THE COURT OF JUSTICE (4)

## Gesamtverband Autoteile-Handel V. Scania

- Facts:
  - Vehicle manufactures must provide certain vehicle data to other market players based on a legal obligation in EU law
  - **Vehicle Identification Number (VIN):** related to anyone who owns or drives the respective vehicle
- Question: does the VIN qualify as personal data?





# NEW APPROACH IN CASE LAW OF THE COURT OF JUSTICE (5)

## Gesamtverband Autoteile-Handel V. Scania

- Findings
  - The VIN can be considered personal data when someone who has access to it has the means to identify the owner of the vehicle
  - Owner is indicated in the registration certificate

## WHAT DOES THIS MEAN FOR EUMAR? (1)

### **Arguments to conclude that the IRCC is not personal data:**

1. MAR patients cannot be identified by ESHRE in EuMAR
2. ESHRE does not have the legal means to identify the MAR patient because the information to identify the MAR patient is held by the clinics
3. The data that is entered in EuMAR is pre-defined (no free text fields)

## WHAT DOES THIS MEAN FOR EUMAR? (2)

No legal basis needed for maintaining EuMAR for ESHRE

Data subject rights will not apply for ESHRE

No storage limitation periods will be applicable

## ANY QUESTIONS?

Ruben Roex & Jolien Clemens

[Ruben.roex@timelex.eu](mailto:Ruben.roex@timelex.eu)

[Jolien.clemens@timelex.eu](mailto:Jolien.clemens@timelex.eu)

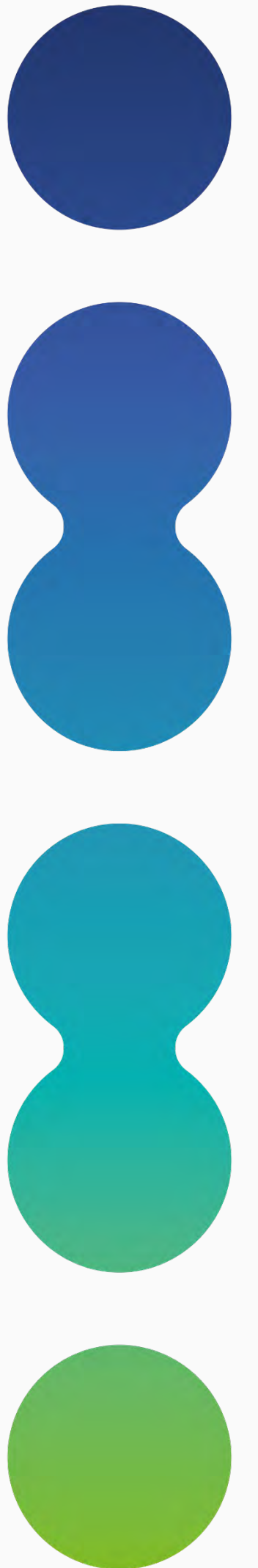
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# Work package 5 – IT solution for the registry including the IRCC

Christine Wyns



# WP5 members



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Project Support  
Belgium



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Belgium



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Netherlands



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WP5 Member  
Belgium



Ruben Roex (Timelex)  
WP5 Member  
Belgium

# WP5: IT solution for the registry including the IRCC



## Aim:

- Develop the IRCC and a web-based transnational IT solution able to ensure the prospective collection of cycle-by-cycle and case-based harmonized data sets (Objective 2)

## Specific aims:

- To develop an **IT solution for the IRCC** and supplement it with a **manual** for MAR services offering centres on how to use it, together with **educational information for patients/donors and professionals**.
- To enable **the web-based transnational IT solution** which ensures the prospective collection of cycle-by-cycle and case-based harmonized data sets. Starting with **documentation** and a **prototype**, followed by the data registry and, finally, the **output tools** (data visualization tool and patient portal).
- To ensure that the system can **link together different steps of the sequential MAR treatment** that may span long time intervals so that a **cumulative outcome** report (per patient) can be generated.

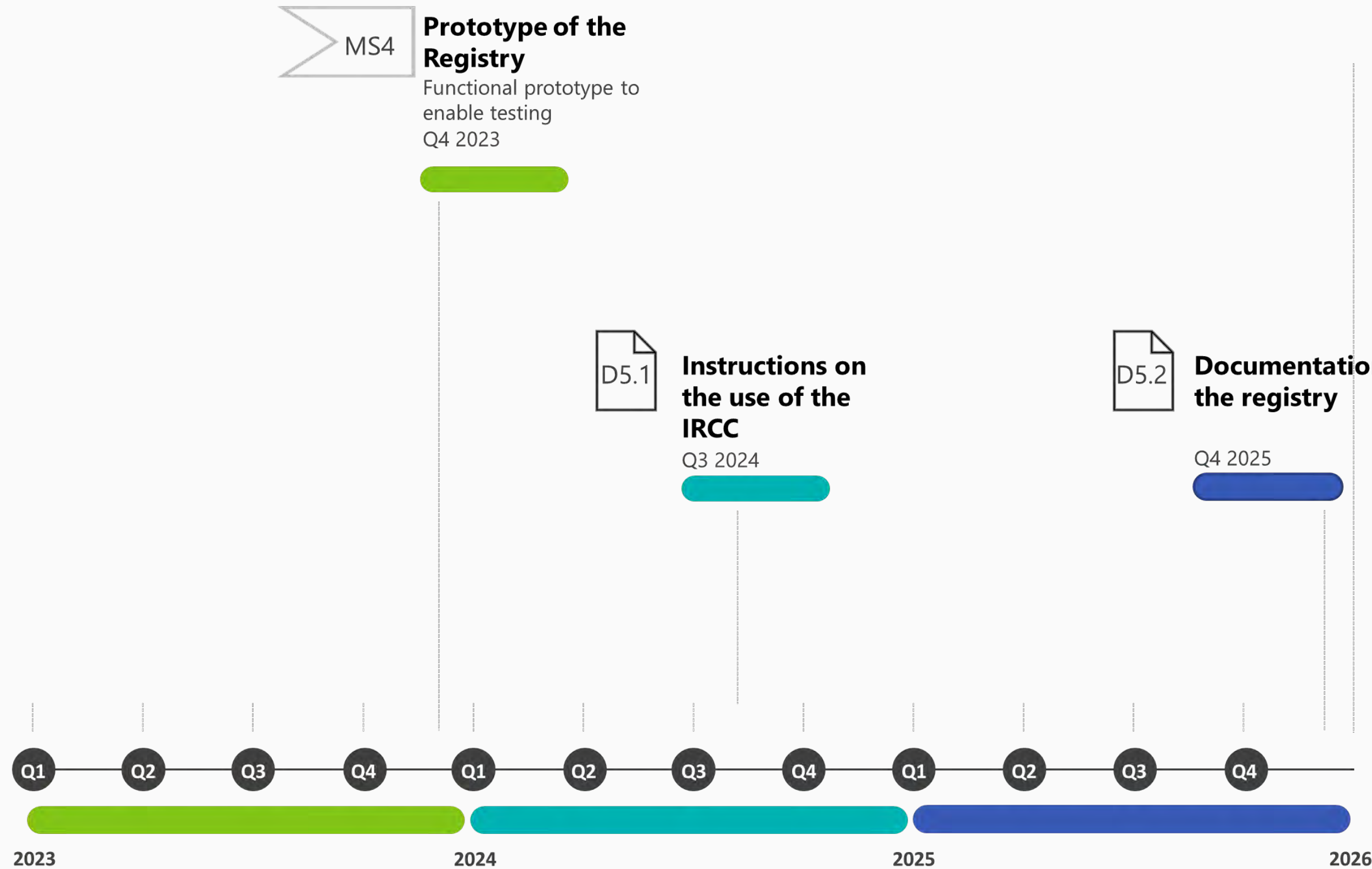
## Tasks:

- Data protection Impact Assessment → Timelex
- Roadmap for the registry
- Prototype of software for the data registry
- Prototype – proof of concept
- EuMAR patient/donor portal set-up
- Set up of output options for stakeholders
- Data registry
- Documents and agreements for implementation of the data registry
- Documentation of the registry
- Training and support for users

# WP5: IT solution for the registry including the IRCC



M1-M36



## Milestones

MS4 - Prototype of the Registry

## Deliverables

D5.1 - Instructions on the use of the IRCC

D5.2 - Documentation of the registry



# Individual reproductive care code (IRCC)



## Why do we need it ?

Unique patient identifier to follow the patients (and all their reproductive material) through their treatment process across care providers in Europe

- Enables a prospective follow-up of segmented treatment steps and their outcomes in different institutions across Europe
- Allows calculation of cumulative data (linking consecutive treatment cycles)

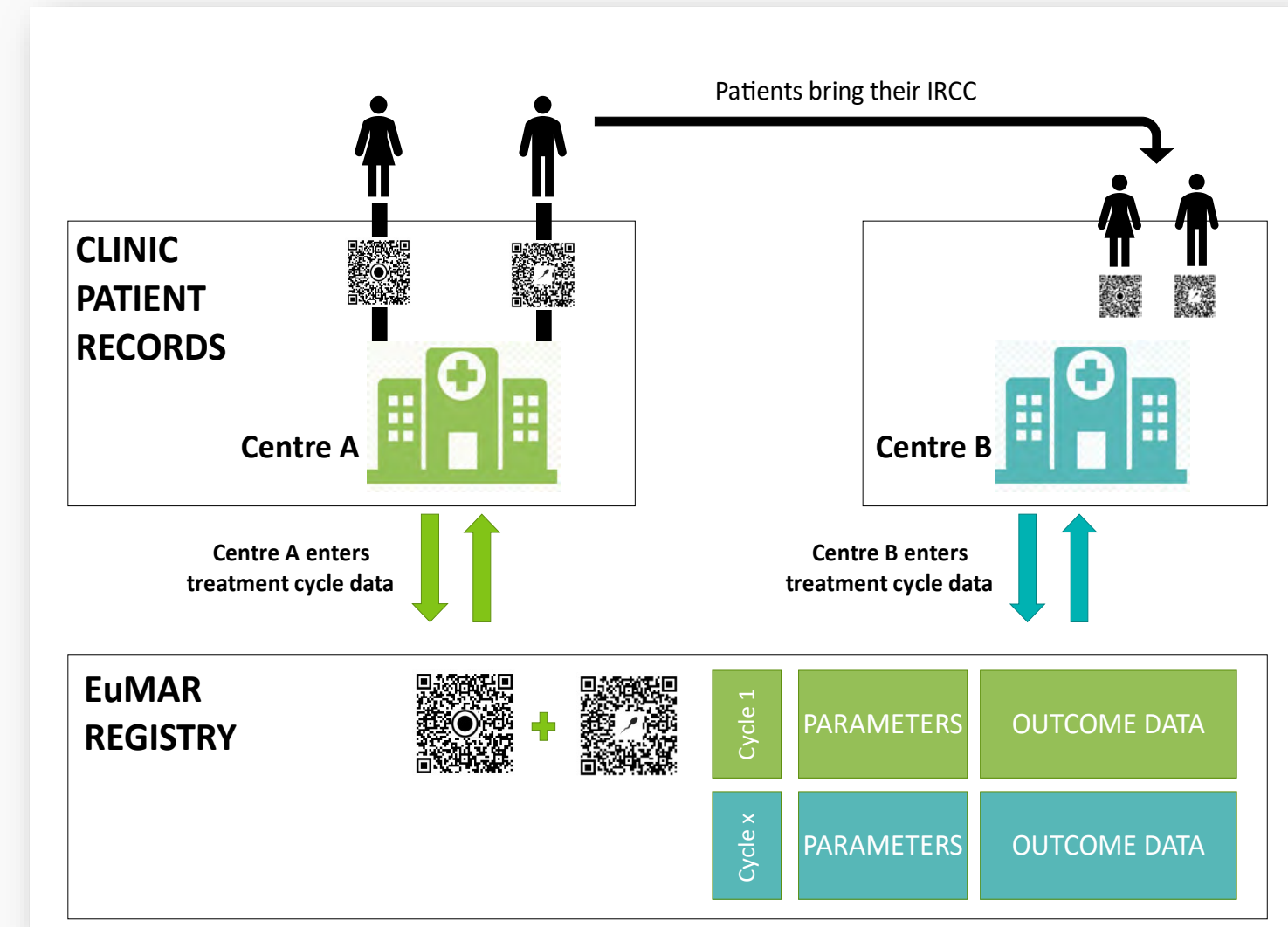


Figure 5 Integration of the Individual Reproductive Care Code (IRCC) in clinical practice; Patients can bring their IRCC from clinic A to clinic B which allows for collection of data in the EuMAR registry of data on cross-border or interinstitutional migration of infertile patients.

# IRCC generation and use: why is it safe?



## Requirement

- Analyses can be performed without the risk that data is identifiable to individuals.
- The solution should be GDPR proof:
  - Data can not be **(in)directly** traced back to personal information.
  - No personal data such as name, address, security number, etc. is stored in the EuMAR registry.

## IT solution

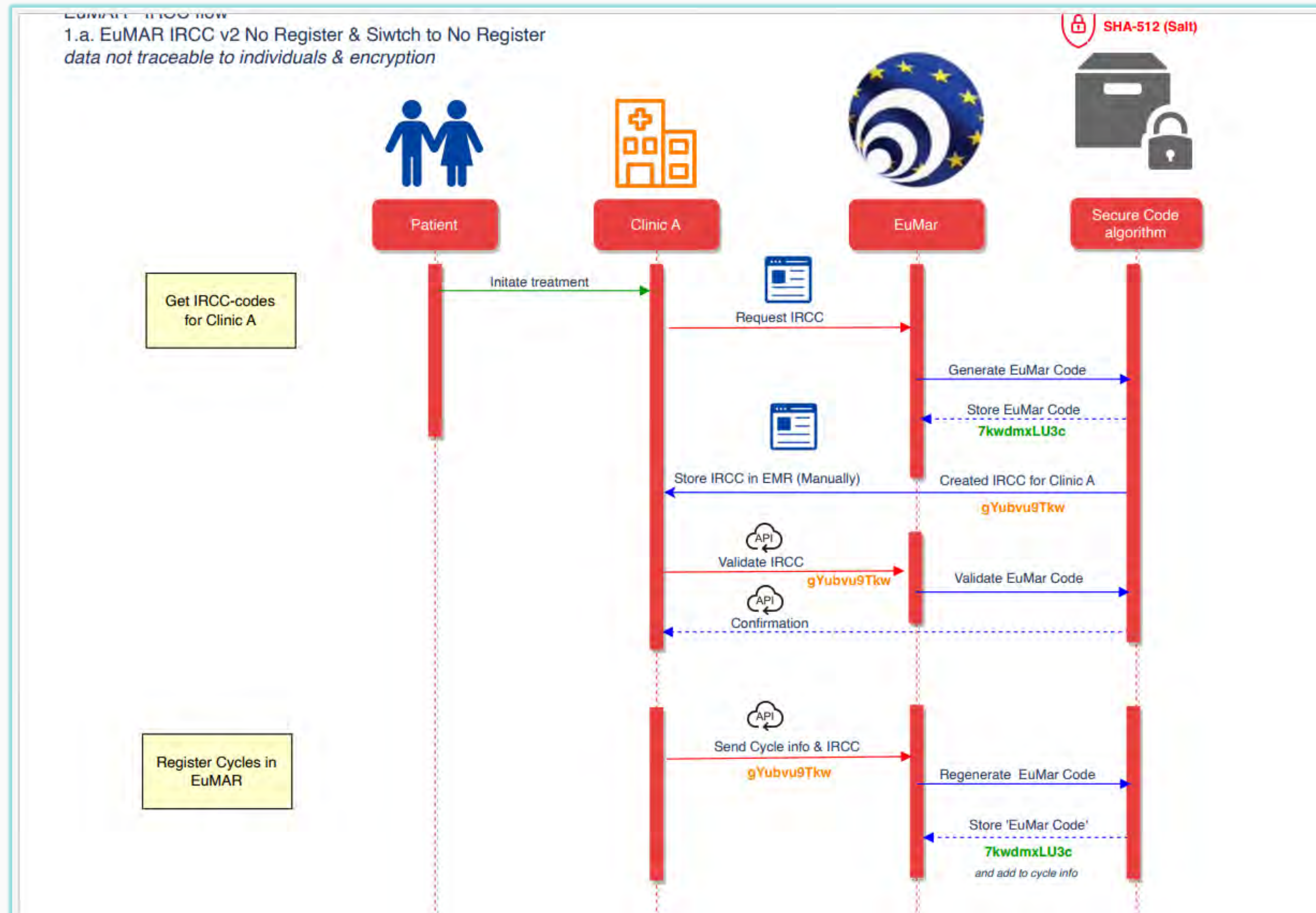
Creation of a Secure coding algorithm ('black box'\*).

- **IRCC** obtained by the clinic is not stored in EuMAR database.
  - IRCC codes in EuMAR can not trace back individual patients.
- Clinics store a **EuMAR code** in the patient's medical record.
- IRCC codes are linked to the login of the clinic and are not the same in different EMR systems/clinics.
- The IRCC will automatically renew per clinic change: request for **transfer code**.
  - No link between patients' treatments in different clinics.

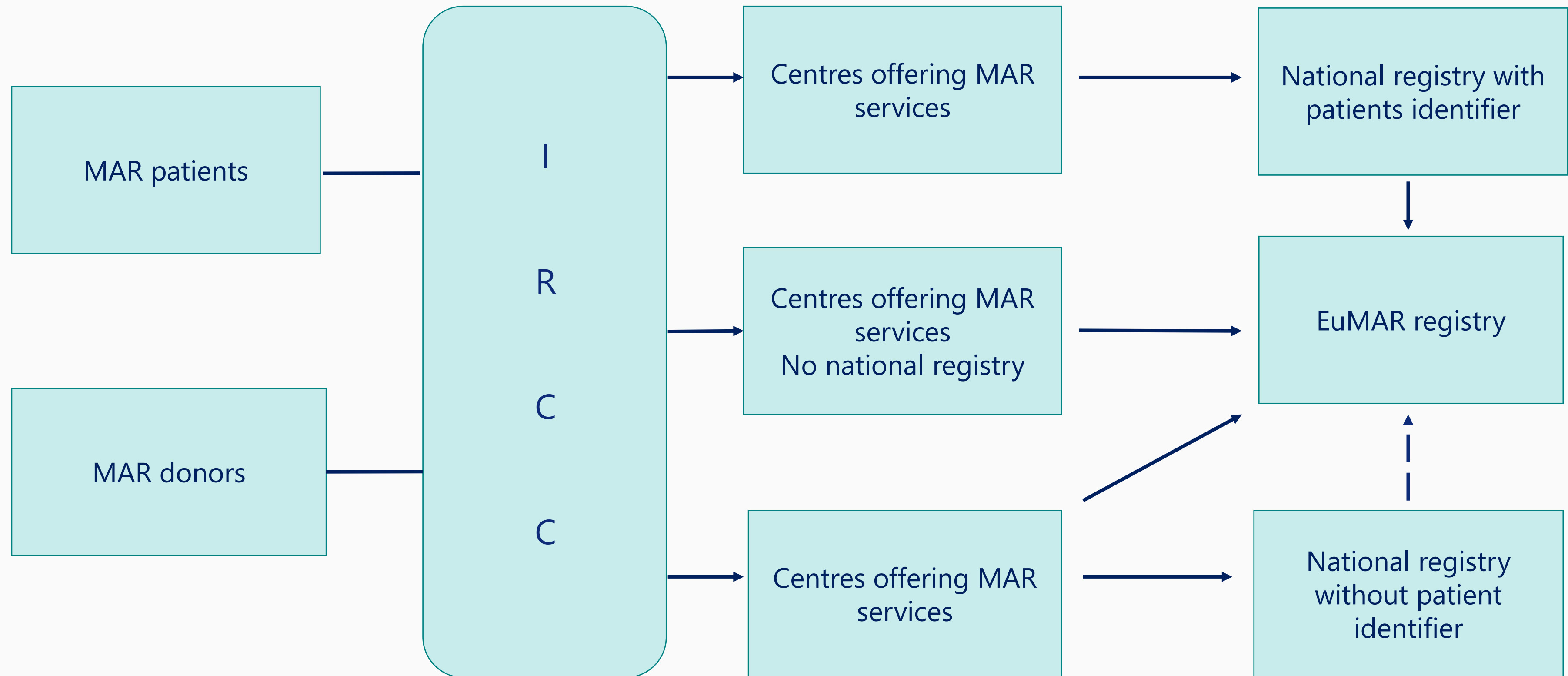


Use of a state-of-the-art encryption technology/algorithm → even in a theoretical situation of decryption data is not traceable to a real person because codes in the EMR system and EuMAR system will be different.

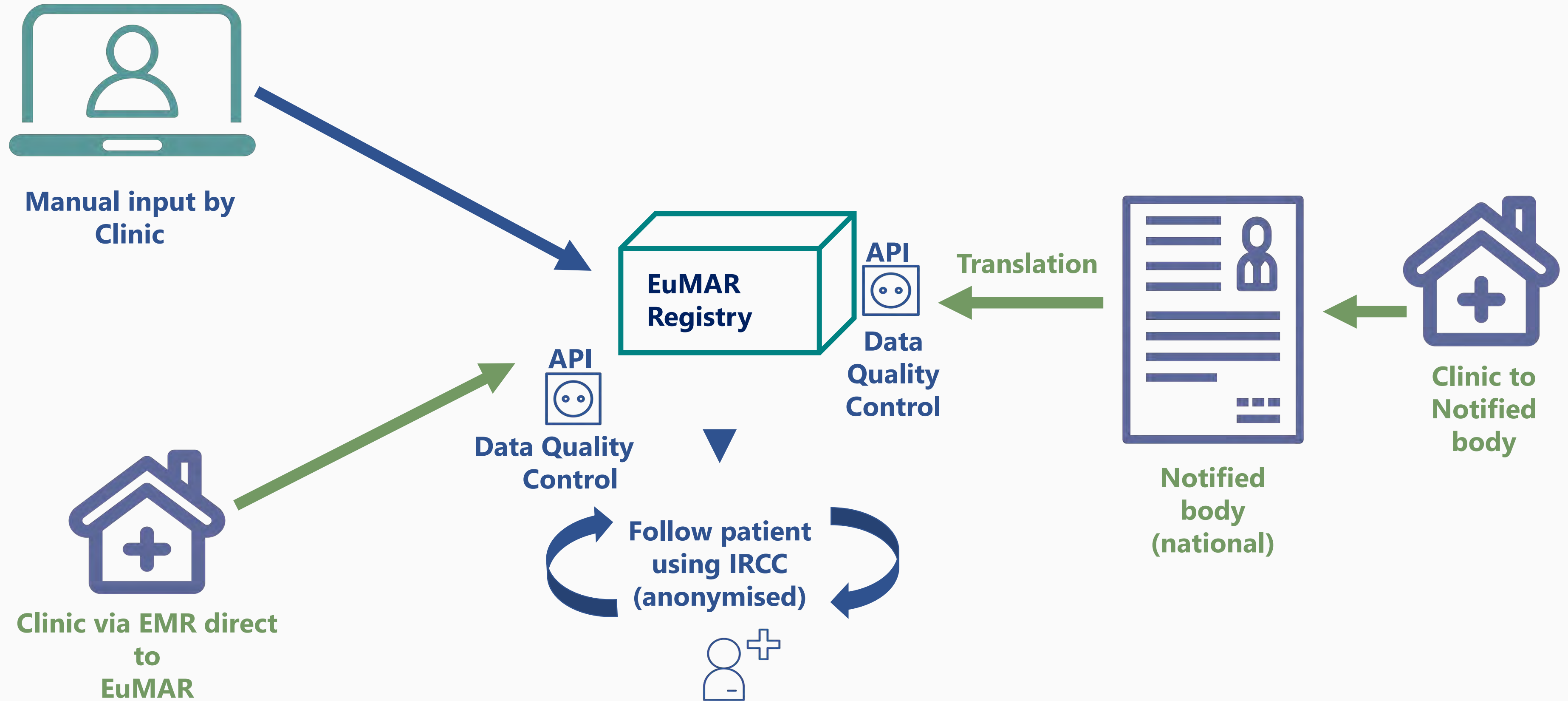
# IRCC flow between clinic and EuMAR



# Reporting options using IRCC



# IT tools for data flows



# Data base structure



## 4 Levels of viewing the data



### EuMAR

- Will see all clinics.
- Can define regions with attached clinics.
- Can define National Authorities with attached clinics.
- Will define and authorise new clinics.

### Clinic

- Can see its own patients/treatments.
- Can not see the treatments of previous clinics, while EuMAR will see the whole history of a patient.

# Data base validation



## Three levels:

- Per field
- Fields in relation to each other
- Phasing eg. cycle, pregnancy, child

# Data base validation



## Three levels:

- Per field
- Fields in relation to each other
- Phasing eg. cycle, pregnancy, child





# Prototype of software for the data registry

# Manually providing data to EuMAR



Registration overview - search patient by ircc

center: st. luc, sint-lambrechts-woluwe

ircc:

birth date: dd-MM-yyyy

registration date: dd-MM-yyyy

code	gender	birth date	registration date	status	
UCL000001	Female	25-11-1988	25-09-2023	Active	↔
UCL000002					
UCL000003					
UCL000004					
UCL000005					

cycle overview

center: st. luc, sint-lambrechts-woluwe

ucl000001

patient: Female, 25-11-1988

birth date: 25-11-1988

only pending:

type	date	patient	partner	donor	outcome	status
Fresh	27-09-2023	Female, 25-11-1988			Pregnant	Closed
Fresh	04-05-2023	Female, 25-11-1988			Pregnant	Closed

# EuMAR points to data discrepancies



EuMAR interface showing patient data and pregnancy outcome details.

**Top Panel:** Administration - fresh cycle - 27-09-2023, center: st. luc, sint-lambrechts-woluwe. Patient: Female, 25-11-1988.

**Left Panel (Cycle Details):**

- Cycle ▲
- Fresh cycle (Pick-up) / Oocytes thawed ▲
- Thawed cycle
- Transfer
- Complications
- Outcome ▲

**Outcome Section:**

- finished:
- highest iu fhr: 2
- fetal reductions:
- pregnancy outcome: Ectopic, First trimester miscarriage, Second trimester miscarriage, Induced abortion, Molar, Delivery after 22 weeks, **Loss of follow-up**
- twin pregnancy: Monoamniotic, Monochorionic, Dichorionic
- number of children born: 2 + add child

**Child 1:** birth date: 27-09-2023, birth weight: 4000, sex of child: Unknown, Female, Male

**Child 2:** birth date: dd-MM-yyyy, birth weight: , sex of child: Unknown, Female, Male

# Request the transfer code



The screenshot shows the EuMAR web application interface. A modal window titled "Transfer QR Code" is centered on the screen, displaying a large QR code. Below the QR code are two buttons: "x close" and "✓ copy code". The background is a dimmed view of the application's registration management page. On the left, there is a sidebar with navigation icons. The main content area includes a search form with fields for "ircc", "birth date" (format dd-MM-yyyy), and "registration date" (format dd-MM-yyyy), along with a "search" button. Below the search form is a table with columns "code" and "gender".

code	gender
UCL000001	Female
UCL000002	Female
UCL000003	Female
UCL000004	Female
UCL000005	Female

On the right side of the background page, there is a table with columns "date" and "status".

date	status
3	Active
3	Transferred
3	Active
3	Transferred
3	Active



**Thank you!**

**[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)**  
European Society of Human Reproduction and Embryology

# WP6 - Embarking on the next steps with the Pilot Study

Prof. Dr. Christian De Geyter



Co-funded by the European Union.

Project: 101079865 — EuMAR — EU4H-2021-PJ2



# WP6 Timeline



## M1-M36

### Tasks

- T6.1 Identify collaborators
- T6.2 Pilot Study
- T6.3 Validation

### Deliverable

D6.1 - Validation report



# WP6 Timeline – Identifying collaborators



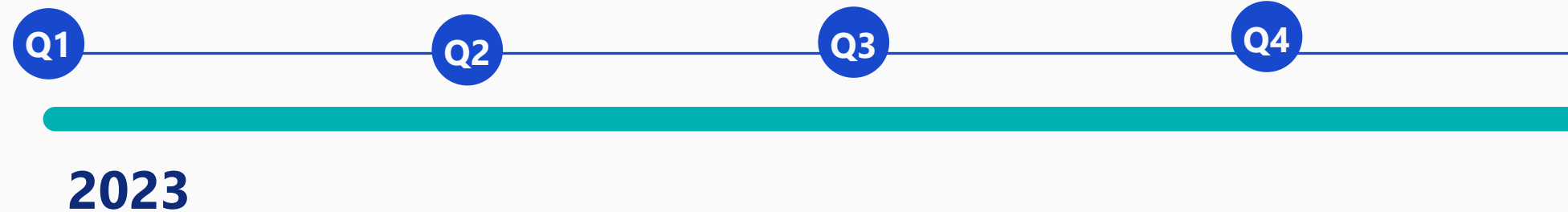
## T6.1 Identify collaborators

1. Select pilot countries
2. Select stakeholders within pilot countries
3. Send formal proposals
4. Prepare consent forms

## T6.2 Pilot study

### Implementation and support phase

1. Monitor implementation process
2. Link EuMAR system with pilot countries' systems
3. Implement IT solution
4. Provide training & support

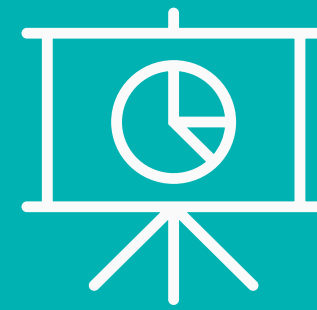




# Pilot countries selection criteria



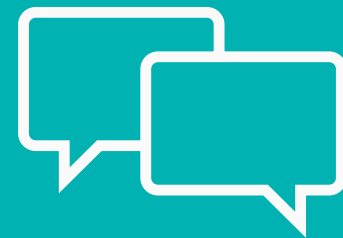
The availability  
of a national  
data collection  
(yes/no)



The type of data  
collection  
(aggregated or  
cycle-by-cycle)



Geographic  
diversity



Possibility to  
communicate in  
English



NCA's interest in  
the project and  
the pilot study

# WP6 Timeline – Implementation and support



## T6.1 Identify collaborators

1. Select pilot countries
2. Select stakeholders within pilot countries
3. Send formal proposals
4. Prepare consent forms

## T6.2 Pilot study

### Implementation and support phase

1. Monitor implementation process
2. Link EuMAR system with pilot countries' systems
3. Implement IT solution
4. Provide training & support



# WP6 Timeline – Pilot study



## T6.2 Pilot study

Collection of data  
of newly started  
fresh cycles

→ *September 2024*

Collection of cumulative  
data of subsequent  
thawing cycle

→ *December 2024*

Collection of pregnancy  
outcome and neonatal  
data from all recorded  
cycles

→ *September 2025*

Monitoring and Validation

*December 2025*



# Pilot study objectives



## FEASIBILITY

Test the feasibility of collecting prospective, cycle-by-cycle data on MAR in countries with and in countries without an existing registry.

## FUNCTIONALITY

Test the functionality of obtaining an IRCC in new individuals embarking on MAR.

## USABILITY

Test the performance of the data collection software provided by eFertility.

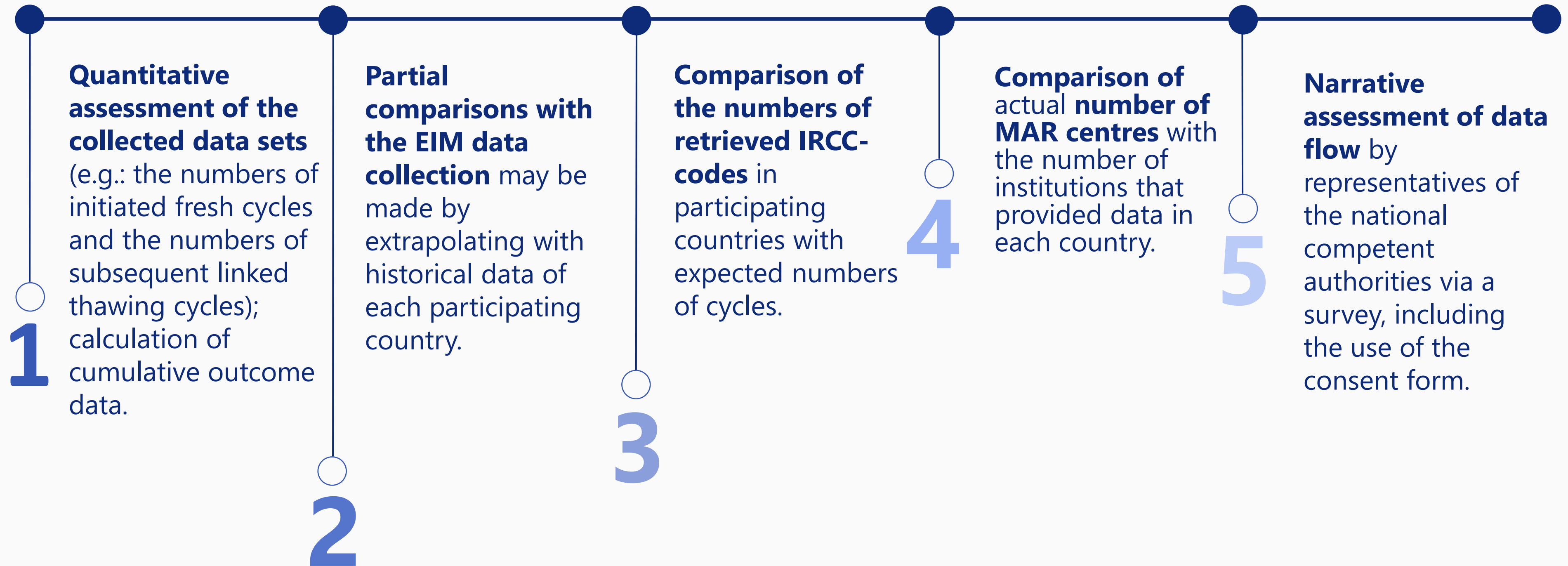
## ENGAGEMENT

Test the compliance of national health authorities and of MAR centres in transferring the data to a voluntary cycle-by-cycle registry of MAR in the EU.

# Validation of results



Validation  
report



# WP6 members



**Christian De Geyter**  
WP Leader



**Carlos Calhaz-Jorge**  
Project member



**Johanna Tassot**  
Project support



**Susanne Hultsch**  
Project support



**Elena Achótegui Sebastián**  
Project support



**Thank you!**

[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)  
European Society of Human Reproduction and Embryology



# Status of the development of the EU SoHO platform

Presentation to EuMAR project meeting

5 December 2023



# Proposal for a Regulation published in July 2022



# Digital Functionalities to support implementation of the SoHO regulation



# Important to tailor to variety of organisational models

## SoHO Actors

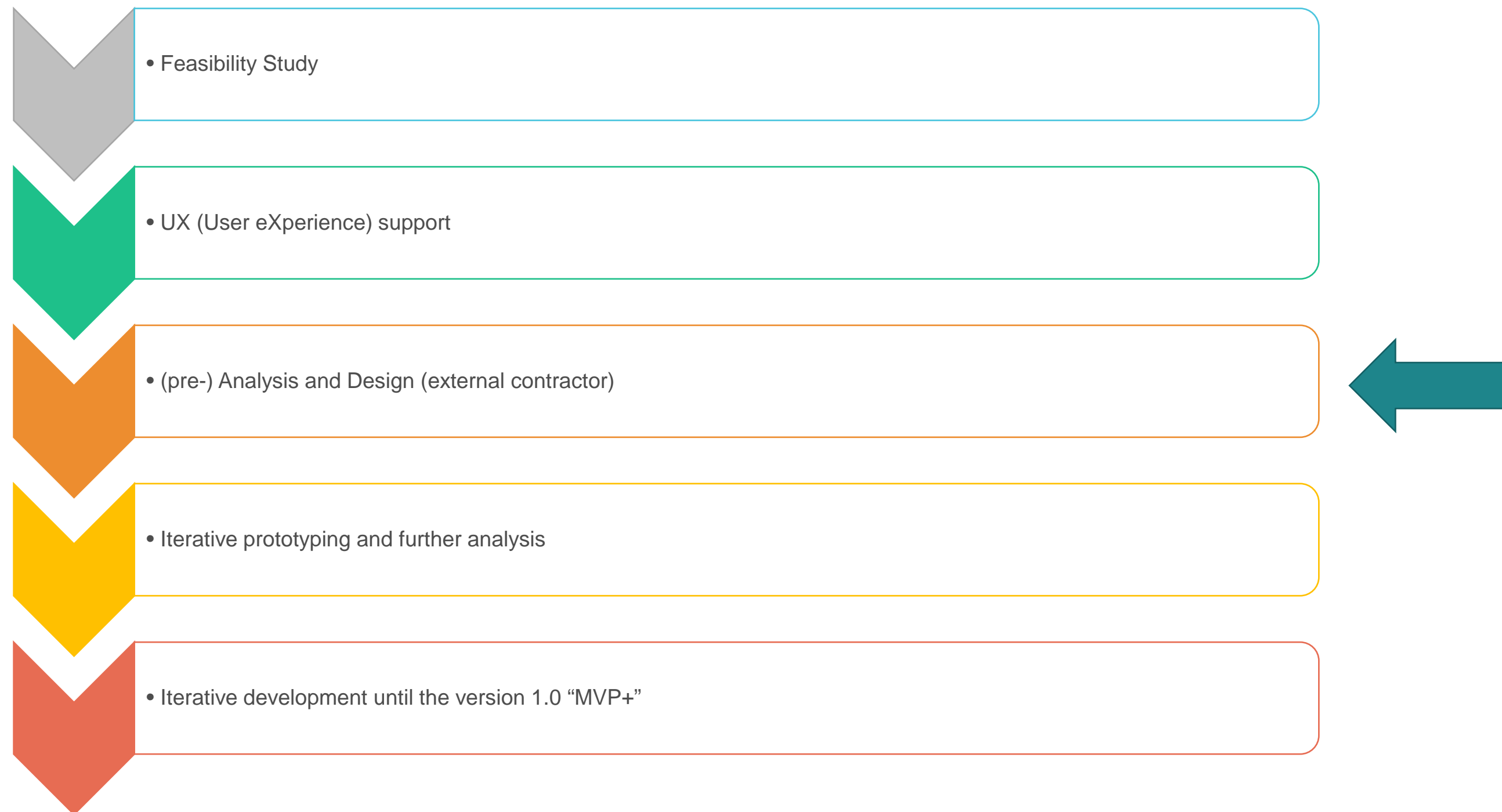
- > 5,000 (often small) authorised establishments (today)
- Adding entities across many healthcare providers
- Different SoHO sectors, different organisational models
- Many public services, academic hospitals, non-profit sector (e.g., Red Cross)
- Professional and scientific societies can be facilitators

## SoHO authorities

- Large vs small countries: different possibilities to have/use own data-solutions
- Central vs regional authorities
- Consolidated vs sector-specific authorities
- Standalone vs integrated with pharma/devices

- Flexible and scalable solutions needed to address variety
- Public actors and authorities, with limited resources
- Potential to add/support admin efficiency

# Overview of process



# Key concerns to consider

Recycle common work  
(EuroCET, EDQM)

Verification by CA's before  
publication

direct entry by  
entities/establishments into SoHO-  
X, and/or upload of data collected  
in existing (e.g., national)  
databases

EU4Health supported  
actions for entities  
(professional societies),  
for CA's

1. **Data Harmonisation and Reporting:** Need to harmonize data, classifications, vocabulary, definitions.
2. **Data governance:** ownership, access, role publication...
3. **GDPR, Privacy:** How will the EU SoHO Platform ensure privacy and security? Ensure access to data.
4. **IT Systems:** How to connect existing IT systems to the SoHO Platform (connectivity) + possibilities for direct entry
5. **Common users and rules:** e.g., when to publish data
6. **Cultural acceptance and transition:** How can we ensure that SoHO entities can adapt to the new requirements in a fast and correct way?
7. **Communication** – how to communicate the platform (architecture, database structure, etc.)
8. **Automation** – leverage potential of IT systems to lighten admin workload for entities and authorities

No personal data at EU-level needed, but for some alerts (as-in RAB/TC), and possibly on responsible persons in entities

Build on existing practices

Map national IT-systems + clarify EU-specs, so EU and national IT-plans can align

Let platform take over some work (draft vérifications, draft consolidation data reports, ...)

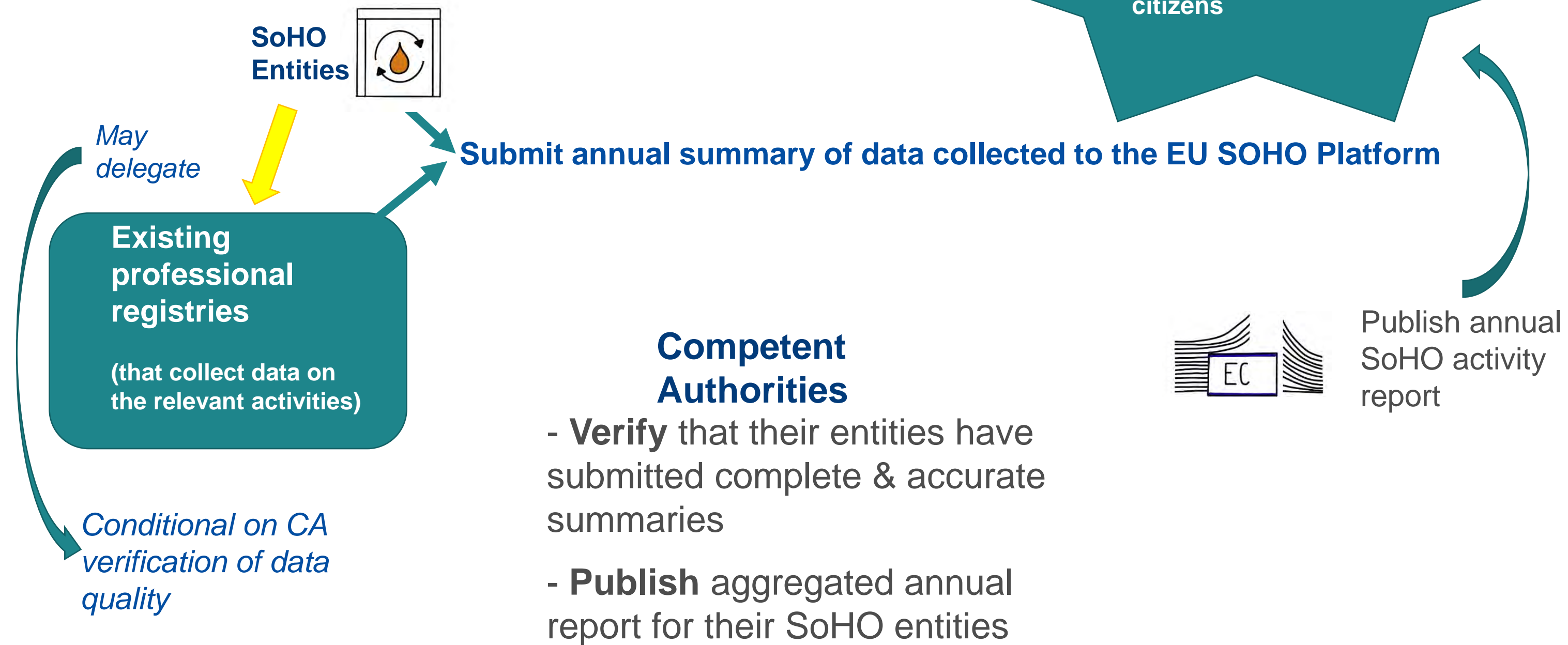
# AGENDA

1. Welcome, introductory remarks and agenda
2. Relevant functionalities of the EU SoHO platform
3. Supporting contracts
4. Existing national platforms
5. Next steps
6. Q&A
7. Final remarks

## 5. Supply (monitoring and) alerts



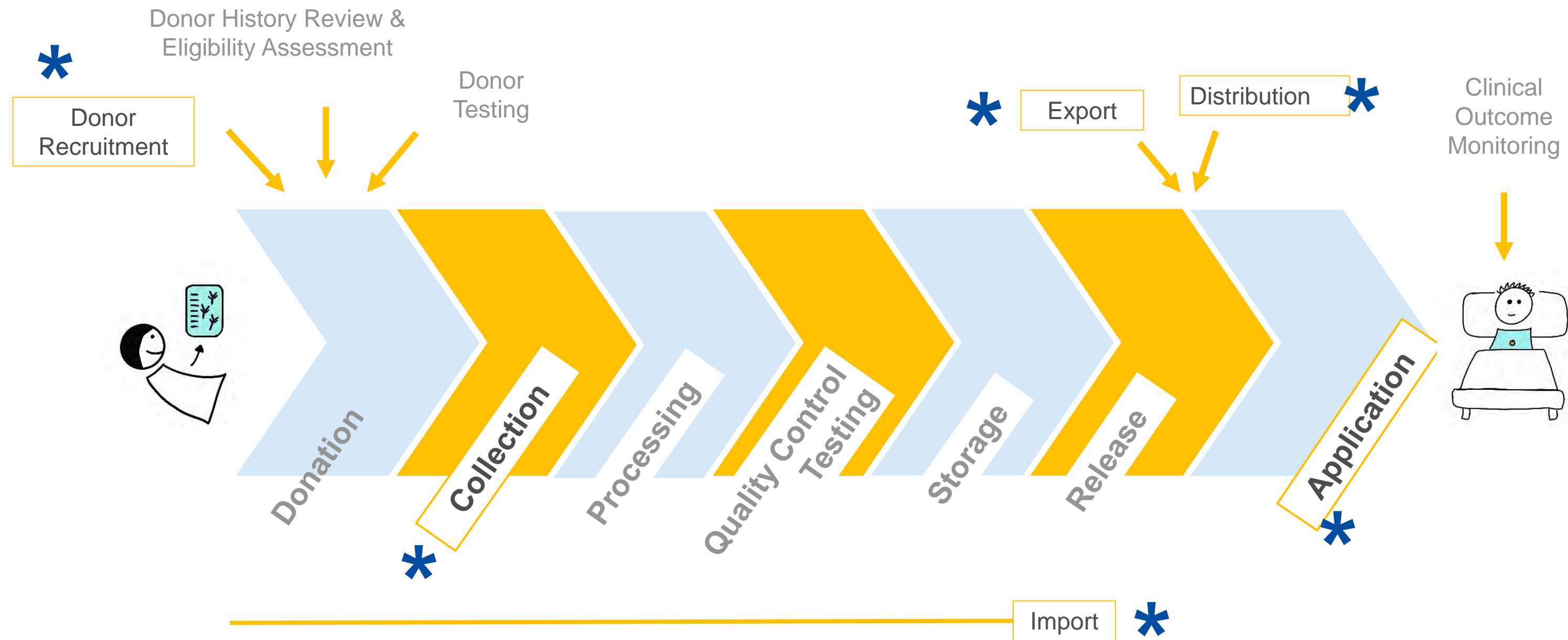
# Activity data overview





# a. Legal: Which data?

\* SoHO activities for which data shall be collected



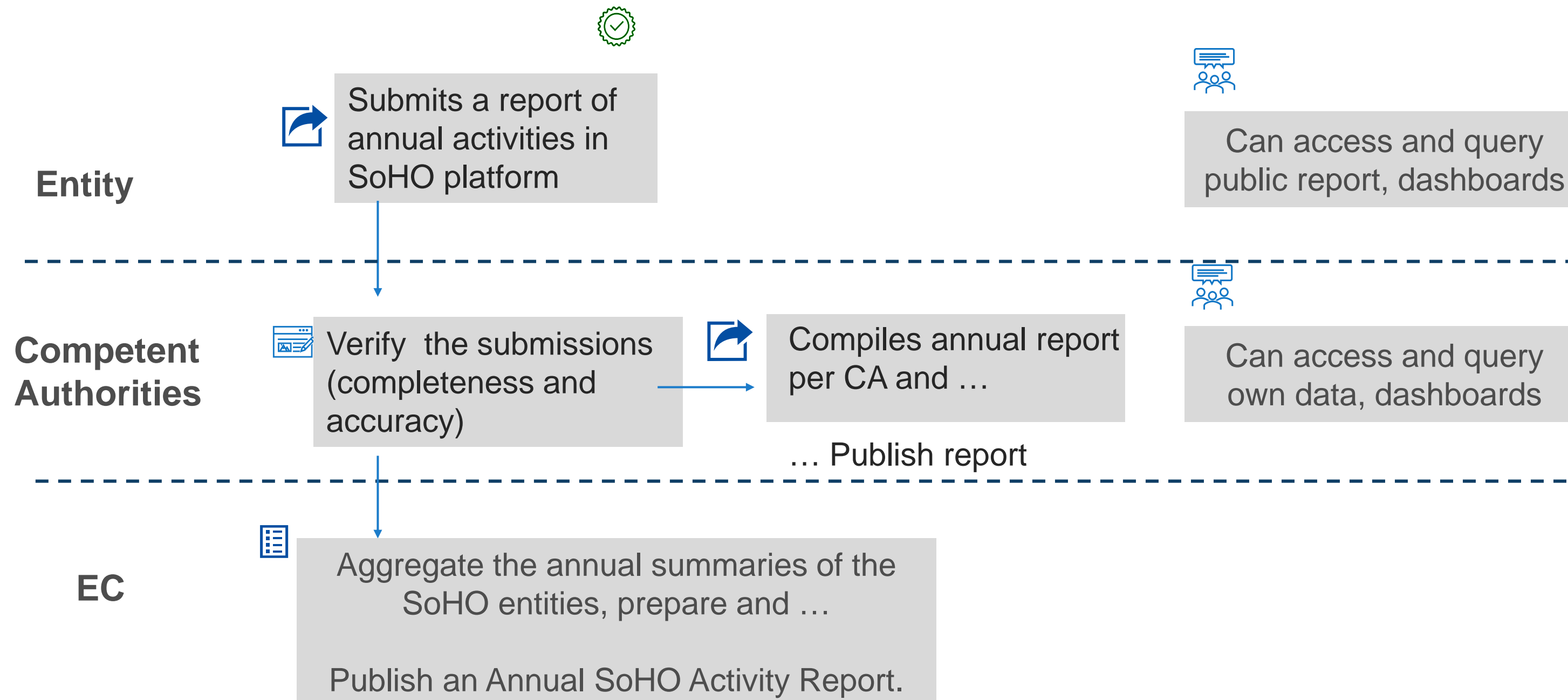
## b. What we have so far...

- Exercises to harmonise activity data collection exercises in the field of tissues and cells in Europe (EuroCET, EDQM)
- Preparedness planning blood sector (B-SCEP, EDQM)
- Guidance Vigilance Expert Subgroup (VES) for annual data reporting reporting (common approach) and
- External contractors' work: use cases specifications, business process and mock-ups
- External contractors' workshop with EDQM and relevant stakeholders

# c. (standard) digital flow

In SoHO digital platform  
(COM SoHO proposal)

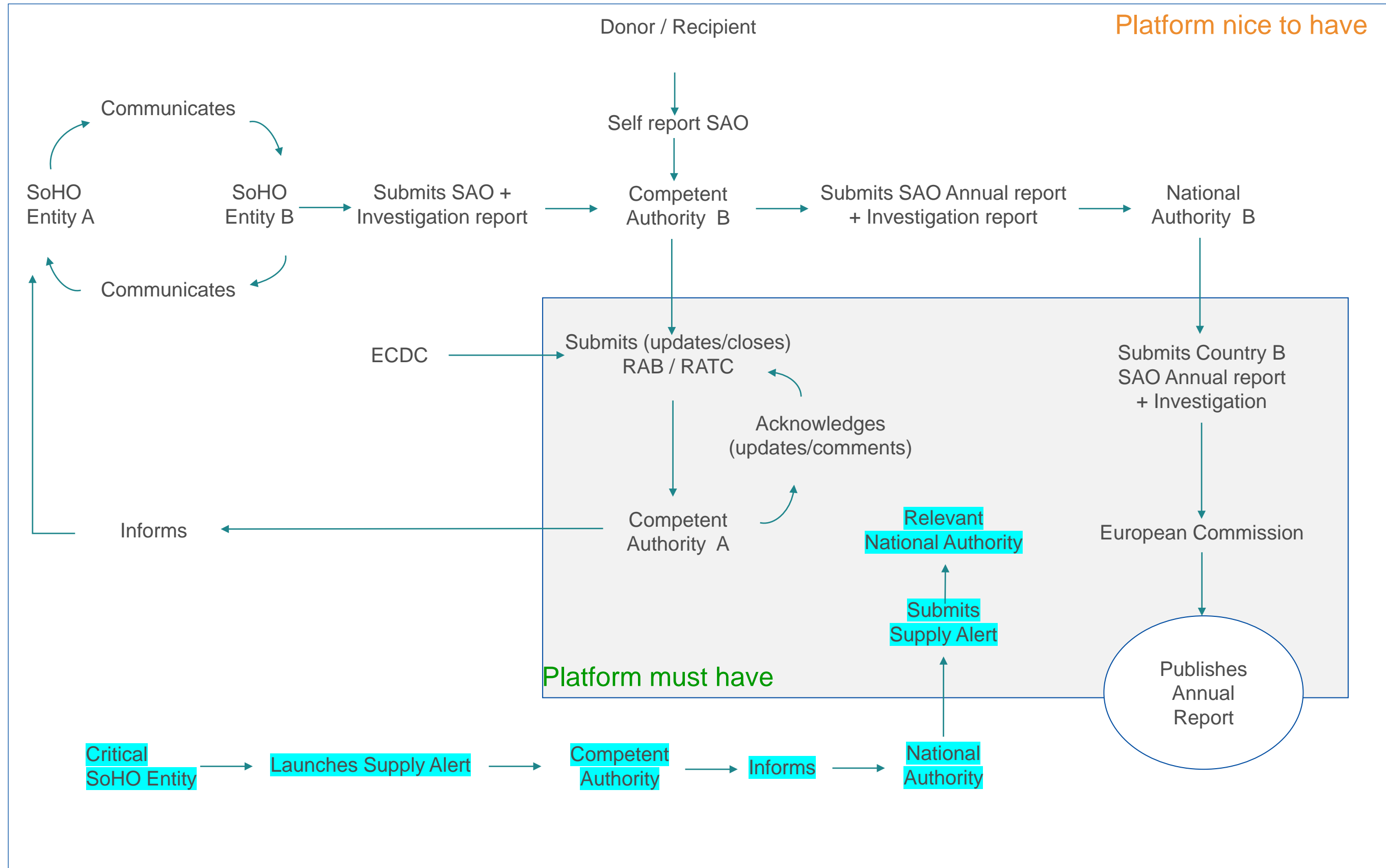
Article 33, 44



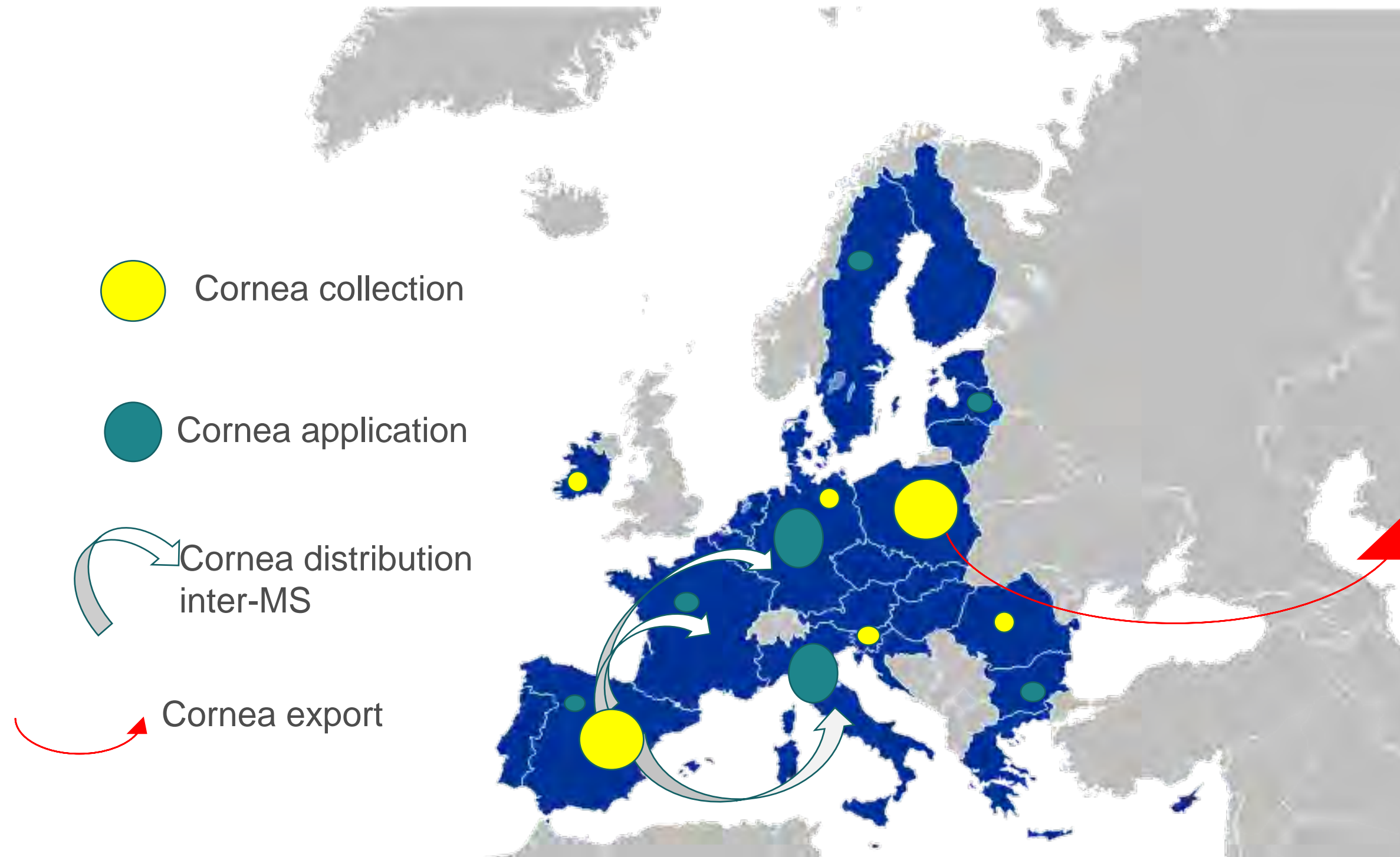
# c. Digital flow

DRAFT

In SoHO digital platform  
(COM SoHO proposal)



## e. How it might look - EU

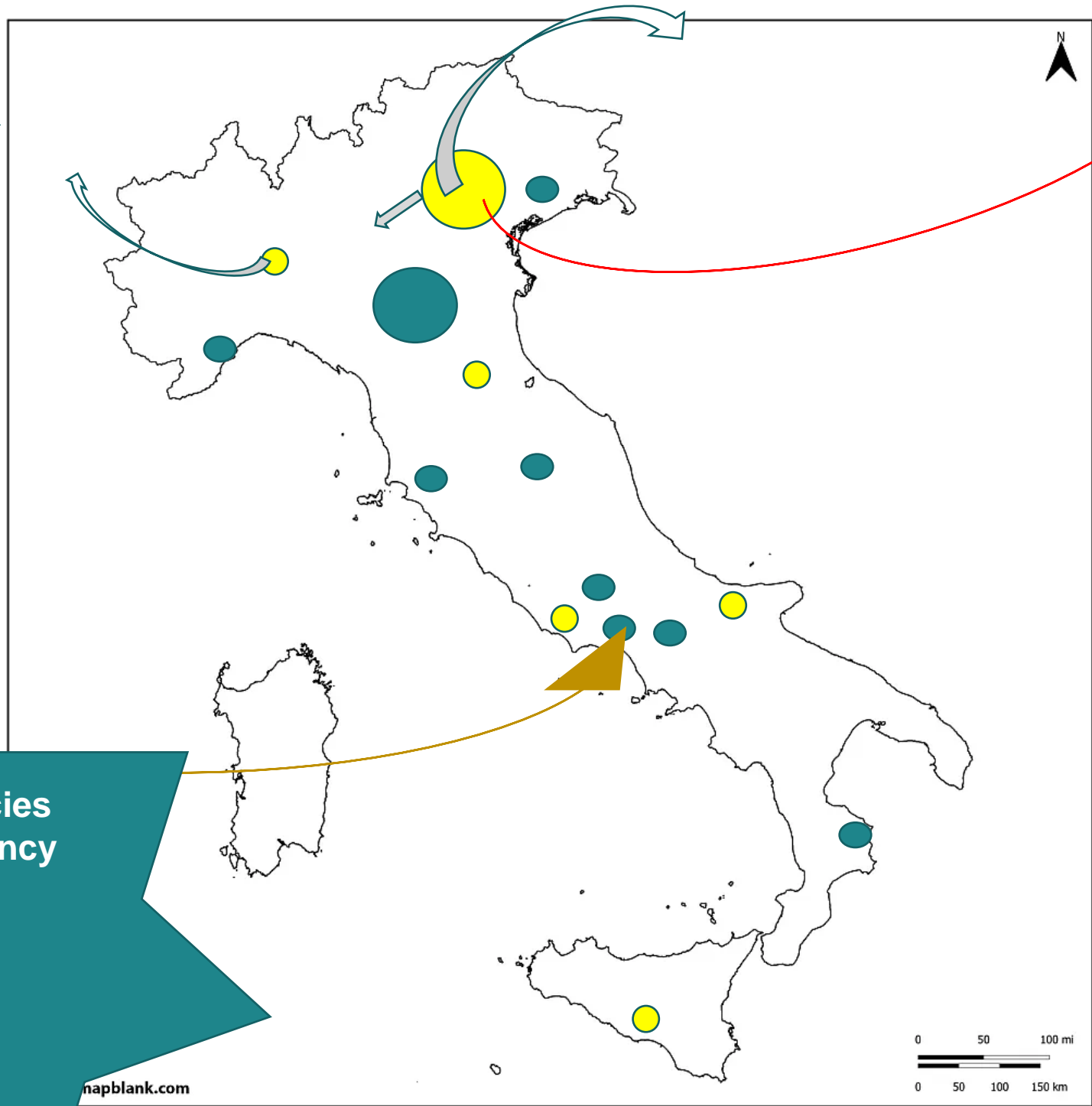


Cornea activity data in 2029!  
**Fictional data!!!**

# e. How it might look – zooming in to one MS

Cornea activity data in 2029 - one Member State!  
**Fictional data!!!**

- Supports MS policies for supply sufficiency
- Provides denominators for SAO reports
- Gives visibility to citizens



● Cornea collection

● Cornea application

↻ Cornea distribution inter-MS

↪ Cornea import

↪ Cornea export

# e. How it could look like – supply alerts

ANNEX III  
NOTIFICATION OF SERIOUS ADVERSE REACTIONS

**New Alert**

Alert details | Problem details | Products

**Alert details**

Reference: FR-2012-DRAFT(1338)  
Creation date: 03/09/2012  
\* Product concerned: Select a concerned product  
\* Type of alert: Select a type

**Initiator Competent Authority**

Initiator CA: FR  
Contact person: Arnaud CORDIER (Agence de la Biomédecine)  
Network: Tissues and Cells  
Contact person details: Email: arnaud.cordier@...  
Phone: ...

**Notified Competent Authorities**

\* Notified CA:  All  AT  BE  BG  CY  CZ  
 DE  DK  EE  EL  ES  FI  
 FR  HU  IE  IT  LT  LU  
 LV  MT  NL  PL  PT  RO  
 SE  SI  SK  UK

**Proposed CAs** | **Selected CAs** (0 items selected)

Buttons: Add all, Remove all

**Is it relevant for:**

Epidemiological sector (ECDC/EWRS)  Medical devices(SANCO)  
 Network CAs Blood  Network CAs Organs  
 Pharmaceutical sector (EMA)  WHO

Buttons: Save as draft, Send alert, Cancel

**National Competent Authorities**

**Other NCA's T&C Other sectors**

# e. Open questions and user engagement

- **(Main) open questions**

- Integrate a local/national channel entity/authority to report supply situation/issues ?
- Alternative pathway to use/recycle data reports to existing registries – upload, interoperability ?
- Reuse (RAB/TC) tools for reporting vigilance alerts adapted for the management of supply alerts ?
- Allow SoHO-X to prepare (draft) annual consolidated reports (per MS, for EU) ?
- Coordinate with recycle non-SoHO supply monitoring efforts post-COVID (EMA, HERA, ...)?

- **User Engagement**

- User group: continue with NCA's members of VES
- Engage EuroCET, engage members EDQM work BSCEP
- ...



## 2. Authorizing SoHO preparations



# a. Legal 1/2: Processing SoHO leads to SoHO preparations

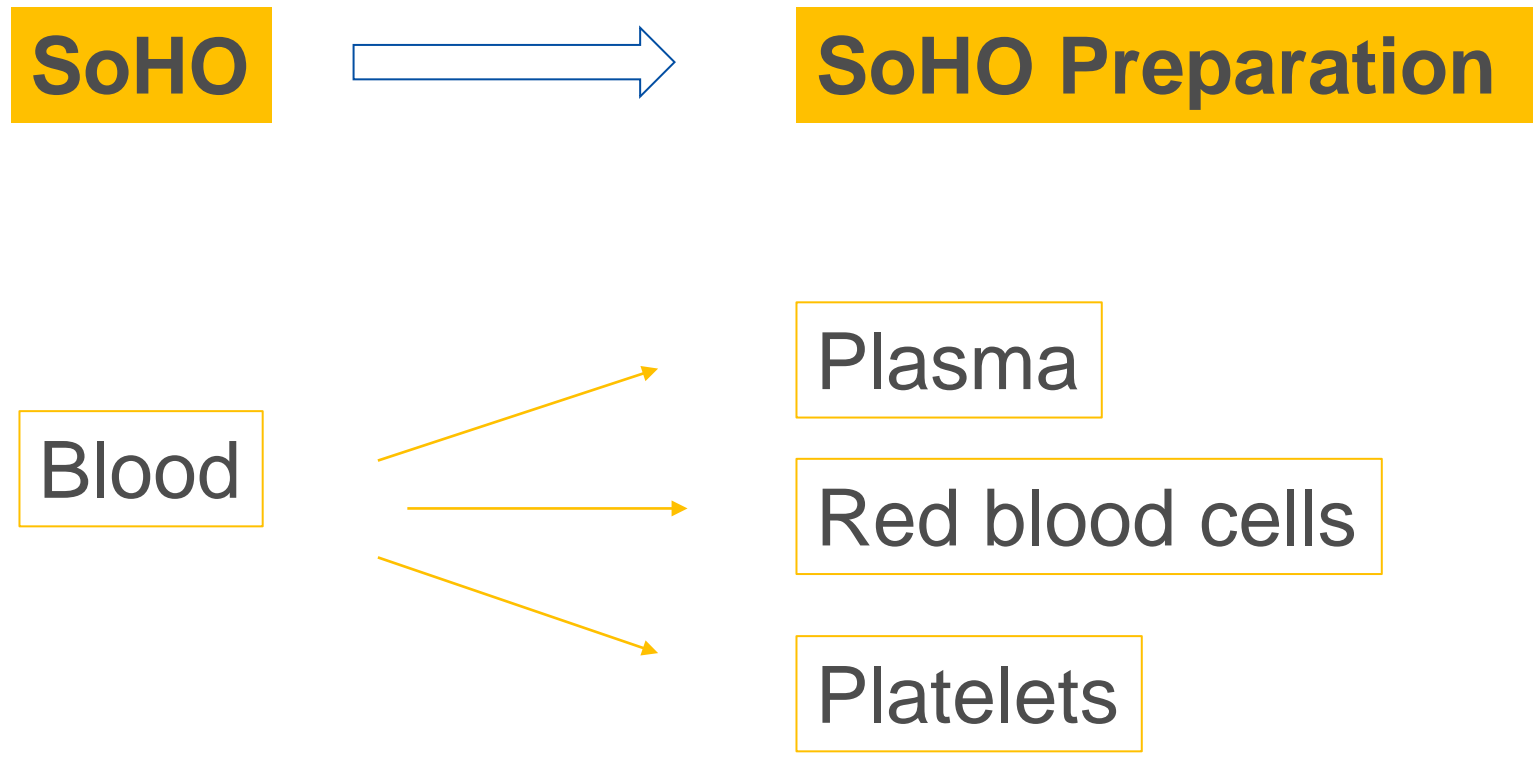
## What is a 'SoHO Preparation'?

A particular SoHO that has been **subjected to one or more SoHO activities, including processing**, with **pre-defined specification** and **specific clinical indication**



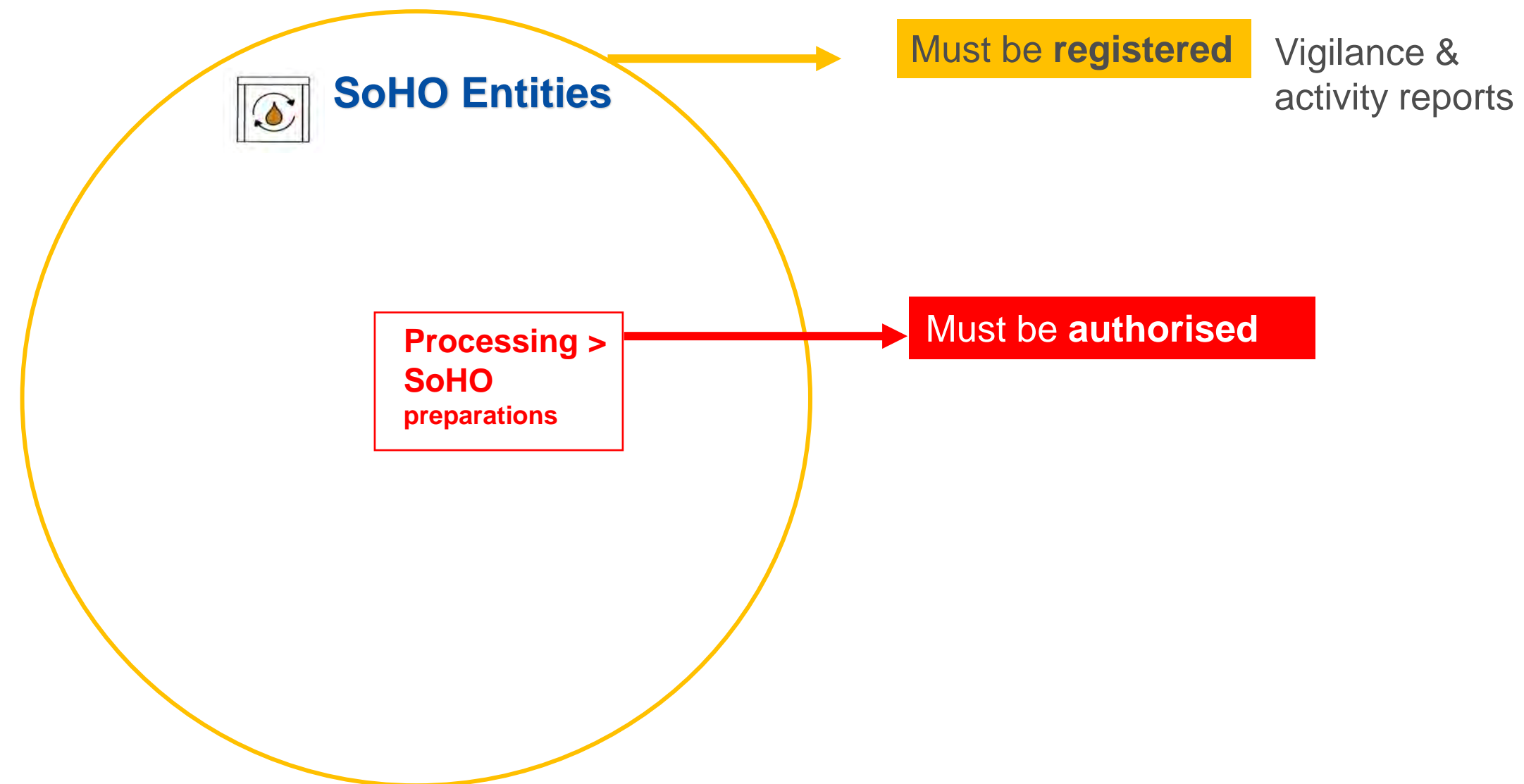
**Must be authorised**

**Example:**



# a. Legal 2/2: SoHO preparation(s) require an authorisation

Article 21



## b. What we have so far...

- **Joint Action GAPP: Facilitating the Authorisation of Preparation Process for blood, tissues and cells ([gapp-ja.eu](http://gapp-ja.eu))**
  - Developed authorization process
  - Tested risk assessment tool (EuroGTP-2)
  - Made a first map of existing preparations
  - IT blueprint
- **Meeting with NCAs involved in GAPP II (Joint Action) 10 November 2022**
- **External contractors' work: use cases specifications, business process**

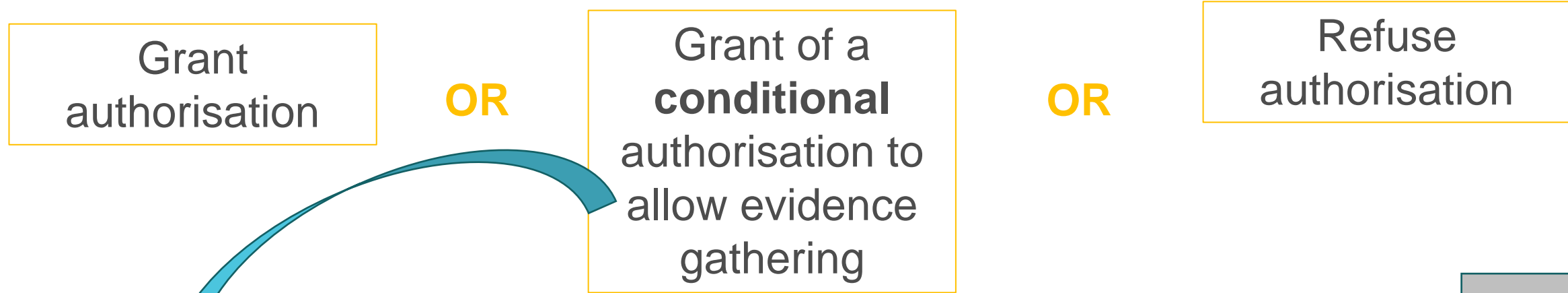
# b. Development SoHO Preparation Authorisation process (GAPP-JA)

1 Systematic Risk Assessment to determine the requirements for authorisation

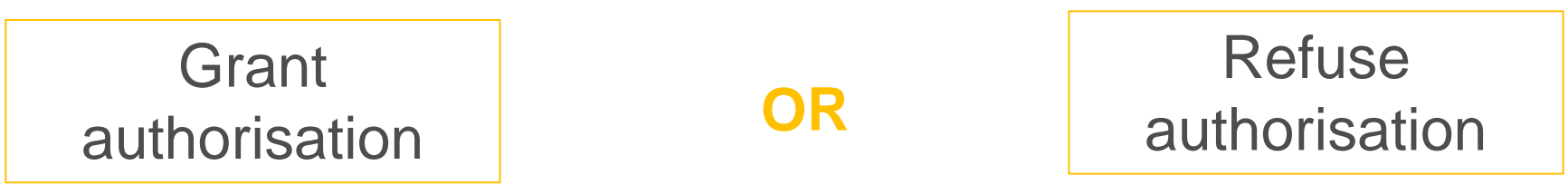
- Use EuroGTP2 tool or similar
- Taking into account any relevant EDQM monograph

2 Submission of an application dossier, including laboratory validation and, where relevant, a clinical outcome monitoring plan proportionate to risk

3 Assessment of the application by the competent authority



4 Assessment by the competent authority of evidence gathered



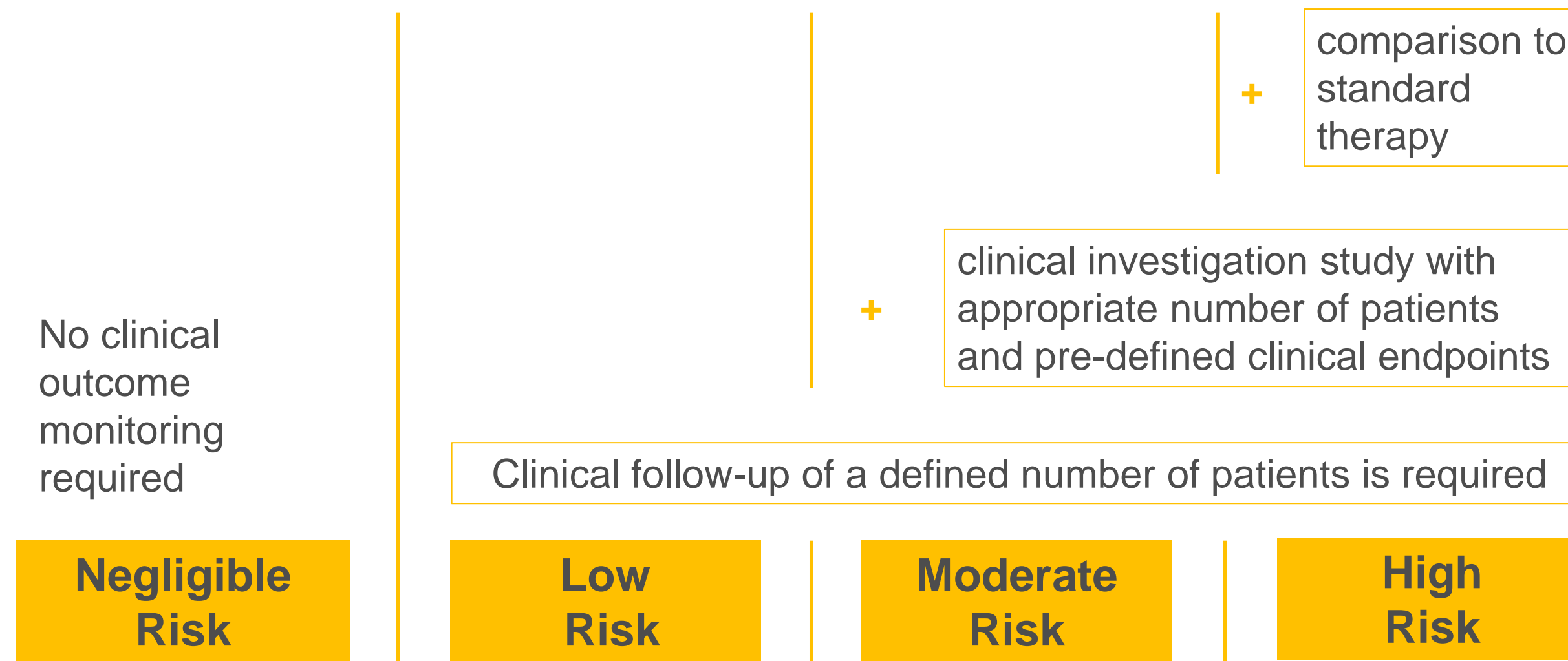
+ blueprint for the authorisation submission/assessment (WP8 GAPP)



Based on preparatory work done by GAPP Joint Action (incl. stakeholders from 17 countries: 15 CAs & professional associations)

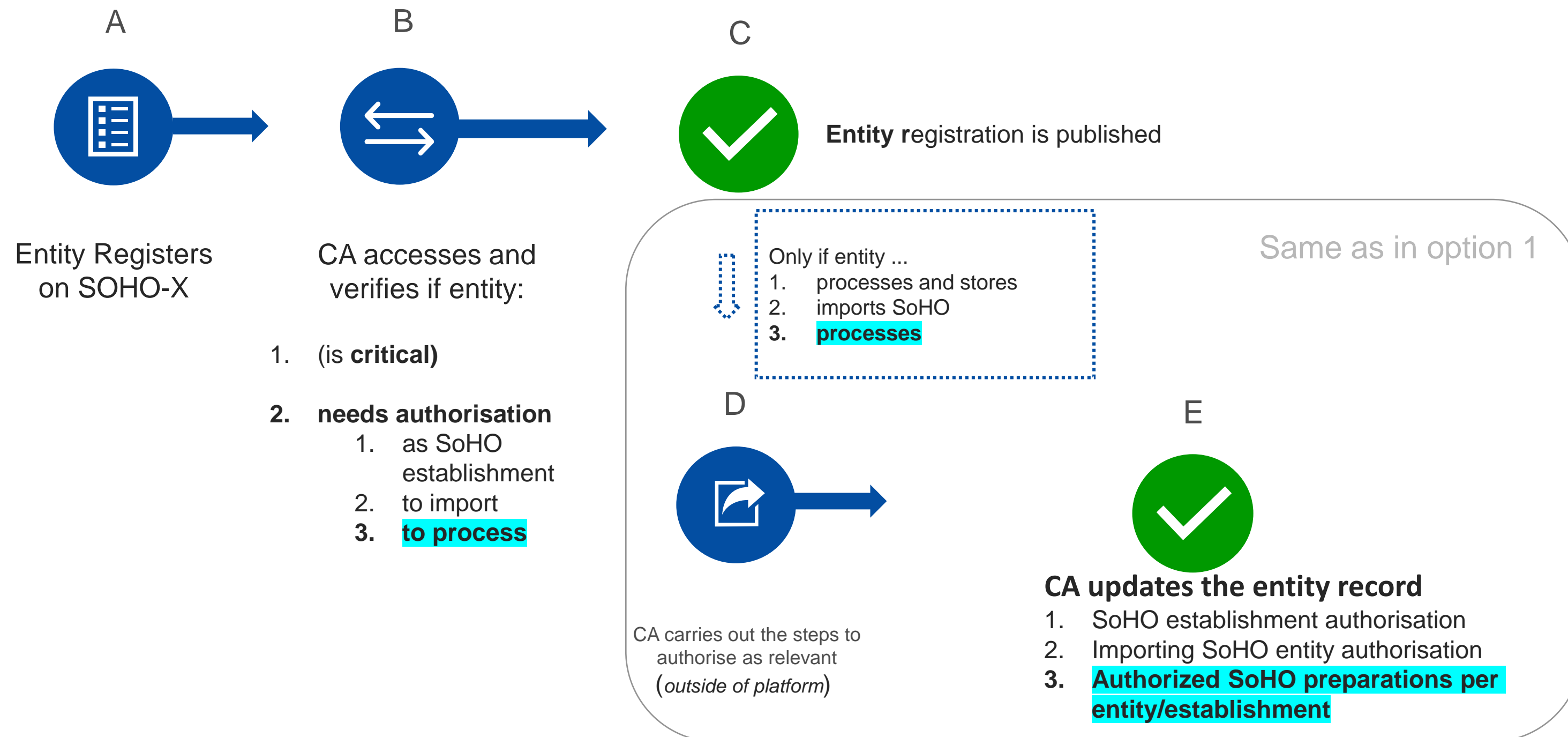


## b. Developments clinical Outcome Monitoring Plans for Conditional authorisation (GAPP-JA)



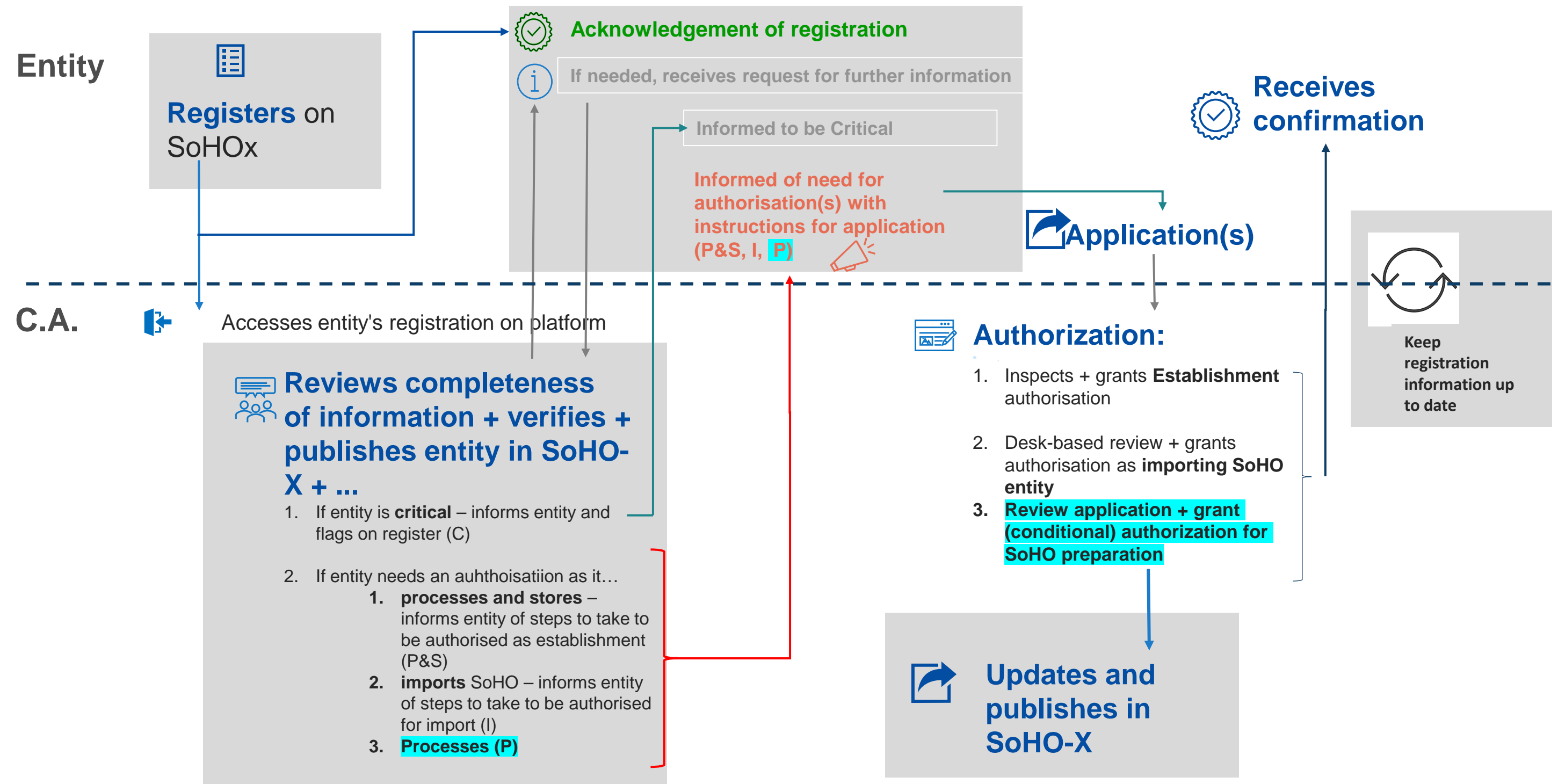
Based on preparatory work done by GAPP Joint Action  
(incl. stakeholders from 17 countries: 15 CAs & professional associations)

## c. (Standard) Flow: SoHO entities can apply for a SoHO preparation authorisation



# c. Digital flow as from first registration as entity...

In SoHO digital platform  
(COM SoHO proposal)





# d. Look & feel – compendium of SoHO preparations authorised in the EU

[Disclaimer](#) | 
 [Privacy Statement](#) | 
 [User Manuals](#) | 
 [Support](#) | 
 [Anonymous](#) | 
 [Logout](#)

## EU Coding Platform

Reference Compendia for the Application of a single European Coding System for Tissues and Cells

SEC LookUp
Compendia
TE Management
Admin

- EU Tissue Establishment Compendium**
- EU TE List
- Filter by Activities
- EU Tissue and Cell Product Compendium**
- EUTC
- Product List*
- Product Categories
- Links**
- Eurocode
- ICCBBA-IBSBT128

### Product List

Coding System	Product number	Product Name	Product Characteristic	Product Code	EUTC Name
A - ISBT 128	M0001	HUMAN MILK	<=-30C Pasteurized For nutritional use	A00M0001	Human milk
A - ISBT 128	M0002	HUMAN MILK	<=-20C Pasteurized For nutritional use	A00M0002	Human milk
A - ISBT 128	M0003	HUMAN MILK	<=-30C Raw For further processing	A00M0003	Human milk
A - ISBT 128	M0004	HUMAN MILK	<=-70C Pasteurized For nutritional use Pooled, <7 donors Specified nutritional analysis: Yes	A00M0004	Human milk
A - ISBT 128	M0005	HUMAN MILK	20-24C For further processing Term Single donor expression Volunteer donor	A00M0005	Human milk
A - ISBT 128	M0006	HUMAN MILK	<=-18C Raw For nutritional use	A00M0006	Human milk
A - ISBT 128	M0007	HUMAN MILK	<=-18C Pasteurized For nutritional use	A00M0007	Human milk
A - ISBT 128	M0008	HUMAN MILK	<=-25C Pasteurized For nutritional use Specified recipient Pooled, single donor Fat reduced Specified nutritional analysis: Yes Volunteer donor	A00M0008	Human milk
A - ISBT 128	N0011	VESSELS FOR RECONSTRUCTION		A00N0011	CARDIOVASCULAR, VESSEL, OTHER
A - ISBT 128	N0012	VESSELS FOR RECONSTRUCTION	Artery, Iliac	A00N0012	CARDIOVASCULAR, VESSEL, OTHER

1-10 out of 4989    1 2 3 4 5 6 7 8 9 10    10

# d. Look & feel – authorised (processing) activities per entity

The screenshot shows the 'EU Coding Platform' interface. At the top, there are navigation links for Disclaimer, Privacy Statement, User Manuals, Support, Anonymous, and Logout. The main header includes the European Commission logo and the title 'EU Coding Platform Reference Compendia for the Application of a single European Coding System for Tissues and Cells'. Below this is a menu with 'SEC LookUp', 'Compendia', 'TE Management', and 'Admin'. The left sidebar contains a 'EU Tissue Establishment Compendium' menu with options like 'EU TE List', 'Filter by Activities', 'EU Tissue and Cell Product Compendium', 'EUTC', 'Product List', 'Product Categories', 'Links', 'Eurocode', and 'ICCBBA-ISBT128'. The main content area shows 'Overview Tissue Establishments' and 'TE Details' for 'Details of ES006072'. This includes a table with fields like Establishment Name, EU TE Code, Status, Hospital Name, Competent Authority, Country, Address of TE, and Contacts. Below this is a table titled 'Authorisation Status of INSTITUTO DE REPRODUCCION ASISTIDA QUIRONSALUD DEXEUS MURCIA' with columns for Competent Authorities, Type of Authorisation, Last registration update, and a grid of activities: Procurement/Donation, Testing, Preservation, Processing, Storage, Distribution, Import, and Export. A callout bubble points to the 'Processing' column, stating 'Complemented with info on specific authorized preparations'. The 'Processing' column shows 'A' for all listed categories.

Establishment Name	INSTITUTO DE REPRODUCCION ASISTIDA QUIRONSALUD DEXEUS MURCIA
EU TE Code	ES006072
Status	Active
Hospital Name	
Competent Authority	ES017-Ministry of Health
Country	ES - Spain
Address of TE	AVENIDA JUAN DE BORBON - 30008 Murcia Spain
Contacts	
Phone	968365008

Competent Authorities	Type of Authorisation	Last registration update								
ES017-Ministry of Health	System site inspection	19/05/2016								
Category of tissues/cells	Detail	Procurement/Donation	Testing	Preservation	Processing	Storage	Distribution	Import	Export	
Reproductive, Oocytes	Partner	A	A	A	A	A	A			
	Non partner	A	A	A	A	A	A	A		
Reproductive, Sperm	Partner	A	A	A	A	A	A			
	Non partner	A	A	A	A	A	A			

Complemented with info on specific authorized preparations

## e. Open questions and user engagement

- **(Main) open questions**

- Module for local/national process to apply and authorize SoHO preparations ?
- Integrate tools to make risk-assessments (EuroGTP-2) ?
- Integration in EU Coding platform (possible reuse) or development of new compendia ?
- ...

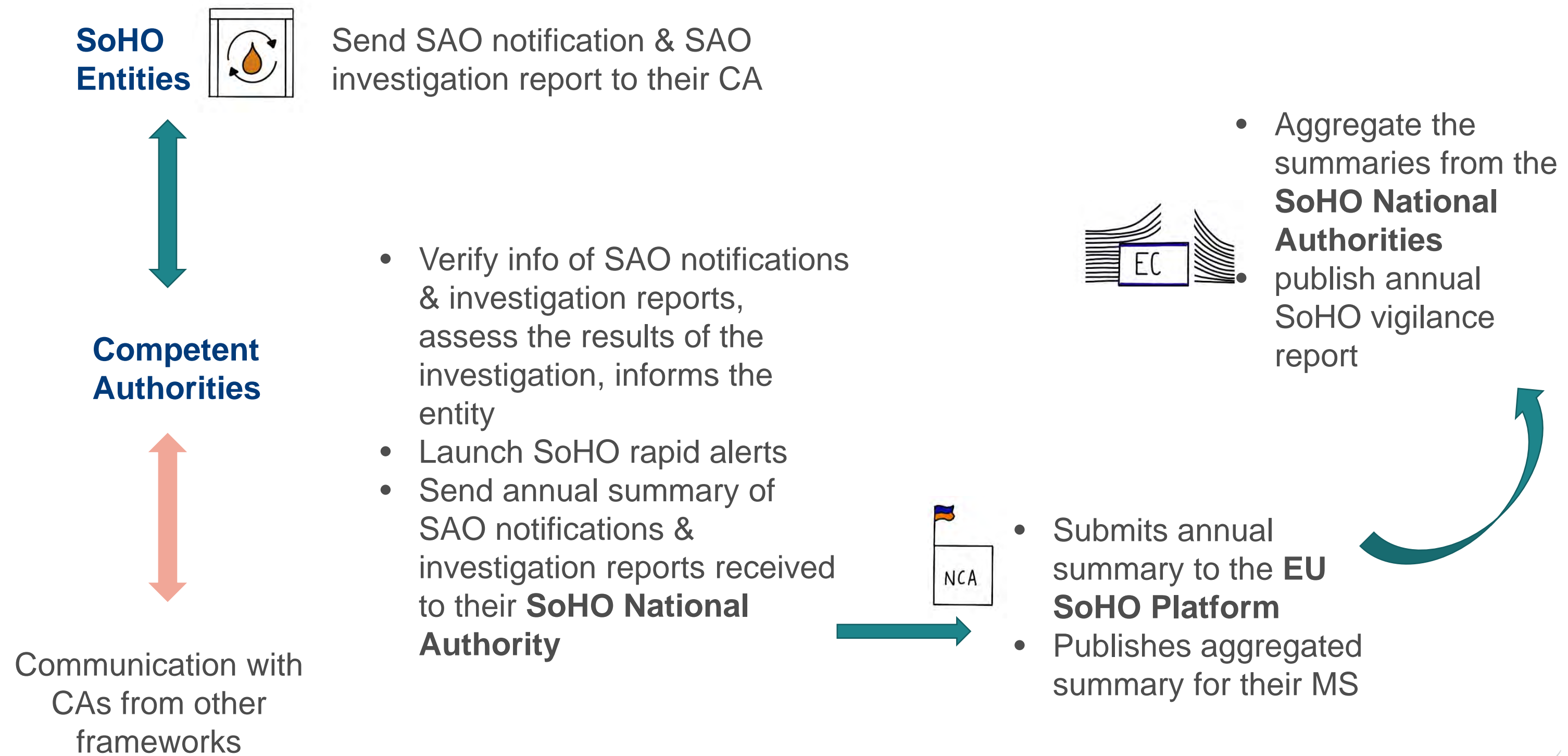
- **User Engagement**

- Map out existing national initiatives/registries (see agenda 4.)
- Map out authorized preparatons (GAPP/GAPP-pro)
- Call for interested authorities to co-develop (GAPP-pro?)
- Training for eventual users (e.g., SIGHT-SoHO, ...)

## 4. Vigilance reporting and alerts



# a. Legal: Vigilance overview



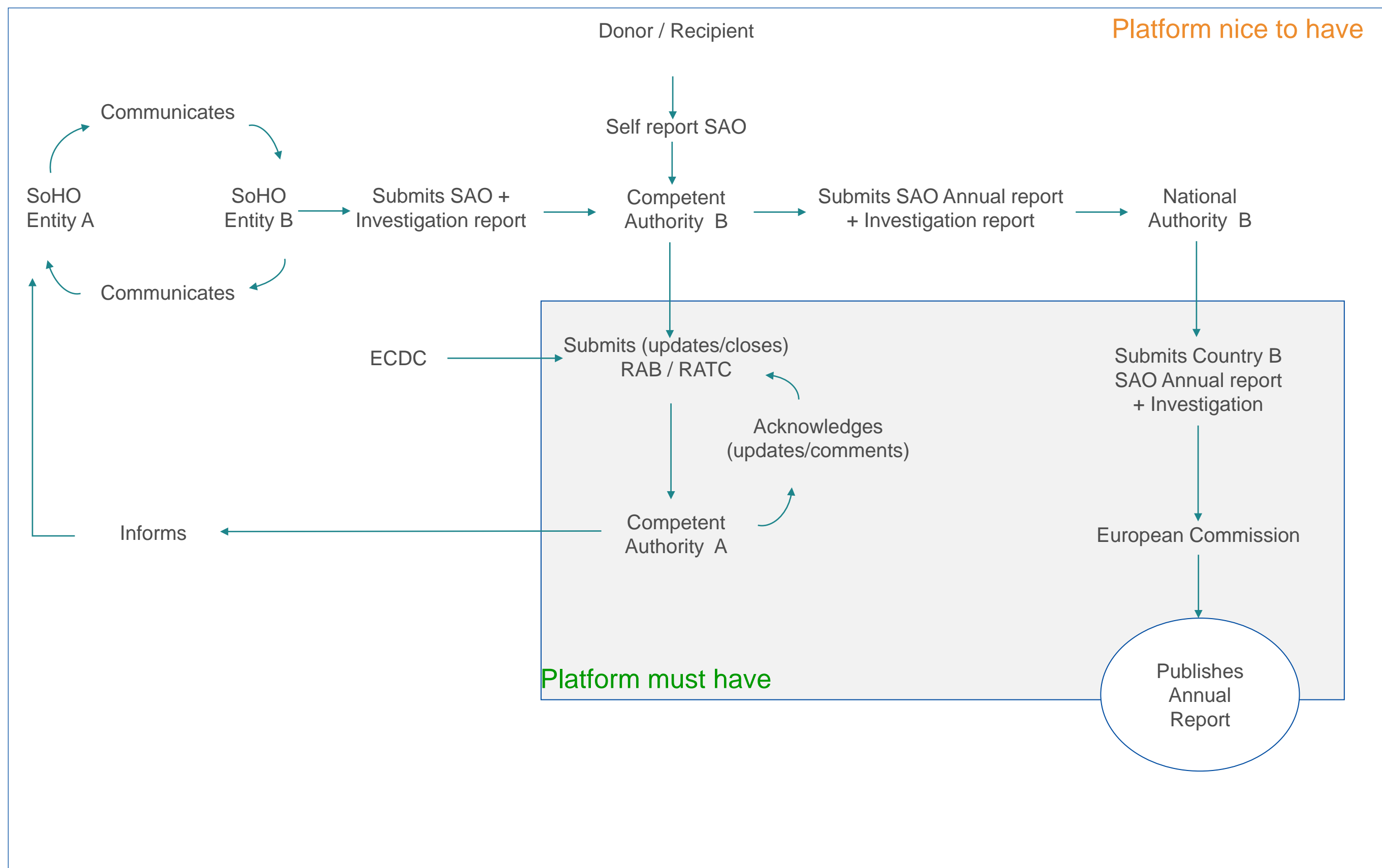
## b. What we have so far...

- Well-established vigilance systems under Directives 2002/98/EC and 2004/23/EC, including ...
  - reporting templates/forms (establishment to authority)
  - rapid alert systems (RAB/TC)
  - annual data collection and consolidation SARE (per MS, EU-wide)
- Guidance Vigilance Expert Subgroup (VES) for annual data reporting reporting (common approach)
- External contractors' work: use cases specifications, business process and mock-ups

# c. Draft Digital flow

DRAFT

In SoHO digital platform  
(COM SoHO proposal)



# d. How it could look – rapid alerts

DRAFT

The screenshot shows the 'New Alert' form in the RAB/RATC platform. The form is titled 'ANNEX III NOTIFICATION OF SERIOUS ADVERSE REACTIONS' and 'Tissues and Cells'. It has three tabs: 'Alert details', 'Problem details', and 'Products'. The 'Alert details' tab is active, showing fields for 'Reference' (FR-2012-DRAFT(1338)), 'Creation date' (03/09/2012), '\* Product concerned' (a dropdown menu), and '\* Type of alert' (a dropdown menu). Below this is the 'Initiator Competent Authority' section, which includes 'Initiator CA' (FR), 'Contact person' (Arnaud CORDIER), 'Network' (Tissues and Cells), and 'Contact person details' (Email: arnaud.cordier@..., Phone: ...). The 'Notified Competent Authorities' section features a grid of checkboxes for various countries (All, AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK). Below the grid are two columns: 'Proposed CAs' with 'Add all' and 'Remove all' buttons, and 'Selected CAs' showing '0 items selected'. At the bottom, there is a section 'Is it relevant for:' with checkboxes for 'Epidemiological sector (ECDC/EWRS)', 'Medical devices(SANCO)', 'Network CAs Blood', 'Network CAs Organs', 'Pharmaceutical sector (EMA)', and 'WHO'. At the very bottom of the form are three buttons: 'Save as draft', 'Send alert', and 'Cancel'. Annotations include a yellow box labeled 'National Competent Authorities' with a curved arrow pointing to the 'Alert details' section, and another yellow box labeled 'Other NCA's T&C Other sectors' with a blue arrow pointing to the 'Initiator Competent Authority' section.



# d. How it could look – annual reports

Annual notification for Serious Adverse Event(s)

Total number of units processed:   N/A  
(See section 3.1 of the common approach)

Whole Blood collections:   N/A

Apheresis collections:   N/A

Is there any serious adverse **EVENT(S)** in your country?  Yes  No

**Donor selection**  Yes  No

Specification	Additional details (if available) / Comments	Quantity	
		<input type="checkbox"/> N/A	
		Total	0

Comments

Whole blood collection  Yes  No

Apheresis collection  Yes  No

Testing  Yes  No

Processing  Yes  No

Storage  Yes  No

Distribution  Yes  No

Component selection (BE or HBB activity step)  Yes  No

Compatibility testing/Cross matching (BE or HBB activity step)  Yes  No

Issue (BE or HBB activity step)  Yes  No

Use this button to add a new 'other' category block

National  
Competent  
Authorities



European  
Commission  
(EDQM)

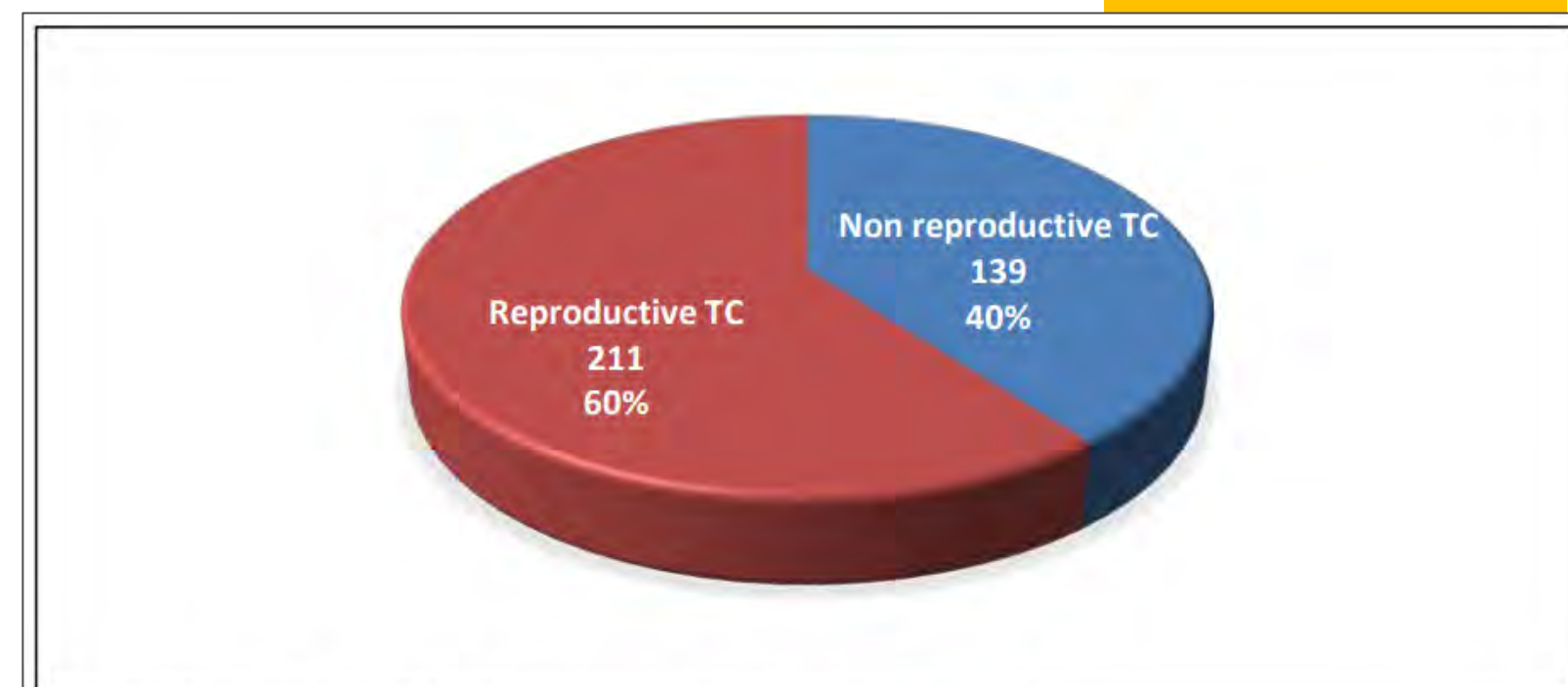


Figure 18. Number of SAR per type of tissues and cells; data 2020

# e. Open questions and user engagement

- **(Main) open questions**

- Secure communication channel entity/authority to integrate model for national process/forms to submit and follow-up on SAO ?
- Allow SoHO-digital platform to auto-prepare (draft) annual consolidated reports (per MS, for EU) ?
- Re-use existing RATC platform - ask VES proposal for RATC platform improvement and extension to non BTC ?

- ...

- **User Engagement**

- User group: continue with NCA's members of VES

- ...

Thank you

# WP7 - Perspectives of interoperability and innovation

Jesper Smeenk



Co-funded by the European Union.

Project: 101079865 — EuMAR — EU4H-2021-PJ2



# WP7: Plan for incorporation of innovation



## Aims

- Facilitate the flexibility of the data registry with regards to the inclusion of additional parameters, amendments towards innovations and possible future connections to other data registries (e.g., obstetric data, birth registry, paediatric diseases' registries, cancer registries, cardiovascular disease registries)
- **Specific aim:**
  - To create a plan for adaptation of the data collection, including IT solutions, which should ensure the data registry is adjustable, making it future proof.

## Tasks

- EuMAR plan for incorporation of innovation (T7.1)

# WP7: Plan for incorporation of innovation



M25-M33

## Milestones

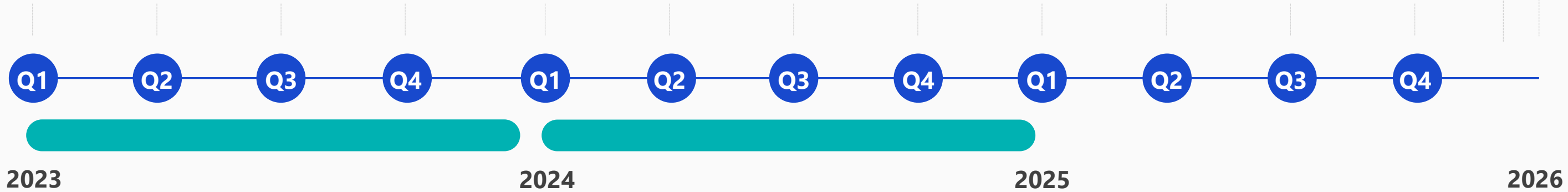
### Deliverable

D7.1 - EuMAR plan for incorporation of innovation

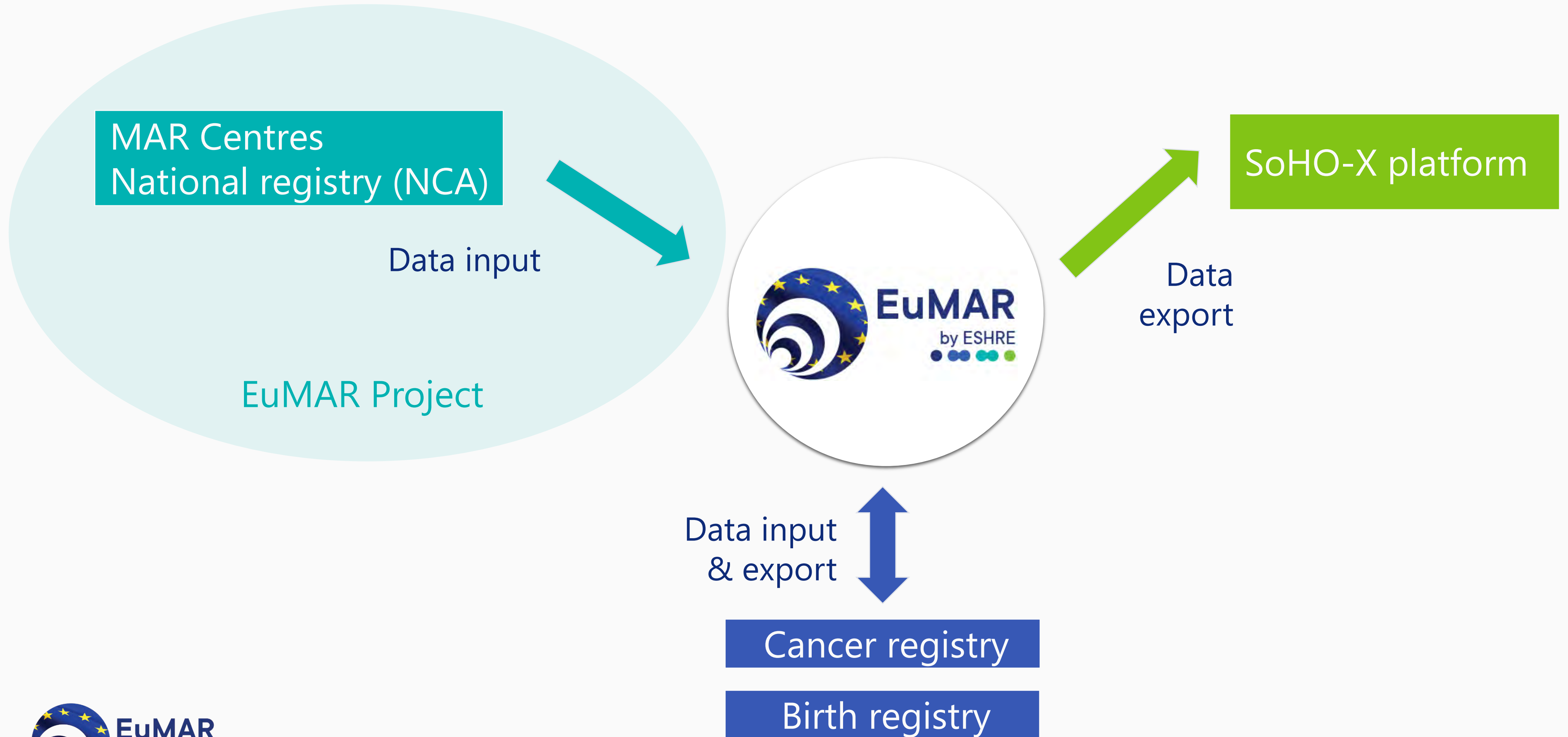


**EuMAR plan for incorporation of innovation**

Q4 2025



# Interoperability





## Connections with other registries

=> How can we adapt the EuMAR Registry to be able to link to other registries?

- Relevance :

Which data are collected in the other registries?

Does a link create any value?

- Birth registry: link prenatal data to ART

- Cancer registry: link the ART outcomes to cancer diagnosis

If relevant..

- Technical possibilities / limitations

- GDPR – legal restraints (data exchange, patient identification)



# Interoperability



## SoHO-X platform

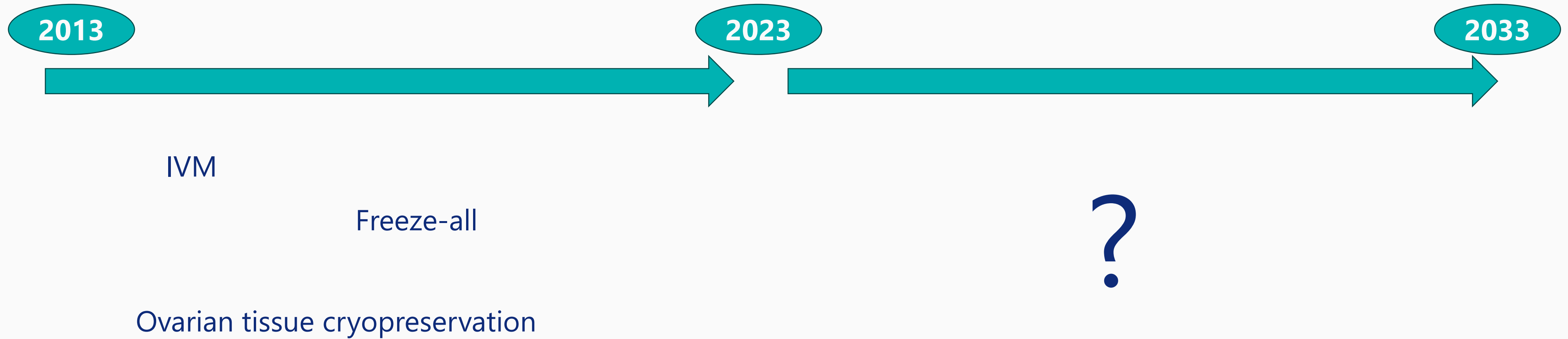
= > aggregated data per clinic, once a year

- Which data will be collected in the SoHO platform?
- Technical possibilities / limitations of direct transfer, or better download/upload
- GDPR – legal restraints

# Innovation



ART is always developing / improving



# Innovation



In the next years, there may be ..

- New treatments?
- Changes in treatment structures?
- Adapted legislation?
- ..

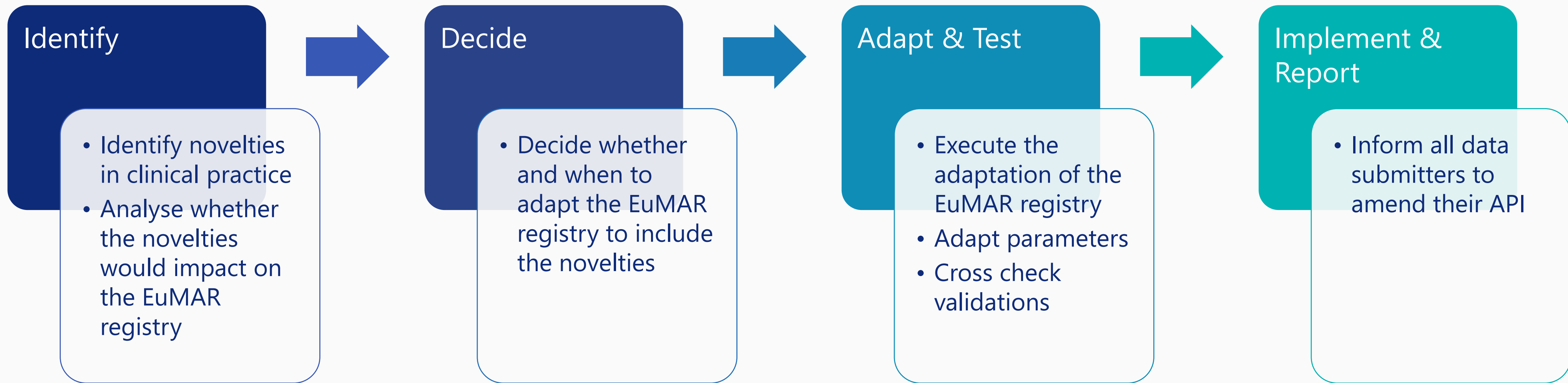


How can the EuMAR registry adapt to this?

# Innovation



## Plan for incorporation of innovation



# Take-home message



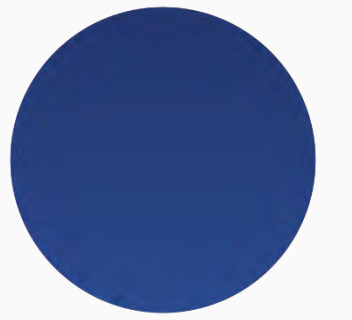
WP 7 will evaluate the feasibility of

- connecting the EuMAR data registry with other registries
- adding parameters to reflect changes in ART

For both scenarios, if they are feasible, WP 7 will develop a checklist / SOP on how to execute these changes while safeguarding the integrity of the EuMAR data registry

# WP2 – Spreading knowledge: Leveraging project dissemination resources

Laura Rossignoli



Co-funded by the European Union.

Project: 101079865 — EuMAR — EU4H-2021-PJ2

# Communication & Dissemination



*Good communication is the bridge between confusion and clarity!*

*To have effective communication we must understand the capacity of the audience!*

# Target audience



MAR Patients

MAR Professionals & Clinics

Policymakers

Research Community / Academia

General Public



# Key deliverables



Event/Media	Specific Action	Date	Description of the action (promotion, general update, announcement, event)	Audience	Attendance number	Virtual or In-person	Link
Website	Created a dedicated section to EuMAR Grant	22/02/2023	A dedicated section on the ESHRE website has been created to share the information, updates and practical information regarding events			-	<a href="http://www.eshre.eu/EuMAR">www.eshre.eu/EuMAR</a>
Mailing	Mailing to announce the grant	14/11/2022	Mailing to announce the grant received from EU (News – ESHRE wins EU4Health Grant for monitoring of Medically Assisted Reproduction!)	ESHRE Members 8,722 recipients		-	<a href="#">News ESHRE wins EU4Health Grant for monitoring of Medically Assisted Reproduction!</a>
Presentation	Competent authority meeting - presented by DG SANTE	01/01/2023	Competent authority meeting (Jan 2023) – 2 slides presented by DG SANTE	National Competent Authorities	unknown	virtual	
Presentation	Project objectives presented	07/02/2023	Competent authority meeting: NV presented the projects objectives and plan	National Competent Authorities	1-2 CAs per EU MS	in-person	
Leaflet	Project overview	10/03/2023				-	
Event	Kick off meeting	10/03/2023	Meeting to get the project started, bringing the various stakeholders together Organised by the Project Support Team	Key stakeholders of project		in-person	<a href="https://www.eshre.eu/Data-collection-and-research/EuMAR/Events">https://www.eshre.eu/Data-collection-and-research/EuMAR/Events</a>
Presentation	20230502_invitation_Presentation on EuMAR at the Working Group on Infertility and MAR	02/05/2023	Presentation on how to improve data infrastructure and measurements to study infertility and MAR. In a webinar hosted by the Working Group on "Infertility and MAR" in the European Association for Population Studies (EAPS). Presentation by Christine Wyms	Researchers with a focus on infertility and MAR	unknown	virtual	
Media	Social media to announce the Scientific Paper		Social media to announce the Scientific Paper in HROpen. Shared on ESHRE social media channels - Twitter, Facebook and LinkedIn	Instagram   Facebook   Twitter   LinkedIn		-	
Media	Focus on Reproduction (FoR) article published online	26/05/2023	FoR Article: "ESHRE's ART monitoring collaboration with the European Commission moves towards cycle-by-cycle data collection"			-	<a href="https://www.focusonreproduction.eu/article/ESHRE-News-European-IVF-data-monitoring">https://www.focusonreproduction.eu/article/ESHRE-News-European-IVF-data-monitoring</a>
Mailing	DGSANTE - competent authorities	05/05/2023	Mailing by DG SANTE to competent authorities with some general information and a reminder about the survey for WP3	National Competent Authorities		-	
Mailing	6 month mailing	29/09/2023	Transforming the future of MAR through data sharing - mailing with an overview of the project, what's happened in the last 6 months and what is coming in the next months	ESHRE Members: 8,722 recipients & Advocacy and Policy: 849 recipients mailing lists		-	Transforming the future of MAR through data sharing
Presentation	10. DVR kongress	22/09/2023	Jasper Smeenk Presente a few slides on EuMAR within his talk on Reproduktionsmedizin im europäischen Umfeld – eine Bestandsaufnahme	Mainly German Doctors/Researches form the field of reproductive healthcare		-	<a href="https://www.medical-communications.de/Readmin/User_upload/DVR23_Programm_A5_WEB_23_0901_NEU.pdf">https://www.medical-communications.de/Readmin/User_upload/DVR23_Programm_A5_WEB_23_0901_NEU.pdf</a>
Presentation	Presentation at the annual meeting of the Polish Society of Repro. Medicine and Embryology (by Anna Janicka)	6-7/10/2023	Anna Janicka (EIM representative for Poland) presented the EuMAR project at the annual meeting of the Polish Society of Repro. Medicine and Embryology	Polish Society of Repro. Medicine and Embryology	unknown	in-person	<a href="https://eshre.sharepoint.com/p://sites/Eu4HealthActionGrantWorkingGroup/Gesde/de%20documents/WP2%20-%20Dissemination%20and%20Communication/RESOURCES/TEMPLATES/SLIDESSET/Previous%20Used/2023/1017_AnnJanicka_PTM/E2023_Poland.pdf?w=8032096696448bb83e1596271a23486&amp;cf=1&amp;web=1&amp;event=2023">https://eshre.sharepoint.com/p://sites/Eu4HealthActionGrantWorkingGroup/Gesde/de%20documents/WP2%20-%20Dissemination%20and%20Communication/RESOURCES/TEMPLATES/SLIDESSET/Previous%20Used/2023/1017_AnnJanicka_PTM/E2023_Poland.pdf?w=8032096696448bb83e1596271a23486&amp;cf=1&amp;web=1&amp;event=2023</a>
Presentation	CO-P-TO meeting (Council of Europe)	10/08/2023	Kersti Lundin presented the EuMAR project at the annual meeting of the Steering Committee on Organ Transplantation (CO-P-TO) at the Council of Europe	competent authorities of the member countries of the Council of Europe	ca. 60	in-person (also online participants in the audience)	<a href="https://eshre.sharepoint.com/p://sites/Eu4HealthActionGrantWorkingGroup/Gesde/de%20documents/WP2%20-%20Dissemination%20and%20Communication/RESOURCES/TEMPLATES/SLIDESSET/Previous%20Used/2023_11_08_EuMAR%20for%20CO-P-TO%20meeting.pdf?w=1d1a302b1368d16a7b636ce1301ae728cfc1&amp;web=1&amp;event=2023">https://eshre.sharepoint.com/p://sites/Eu4HealthActionGrantWorkingGroup/Gesde/de%20documents/WP2%20-%20Dissemination%20and%20Communication/RESOURCES/TEMPLATES/SLIDESSET/Previous%20Used/2023_11_08_EuMAR%20for%20CO-P-TO%20meeting.pdf?w=1d1a302b1368d16a7b636ce1301ae728cfc1&amp;web=1&amp;event=2023</a>
Mailing	invitation to members to join the stakeholder event	30/11/2023	Mailing to all ESHRE members letting them know about the stakeholder event and inviting them to join virtually	ESHRE Members 8,722 recipients		-	

**European monitoring of Medically Assisted Reproduction**

European monitoring of Medically Assisted Reproduction (EuMAR) aims to develop a pan-European registry of prospective cycle-by-cycle data on the use and outcomes of medically assisted reproduction (MAR) treatments. EuMAR addresses the need for more transparency, surveillance and biovigilance in MAR across country borders, including better data on the safety of MAR for offspring, donors and recipients, in line with the revision of the EU Directives on blood, tissues and cells.

- Objective 1: Constructing a data flow system beneficial to all stakeholders
- Objective 2: Standardization and definition of precise MAR parameters
- Objective 3: Developing a technical solution for the web-based data registry and the Individual Reproductive Care Code (IRCC)

'overarching', standardized, web-based data registry in MAR in the European Union

Co-funded by the European Union.  
Project: 101079865 - EuMAR - EU4H-2021-PJ2  
"Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them."

[www.eshre.eu/Data-collection-and-research/EuMAR](http://www.eshre.eu/Data-collection-and-research/EuMAR)



# Key deliverables





**Work packages**  
The work for the EuMAR project is divided into 8 Work Packages (WP), including 5 core WPs and 3 horizontal WPs, each executed by a dedicated working group.

→ **WP3: Integration in national policies and sustainability**  
The project specifically aims to prepare the implementation of the central EuMAR data registry through developing connections with the national competent authorities and policymakers and gathering their feedback. To achieve this goal, ESHRE will map the different stakeholders across the EU member states, distribute information on the project and gather feedback on barriers to implementation and examine with Competent Authorities on what data they and the centres in their countries need/would like to receive.

→ **WP4: Selection and definition of parameters**  
To prepare the data registry, this WP aims to identify relevant items to be registered and create a glossary of standardised definitions in order to ensure proper data harmonisation.

→ **WP5: IT solution for the registry including the IRCC**

**Expected impact**

ESHRE is convinced the EuMAR registry will be a first step towards increased uptake of surveillance and vigilance in MAR, which, in turn, could allow for a better understanding of the overall effectiveness and potential risks related to novel and established MAR treatments. These insights will be of benefit to patients seeking care, professionals pursuing medical excellence and health authorities.

**Individual Reproductive Care Code (IRCC)**

The IRCC will identify individuals (and their reproductive material) during case-by-case data reporting to the EuMAR registry. The code will be unique for each individual, even if individuals change the institutions, including across country borders within the EU. The IRCC will also allow patients to visualize their own treatment data.

**Background and Aims**

The European IVF-monitoring (EIM) consists of the European Society of Human Reproduction and Embryology (ESHRE) has been collecting data since 1997 with annual reports summarizing efforts, treatments and trends. While valuable, the data collection is limited in terms of the geographical area that can be calculated from the collected sum of data (such as cumulative pregnancy rates) and the ability to collect data on cross border activity.

European monitoring of Medically Assisted Reproduction (EuMAR) aims to develop a pan-European prospective cycle-by-cycle data on the use of Medically Assisted Reproduction (MAR) across Europe.

EuMAR addresses the need for more transparent surveillance and biovigilance in MAR across borders, including better data on the safety of offspring, donors and recipients.

**Key steps of EuMAR**

1. Develop a tailored data flow model that meets the national requirements of all EU Member States and avoids duplication of efforts;
2. Prepare a glossary of standardised parameters on which data is to be collected with corresponding definitions;
3. Develop an IT solution for data collection, including an "Individual Reproductive Care Code" (IRCC) that allows prospective data collection and cumulative follow-up across different centres/countries.

**Contact**

eumar@eshre.eu | www.eshre.eu/EUMAR

ESHRE Central Office  
BXL7 - Building 1  
Nijverheidslaan 3, 1st floor  
B-1853 Strombeek-Bever, Belgium

**EU Funding**

The EuMAR project is co-funded by the European Union, Project: 101079865 – EuMAR – EU4H-2021-PJ2\*

\*Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.





## Kick-off meeting – 10 March 2023



The official EuMAR Kick-off Meeting was held at ESHRE's headquarters in Strombeek-Bever (Belgium) on 10 March 2023.

It was the starting block where the project's background, objectives and organisation were presented by the EuMAR Team, along with input from the HaDEA project officer regarding the project's technical requirements. Each of the Work Package leaders presented their lines of actions for the different work packages aiming to meet the EuMAR projects objectives and timelines.

[View agenda](#)

# Resources & Dissemination



Toolkit

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Scientific publications

[Click here](#)



Project results

[Click here](#)

PLEASE CLICK [HERE](#) IF YOU CAN'T READ THE CONTENT OF THIS EMAIL

**ESHRE**  
Advocacy and policy engagement



## European monitoring of Medically Assisted Reproduction

Dear ESHRE member,

We have some exciting news to share with you all. ESHRE was recently awarded an EU4HEALTH project grant of 1.2 million euro for the development of the EuMAR data registry. The project will run between January 2023 and December 2025.

The EuMAR data registry will be the first 'overarching' European, standardised, web-based data registry, containing high-quality cycle-by-cycle data entries from medical professionals across the EU. The EuMAR registry aims to facilitate data sharing for open science across institutes and to allow the longitudinal and cross-border follow up of medically assisted reproduction (MAR) data.

ESHRE is convinced the EuMAR registry will be a first step towards increased uptake of surveillance and vigilance in MAR, which, in turn, could allow for a better understanding of the overall effectiveness and potential risks related to novel and established MAR treatments. These insights will be of benefit to patients seeking care, professionals pursuing medical excellence and health authorities - a win for all.

We are excited about the prospects of this project and what it means and look forward to keeping you posted through mailings and social media. More details on the project will be available on the ESHRE website as of spring 2023.



Co-funded by the European Union

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We hope you find this information useful. For questions, comments, feedback or suggestions please reply to this e-mail and tell us exactly what you think.

Please add [kristina@eshre.eu](mailto:kristina@eshre.eu) to your address book to ensure our e-mails reach your inbox

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JOURNAL ARTICLE

## EuMAR: a roadmap towards a prospective, cycle-by-cycle registry of medically assisted reproduction in Europe

Christian De Geyter ✉, Carlos Calhaz-Jorge, Veerle Goossens, Cristina M Magli, Jesper Smeenk, Kristina Vesela, Nathalie Vermeulen, Christine Wyns

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Interview 01 Christian De Gryter

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Interview 02 Carlos Calhaz-Jorge

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Interview 03 Veerle Goossens

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**EuMAR**  
by ESHRE

Transforming the future of MAR through data sharing.

### Introduction

Introducing EuMAR - the groundbreaking project that's set to transform the field of Medically Assisted Reproduction (MAR). With a focus on gathering prospective cycle-by-cycle data on the use and outcomes of MAR treatments across the EU, EuMAR is leading the change towards improved patient safety, enhanced quality of care, and informed decision-making.

**EuMAR responds to the needs for:**

- Biovigilance and surveillance to identify adverse events and prevent and reduce risks, making MAR safer for patients, donors, and children.
- Cross-border care and inter-institutional monitoring allowing to compile cumulative reports per patient.
- Harmonisation of core parameters to facilitate dialogue and international cooperation.
- Accessibility of data to ensure transparency and Open Science.
- Flexibility to the inclusion of additional parameters, revisions towards innovation and possible future connections to other data registries and EU initiatives.
- Monitor the effectiveness of MAR treatments with accurate real-time data, to improve quality of care and promote decision making.

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