



OD4RD3

Kick Off Meeting 6 May 26



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AGENDA



13h30 Welcome (Coordinator)

13h45 Workpackage 1 -Admin update (Project Manager)

14h-14h30 Workpackage 2 - Interoperable Nomenclature- Presentation & discussion (Inserm/Bfarm).

14h30- 15h00 Workpackage 4 - Database Improvement & exploitation at the European level- Presentation & Discussion (Inserm)

15h00-15h15 Break

15h15-16h45 Workpackage 3 - Supporting ORPHAcodes implementation/Use at National level- Interactive session (Inserm/Ous-Bar)

16h45- Conclusion

What do we want?

OD4RD wants to build knowledge around ORPHAcoding!

Why?

to make RD diagnosis visible in HIS uniformly across countries



Eco-systeming with ERNs

What for?

to improve the lives of PLWRD & facilitate Evidence based decisions!!

In synergy with other RD projects & Health data projects @EU & worldwide



@OD4RD



@OD4RD



GENERAL OBJECTIVES

1. Ensure the production and delivery of the **Orphanet nomenclature of RD** (ORPHAcodes), updated and adapted to evolution of knowledge and coding needs, including the need for interoperability of RD data in health and research systems.
2. Accompany and promote the **RD codification expansion** in ALL European MS, by providing human and technical support for implementation, actual adoption and codification in a harmonised standardized way across Europe.
3. Collaborate closely with ERNs so their expertise and data collected in registries contributes to **knowledge generation and dissemination** through a constantly improved Orphanet knowledge base.
4. Contribute to the European RD policy by providing support to the European Commission, the Board of Member States and the ERN coordination for evidence-based decision-making.

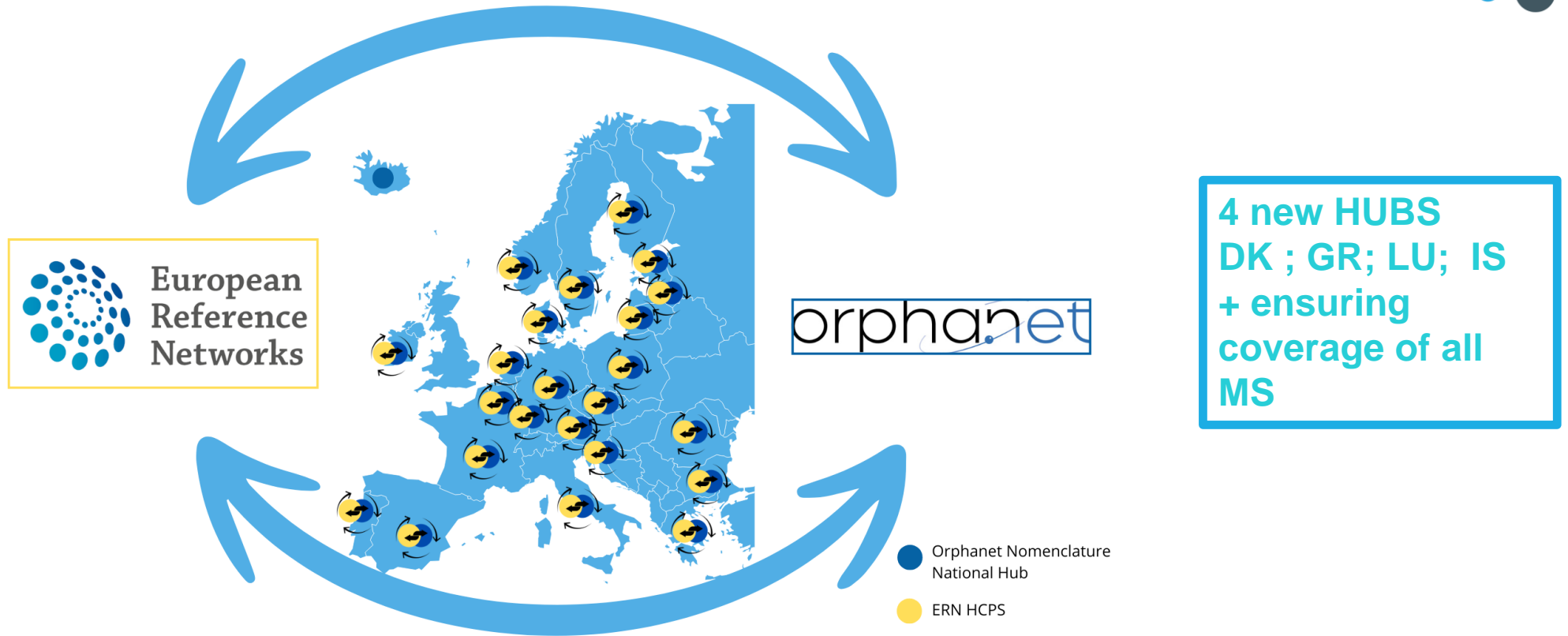


SPECIFIC OBJECTIVES

1. Ensure the continuous production and delivery of Orphanet nomenclature so as to follow the continuous evolution of knowledge and to adapt to coding needs, in particular by enhancing collaborations with ERNs.
2. Ensure the interoperability between ORPHACodes and other terminologies in use (in particular ICD-10, ICD-11 and SNOMED-CT) so as to provide an accurate and consistent resource for transcoding.
3. Scale-up the support for ORPHACodes implementation in MS by expanding the capacity and the geographical coverage of the Network of Orphanet Nomenclature Hubs (NONH), so as to cover all EU MS, by adapting the National hubs action plans to the local situations (taking into account the specificity of the current ORPHAcoding implementation State of play in each MS).
4. Expand and update the Orphanet knowledge base content in collaboration with ERNs so as to contribute to its exploitation for primary use (improved patients' healthcare pathways) and secondary use (data exploitation).
5. Provide Orphanet knowledge base exploitation and analysis to support evidence-based decision-making by EC, BoMS and ERNs coordination.

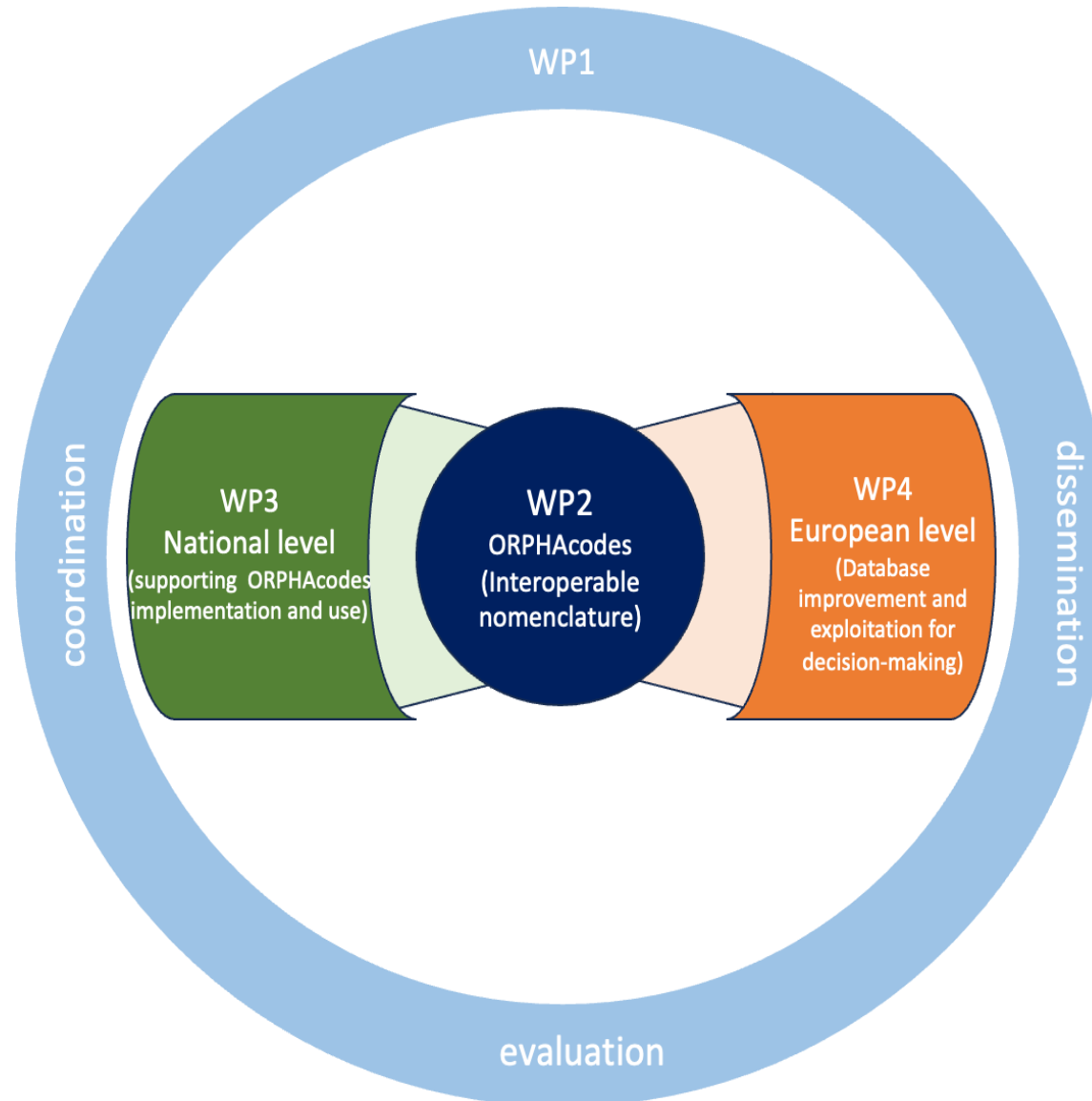


24 PARTNERS-23 FUNDED HUBS



Orphanet and ERNs constitute a European framework for RD demonstrating European added-value and national level impact for better and more efficient care and research for PLWRD

OD4RD3 STRUCTURE



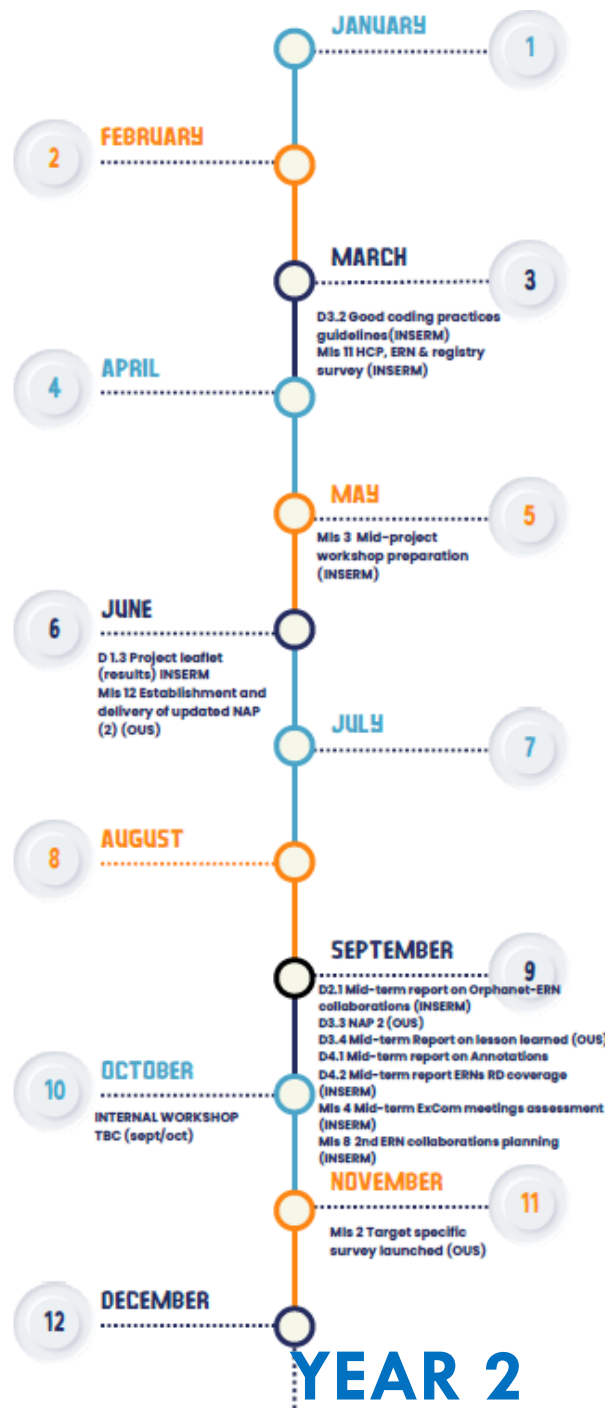


WP1

COORDINATION ACTIVITIES



TIMELINE



ADMIN INFO IN A NUTSHELL



- April 2026-December 2028
- 24 Partners
- Direct Grant de facto monopoly: Inserm is the solo beneficiary with Affiliated entities
- EC-funding stable 3.5 M€ but 4 new partners => decrease in co-funding for « old hubs », 0.75
- Events:
 - KOM 6 May online (only project partners)
 - **Additional high level KOM event with EC & ERNs : 12-13 November**
 - mid-term Workshop around M18 2027 (only project partners=> probably online TBD)
 - Annual TfT (with one F2F , eventually a second if B2B with final event)
 - Final meeting: F2F with external stakeholders (fall 2028)
- Regular meetings
 - WP4 monthly then bi-monthly
 - Open sessions Nomenclature
 - Excom Monthly

ADMIN INFO IN A NUTSHELL



- Project external website : www.OD4RD.eu
- Internal website: <https://network.orphanet.org/od4rd3-project/>



REPORTING & PAYMENTS

Reporting and payment schedule (art 21, 22):

Reporting					Payments	
Reporting periods			Type	Deadline	Type	Deadline (time to pay)
RP No	Month from	Month to				
					Initial prefinancing	30 days from entry into force/10 days before starting date/ financial guarantee (if required) – whichever is the latest
1	1	18	Periodic report	60 days after end of reporting period	Interim payment	90 days from receiving periodic report
2	19	33	Periodic report	60 days after end of reporting period	Final payment	90 days from receiving periodic report

50%

According to declaration but up to 0%

Balance

BUDGET FLEXIBILITY



5.4 Estimated budget, budget categories and forms of funding

The estimated budget for the action is set out in Annex 2. It contains the estimated eligible costs and contributions for the action, broken down by participant

and budget category. Annex 2 also shows the types of costs and contributions (forms of funding)¹⁰ to be used for each budget category.

If unit costs or contributions are used, the details on the calculation will be explained in Annex 2a.

5.5 Budget flexibility

The budget breakdown may be adjusted — without an amendment (see Article 39) — by transfers (between participants and budget categories), as long as this does not imply any substantive or important change to the description of the action in Annex 1.

However:

- changes to the budget category for volunteers (if used) always require an amendment
- changes to budget categories with lump sums costs or contributions (if used; including financing not linked to costs) always require an amendment

changes to budget categories with higher funding rates or budget ceilings (if used) always require an amendment

- addition of amounts for subcontracts not provided for in Annex 1 either require an amendment or simplified approval in accordance with Article 6.2
- other changes require an amendment or simplified approval, if specifically provided for in Article 6.2



BUDGET AWARENESS

- You can use your budget for staff/other costs/travels
- Please keep us updated on any underspending so that we can quickly re-allocate it to a team in need or at coordination level for relevant project-related expenditures that could not make it after the budget cuts
- Important assessment at RP1

DISSEMINATION PLAN



Full document to review here: [OD4RD3 Dissemination Plan V1.docx](#)

What	Type	Audience / to Whom	Objective Why	Target date /availability	How	Description
Visual identity	Communication	NA	NA	Available	Displayed on every material and on website	OD4RD visual identity
Project website	Communication	Project partners and ERNs	Disseminate project results and deliverables	Available	Available & the Co-funding by European Commission Logo as well as the relevant disclaimer are available in the website homepage www.od4rd.eu	<p>The project website describes the project objectives, description of the work by Workpackage and its partners. Moreover:</p> <ul style="list-style-type: none"> - All the deliverables will be made available on the website: https://od4rd.eu/03-deliverables - A dedicated page containing all the communication and dissemination material produced is made available: https://od4rd.eu/communication-material - A page containing the most-up-to date bibliography of Scientific papers where ORPHAcodes is also available: https://od4rd.eu/orphacodes-bibliography - information about the Kick off Meeting as well as its report will be published - A link to the ORPHAcodes helpdesk dedicated to answering questions related to the Orphanet nomenclature content and the implementation of ORPHAcodes in Health Information Systems or other Systems: https://od4rd.eu/orphacodes-helpdesk - a link to the ORPHAcodes one shop stop webpage (see section B)
One stop Shop ORPHAcodes website				available	the Co-funding by European Commission Logo as well as the relevant disclaimer are available in the website homepage www.orphacode.org	In this website the users can access all the computable information necessary to achieve implementation of ORPHAcodes in health information systems, and ensure accurate coding (files and technical tools), tools for coders and also links to the Helpdesk, links to the Recommendation and overview of the ORPHAcodes in the data policy ecosystem



DISSEMINATION PLAN

What	Type	Audience / to Whom	Objective Why	Target date /availability	How	Description
Instagram	Social Communication	RD community	Raise awareness about the project	Available (ORPHAcodes instagram account)	Regular posts: what's new/ Did you know/ What's next/ further reading. @ORPHAcodes	
Linkdin	Social Communication	RD community	Raise awareness about the project	Available via the Orphanet page	All OD4RD2 Instagram posts are also disseminate via the orphaned linkdin page	See above
Kick off meeting & executive summary	Dissemination of results and good practice	Project partners and ERNs	Share Project Action plans and expected results and deliveries	M2	Online meeting,	https://od4rd.eu/03-deliverables executive summary
Final Meeting Executive summary	Dissemination of results and good practice	Project partners and ERNs	Share achievements and co-build future actions	M33	2F2 Meeting	
Project Leaflet	Dissemination of results and good practice	GP	Share achievements	June 2027	Displayed on the website and insta. Printed version distributed at events	



NATIONAL HUB DISSEMINATION

- keep us posted and tagged
- do not forget the mandatory disclaimers

17.3 Quality of information — Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information. Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“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 HADEA. Neither the European Union nor the granting authority can be held responsible for them.”



EVALUATION PLAN

- ❑ Mid-Term Report & Final Report on project evaluation
- ❑ Dedicated section in RP1 and final Technical report
- ❑ Process/Output/Outcome Indicators & targets detailed in each WP description



TABLES ON DISSEMINATION/COMMUNICATION/EVENTS & TRAININGS ACTIVITIES TO BE KEPT UPDATED: WP1

HOW? => HOMEWORK BEFORE EACH WP3 MEETING?

Management

01307450 (OD4RD3) EU4H-PJG

Call: EU4H-2025-DGA-02-IBA
Topic: EU4H-2025-DGA-02-IBA

Project Summary	Deliverables	Milestones	Critical Risks	Disseminat... activities	Communic... Activities	Events and Trainings	Financial support to 3rd parties

Dissemination Activities SAVE

There is no dissemination activity for this project yet

List the dissemination activities carried out in the context of the project.
Include dissemination activities mentioned in the proposal and new ones.

[+ Add Dissemination Activity](#)

Dissemination Activity Name	What? Type of dissemination activity	Who? Target audience Reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions



TABLES ON DISSEMINATION/COMMUNICATION/EVENTS & TRAININGS ACTIVITIES TO BE KEPT UPDATED: WP1

HOW? => HOMEWORK BEFORE EACH WP3 MEETING?

Grant Management | Project Continuous Report | HOW TO

01307450 (OD4RD3)	EU4H-PJG	Project Summary	Deliverables	Milestones	Critical Risks	Disseminati... activities	Communic... Activities	Events and Trainings	Financial support to 3rd parties
all: EU4H-2025-DGA-02-IBA opic: EU4H-2025-DGA-02-IBA									

Communications Activities

SAVE

There are no communication activities for this project yet

Communication on projects is a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about (i) the action and (ii) its results to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange.

List the communication activities carried out in the context of the project. Use the same labels used in your DEC plan.

[+ Add Communication Activity](#)

No communication activities added



TABLES ON DISSEMINATION/COMMUNICATION/EVENTS & TRAININGS ACTIVITIES TO BE KEPT UPDATED: WP1

HOW? => HOMEWORK BEFORE EACH WP3 MEETING?

Grant Management Project Continuous Report HOW TO

101307450 (OD4RD3) EU4H-PJG
Call: EU4H-2025-DGA-02-IBA
Topic: EU4H-2025-DGA-02-IBA

Project Summary Deliverables Milestones Critical Risks Disseminat... Communic... Events and Trainings Financial support to 3rd parties

Events and Trainings SAVE

There is no event and training for this project yet

+ Add Event or Training

Participant name	Description Name	Description Type	Description Area	Description Location	Description Duration (days)	Male Attendees	Female Attendees	Non-binary Attendees	Total Attendees	Actions
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WP2

INTEROPERABLE NOMENCLATURE





WP2 INTEROPERABLE NOMENCLATURE

Objectives:

1. Ensure the continuous production and delivery of Orphanet nomenclature so as to follow the continuous evolution of knowledge and to adapt to coding needs, in particular by enhancing collaborations with ERNs
2. Ensure the interoperability between ORPHAcodes and other terminologies in use (in particular ICD-10, ICD-11 and SNOMED-CT) so as to provide an accurate and consistent resource for transcoding.

Tasks:

1. T2.1 Production, maintenance and delivery of the Orphanet nomenclature according to the evolution of knowledge and ERN collaborations
2. T2.2 Completion and maintenance and quality control of ORPHAcodes alignments with other medical terminologies in use

Leader: INSERM

Participants: BfArM

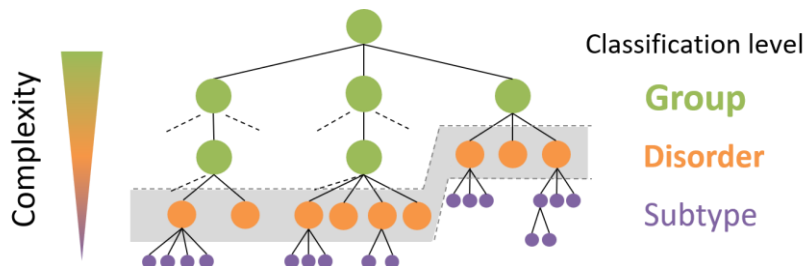
PRODUCTION OF THE ORPHANET NOMENCLATURE



6527 Rare Disorders

[as of July 2025]

ORPHA code	Preferred term	Synonyms	Classification level
ORPHA:2134	Atypical hemolytic uremic syndrome	Atypical HUS aHUS	Disorder
Definition	A rare, genetic thrombotic microangiopathy due to dysregulation of the alternative complement pathway and characterized by the triad of hemolytic anemia, thrombocytopenia, and acute renal dysfunction.		



ORPHAcode creation

- Homogenous clinical presentation
- Prevalence <1/2000
- At least 2 published cases

Modification

- Nomenclature modification
- Classification
- Typology

Inactivation

- **Obsolescence**
- **Deprecation**
- **Non rare**

⚠ Inactive ORPHAcodes are not reused for different entities

Monthly validation cycles



DELIVERY OF THE ORPHANET NOMENCLATURE

Nomenclature Pack and coding tools delivered in July every year

The Orphanet nomenclature is a multilingual, standardised, controlled medical terminology that includes all clinical entities registered in the Orphanet knowledge base. Each clinical entity (and its subtype) is associated with a unique numerical identifier named ORPHAcode, a list of synonyms, and a definition. The Orphanet nomenclature is organised in a classification system by major medical specialties, according to diagnostic and therapeutic relevance. This classification includes main generic clinical and genetic terminologies, thus providing a common language across different countries for effective monitoring and reporting on all rare diseases diagnosis, ultimately improving patient care.

The Orphanet Nomenclature of rare diseases is produced according to standard procedures, based on scientific literature and collaborations with expert groups, so as to reflect the evolution of knowledge.

ORPHAcodes files are available via the CC BY 4.0 licence and are released annually* in July.

The Orphanet nomenclature pack compiles various files which provide the computable information necessary to achieve the implementation of ORPHAcodes in health information systems, and ensure accurate coding. Differentials are provided to ensure traceability*.

NOMENCLATURE PACK WITH GENERIC TERMINOLOGIES MAPPING FILES

The ORPHAcodes API facilitates the informatic access to the nomenclature pack data and allows flexible implementation into the various IT systems in use in the different countries and/or settings.

ORPHACODES API

as per recommendation of the RD-ACTION working group for routine maintenance of codification.

- ORPHAcodes – Guidance for ORPHAcoding implementation and exploitation
- Helpdesk
- Tools for coders
- Standard procedures
- The ORPHAcodes in the data policy ecosystem

Tools for coders

- ORPHACODES CLASSIFICATIONS BROWSER**
a tool dedicated to browse the Orphanet classifications; it allows searching for clinical entities by ORPHAcode.
- ORPHACODES MAPPINGS BROWSER**
a tool that facilitates transcoding by allowing users to search for rare clinical entities and displaying the corresponding mappings in aligned generic medical and genetic terminologies.
- ORPHACODE DATAVIZ TOOL**
a tool that allows visualisation of scientific data and classification information associated to rare diseases in a user-friendly format.

- Standard procedures
- The ORPHAcodes in the data policy ecosystem

<https://www.orphacodes.org>

This nomenclature and classification system has been developed and maintained thanks to European support (RD-PORTAL 512305098-2006119; RD-PORTAL2 512324970-20091215; ORPHANET EUROPE JOINT ACTION 20102206; EUCERD Joint Action 2011 22 01; ORPHANET OPERATING GRANT 20133305; RD-ACTION JOINT ACTION 677024; ORPHANETWORK DIRECT GRANT #38-G28; RD-CODE 826607; QD4RD 101070531; QD4RD2 101110100) since the recognition as a priority, in the Council Recommendation of June 8th 2009 on an action in the field of RD, of the

ENHANCING COLLABORATIONS WITH ERNS: BENEFITS



orphanet



Scientific expertise

- Is the information accurate?
- Does it answer clinicians' needs?
- If not: best course of action?



Databasing expertise

- Transpose information in a standardised system
- Assess proposed updates:
 - Inter- and intra-classification consistency
 - Anticipate coding issues and overlaps
- Help decision process and find alternatives

ENHANCING COLLABORATIONS WITH ERNS: BENEFITS



Scientific expertise

- Is the information accurate?
- Does it answer clinicians' needs?
- If not: best course of action?



Databasing expertise

- Transpose information in a standardised system
- Assess proposed updates:
 - Inter- and intra-classification consistency
 - Anticipate coding issues and overlaps
- Help decision process and find alternatives

- Comprehensive data in 1 place
- ERN patient registries
- Standardise collection of new data
- New discussions & ideas for next classification updates

- Quality of information
- Classification = current state of knowledge
- Better service for clinicians



ENHANCING COLLABORATIONS WITH ERNS: METHODOLOGY



ENHANCING COLLABORATIONS WITH ERNS: OD4RD2 ACHIEVEMENTS



Table 1. Summary of the finalized collaborations in the context of OD4RD2 project.

ERN	ORPHA	Group Revised	Collaboration weight
ERN-EuroBloodNet	NA	Pediatric thrombotic diseases	0.5
MetabERN	738	Porphyria	0.5
ERN-EYE	499047	Isolated optic neuritis	0.5
ERN SKIN	79373	Ectodermal dysplasia syndrome	0.5
ERN EURO-NMD	98482	Acquired skeletal muscle disease	0.5
ERN EURO-NMD	98491	Neuromuscular junction disease	1
ERN PaedCan/SIOPE	715717	Pediatric gliomas, glioneuronal tumours, and neuronal tumours	1
ERN EURO-NMD	599	Distal myopathy	1
ERN GENTURIS	104010	Intestinal polyposis syndrome	1
ERN-Transplantchild	506210	Rare disorder potentially indicated for liver transplant	1
ERN-Transplantchild	506222	Rare disorder potentially indicated for lung transplant	1
ERN-Transplantchild	506225	Rare disorder potentially indicated for heart transplant	1
ERN-Transplantchild	506219	Rare disorder potentially indicated for HSC transplant	1.5
ERN-Transplantchild	506213	Rare disorder potentially indicated for kidney transplant	1.5

ERN ERNICA	104012	Rare inflammatory bowel disease	1.5
ERN EuroBloodNet	68364	Hemoglobinopathies	1.5
ITHACA-eUROGEN / Spina Bifida and other dysraphisms	268357	Neural tube closure defect	2
ERN BOND/ISDD	364526 364559	Primary bone dysplasia and Dysostosis	2
VASCERN	211237	Rare vascular tumor	2
VASCERN	211243	Rare vascular malformation: simple	2
VASCERN	211277	Rare vascular malformation: complex	2
ERN EpiCARE	166463	Epilepsy syndromes	2
ERN-EYE	519311	Rare disorder of the posterior segment of the eye	2
			TOTAL = 29.5

Evaluation scale:

- 0,5= low complexity
- 1= medium low complexity
- 1,5= medium-high complexity
- 2= high complexity



ENHANCING COLLABORATIONS WITH ERNS

Evaluation scale:

0,5= low complexity
1= medium low complexity
1,5= medium-high complexity
2= high complexity

Simplified



1 = **low complexity** (generally less than 50 disorders revised, no classification rearrangements)
2 = **medium complexity** (minor classification refinements, generally between 30 and 100 disorders revised)
3 = **high complexity** (classification structure revision/rearrangement, this is independent from the number of diseases revised, but it tends to be bigger groups with more than 50 disorders)

NOTE: Very high complexity projects involving more than 100-150 disorders will be split into smaller projects.

To obtain a total indicator comparable to the one for OD4RD2 we applied a correction factor to account for the new scale system. This new score system is comparable to the old one but makes project evaluation easier and more flexible.



ENHANCING COLLABORATIONS WITH ERNS

Ongoing ERN collaborations:

Some of the collaborations started in the context of the OD4RD2 project are ongoing as of today. Moreover, Orphanet has already detected and/or has been contacted by ERNs willing to start new revision projects.

18. ERN PaedCan/SIOPE: Classification of pediatric cancers

The goal of this collaboration is to release the Orphanet classification of pediatric cancers, so far incomplete and not yet published. This classification will follow the pediatric oncology clinical practice recommendations, and the WHO classification of tumors (5th edition) structure. The goal standard for the pediatric cancer diagnosis (the ICCG guidelines) will also be considered during the revision process.

22. ERN GUARD-Heart: Rare cardiac rhythm disease

The goal of this collaboration is to revise and update the group of 'Rare cardiac rhythm disease', ORPHA:218436. ERN GUARD-Heart is currently reviewing the group, and the revision is ongoing and is

25. ERN MetabERN: Rare inborn errors of metabolism

The goal of this collaboration is to align the group of 'Rare inborn error of metabolism', ORPHA:68367, with the classification provided by ERN MetabERN experts, reflected in a consensus paper (PMID: 33340416). Orphanet is currently analyzing and comparing the two classifications in order to identify and complete the gaps (clinical entities not yet present in the Orphanet classification), proceed to classification changes (e.g for those existing ORPHA codes but currently rearranged under different groups or classifications), and update the nomenclature and genetic information if this is in line with the current literature and clinical practice. At the end of this revision process, MetabERN experts will be contacted for a final validation of the Orphanet proposal before the implementation of the changes, along 2026-2027.

20. ERN RND

Leukodystrophy ORPHA:68356

The goal of this collaboration is to review the content and structure of this group, and complete the group by creating missing ORPHAcodes if necessary. As of today only one meeting took place, but the collaboration has not formally started yet.

Hereditary spastic paraplegia, ORPHA:685

The goal of this collaboration is to review the content and structure of this group, and complete the group by creating missing ORPHAcodes if necessary, with a specific focus on the group of ataxias (ORPHA:102002), as a first step of the project. At this stage, the ERN is forming the working group of experts.

Frontotemporal dementia, ORPHA:98535

content and structure if necessary. Expert meeting to discuss

26. Inter ERN Mito-WG: Mitochondrial disease

The revision of the classification of the group of 'Mitochondrial diseases, ORPHA:68380' is complex (around 200 ORPHAcodes) and involves several disciplines. For this reason, Orphanet asked the Inter-ERN Working Group of Mitochondrial Diseases made up of 5 ERNs, to bring together the efforts of different medical fields to update the nomenclature and classification. In 2024, the project was officially launched with the following ERNs: MetabERN, Euro-NMD, ERN RND, EpiCARE, and ERN-EYE. However, in the end only MetabERN, Euro-NMD and EpiCARE were able to allocate experts to participate in the meetings. The group agreed to continue the discussions with the available expertise. Following the two training sessions (held on 29 April and 5 May 2025) and the sharing of the working document, some feedback has already been provided.

ENHANCING COLLABORATIONS WITH ERNS



	Number of ERNs/ number of feedbacks received	6/10
1. How do you rate globally the collaboration process?	Excellent (90%)/Acceptable (10%)	
2. How is the level of satisfaction with the channel used to communicate?	Excellent (90%)/Acceptable (10%)	
3. How is the level of satisfaction with the frequency of discussion between the Orphanet Manager and the ERN contact point?	Excellent (90%)/Acceptable (10%)	
4. How is the level of satisfaction with the deadlines?	Excellent (70%)/Acceptable (30%)	
5. If you chose "Not possible to evaluate", please can you briefly explain why?	NA	
6. Has the collaboration improved the accuracy of Nomenclature and Classification of RD?	Yes (100%)	
7. Do you think that the changes will have a positive impact on the coding?	Yes (100%)	
8. Do you intend to use the newly revised codes to code your patients?	Yes (60%)/No (20%)/ Not possible to evaluate (20%)	
9. If you intend to use the newly revised codes to code your patients: in which context do you plan to use the codes?	1/6 "In our national application expertise center for rare disease" 2/6 "In communications" 1/6 "In our hospital and ERN" 1/6 "Out- and inpatient care, registry" 1/6 "Clinical practice and research (national data base for dysraphisms)"	
10. If you chose 'Not possible to evaluate', please can you briefly explain why?	1/3 "Clinically not relevant" 1/3 "Not currently employed in this role" 1/3 "I have no direct say in coding"	
11. Would you be available to contribute to the writing of the abstract of the clinical entities related to your clinical specialty? (That means being available to work again with Orphanet to update the clinical information shown in Orpha.net)	Yes (90%), No (10%)	
12. Would you be available to revise the recently modified classification to help Orphanet in their quality control process? (That means being available to work again with Orphanet to confirm the adequacy and accuracy of the classification in five-year timeline)	Yes (90%), No (10%)	
13. Do you plan to contact Orphanet for other projects in the future?	Yes (80%), No (20%)	
14. If you plan to contact Orphanet for other projects in the future: what would be your request (a revision of the classification, a nomenclature update, ORPHAcode creation, ORPHAcode inactivation...)	1/6 "Not sure yet" 3/6 Yes, revision of a classification 2/6 Nomenclature changes 1/6 "Writing of manuscript about the revision" 1/6 "All"	

OD4RD2 evaluation survey

As part of our ongoing effort to improve the collaboration process, we recently introduced in the methodology a short survey sent to ERNs once the project is completed. We received a total of 10 responses since several ERNs provided more than one feedback

ENHANCING COLLABORATIONS WITH ERNS



Improving the collaboration methodology:

1. Importance of regular interactions with ERN experts

The revision process relies on the reactivity of both sides, requiring a reactive ERN contact point, fluid communication, and full commitment to avoid delays or bottlenecks;

2. Importance of providing an adapted training to ERN experts

Adapted training on Orphanet concepts and processes, combined with frequent discussions, improves experts' understanding, standardizes contributions, and enhances efficient ERN-Orphanet communication throughout the collaboration;

3. Importance of defining the priorities and a precise methodology

Establishing priorities early and applying a precise methodology, such as subdividing workload, separating processes, and working with small expert groups, helps manage complexity and meet deadlines efficiently;

4. Importance of maintaining a certain flexibility in the initial assessment of scale and complexity

Because project complexity is not always predictable, maintaining flexibility, reassessing scope when needed, and using refined methodologies with scalable approaches improves planning and workload management;

5. Integrating the validation of disorder definitions into the revision process (WP4)

Integrating expert validation of disease definitions after classification revision improves coherence, clarity, and usability of disorders, and is being progressively incorporated into the standard workflow;

6. Valorization and dissemination of collaborative work

Collaborative revisions generate additional scientific value by enabling communication activities such as presentations and joint publications;

7. Importance of promoting Orphanet – ERN interactions

Promoting and increasing Orphanet participation in ERN events enhances visibility, supports expert engagement, improves revision processes, and facilitates discussion and validation of ongoing work.

WP2 NOMENCLATURE PRODUCTION INDICATORS



Specific Objective Number	1.
Specific Objective	Ensure the continuous production and delivery of Orphanet nomenclature so as to follow the continuous evolution of knowledge and to adapt to coding needs, in particular by enhancing collaborations with ERN.
Process Indicator(s)	Target at M33
Collaboration workflow's steps completed for each ERN collaboration and justified in the final report	100%
Number of internal nomenclature validation cycles completed (each cycle includes an internal pre-validation meeting, an internal validation meeting, and the production of a final decision report disseminated within the Orphanet Network).	9/year
Output Indicator(s)	Target
Cumulative weight of ERN collaboration projects completed. Each project is attributed a "weight" of 1 to 3 according to its scale and complexity (low complexity=1; medium complexity = 2; high complexity=3)	39 cumulative weight
Number of clinical entities (ORPHAcodes) evaluated for inclusion, modified or inactivated.	800/year
Percentage (%) of completed ERN revision projects on the total number of projects initiated. .	80%
Outcome/Impact Indicator(s)	Target
Number (%) of finalised ERN collaboration projects, after which the related ERNs/ERN thematic group(s) have expressed their intention to effectively implement and use the revised ORPHAcodes in their activities including, for instance, monitoring, coding activities, publications, registries, etc. Measured by a short satisfaction survey sent after the project.	90%

MAPPINGS WITH OTHER MEDICAL TERMINOLOGIES/ CLASSIFICATIONS



SNOMED CT DEVELOPED BY SNOMED

World Health Organization

- ❁ Comprehensive clinical terminology covering diseases, findings, procedures, and more
- ❁ Designed for use in electronic health records (EHRs)
- ❁ Primary use: recording detailed patient data and enabling data exchange between systems

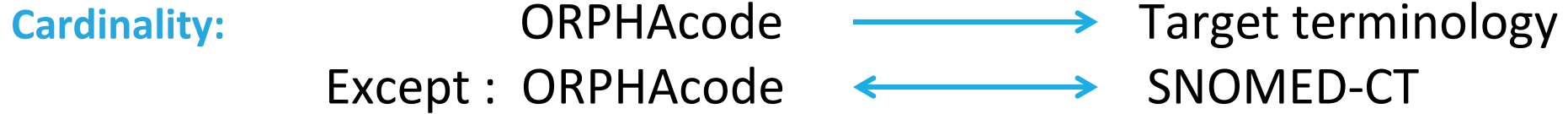
- ❁ International statistical classification of diseases and health conditions
- ❁ 3 classifications: ICD-10, ICD-11 & ICD-O
- ❁ Primary use: morbidity and mortality statistics, billing, epidemiology

<https://browser.ihtsdotools.org/>
<https://lookup.snomedtools.org/>

ICD-10: <https://icd.who.int/browse10/2019/en>
ICD-11 foundation: <https://icd.who.int/dev11/f/en>
ICD-11 MMS: <https://icd.who.int/browse11/l-m/en>



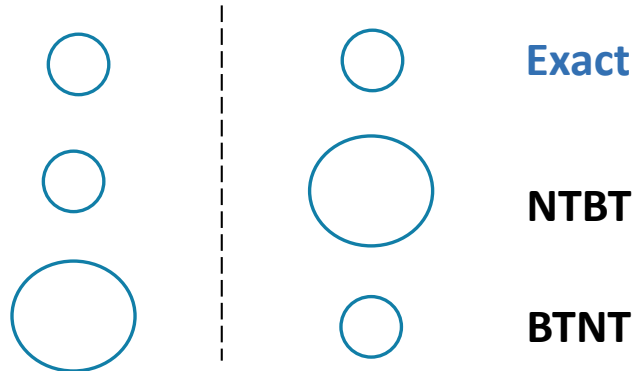
MAPPINGS WORKFLOW



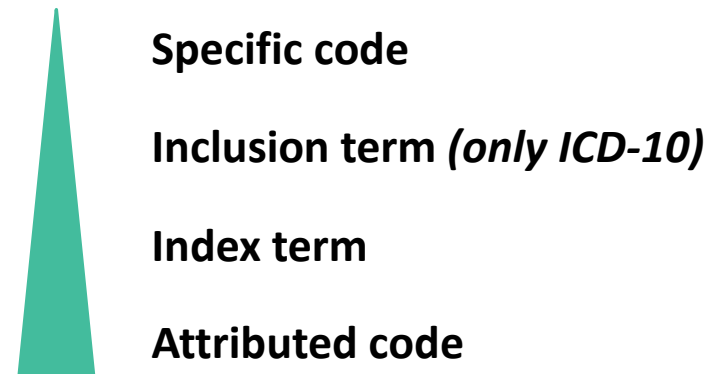
Alignments are qualified by:

A proximity relationship

ORPHAcode → Targeted terminology



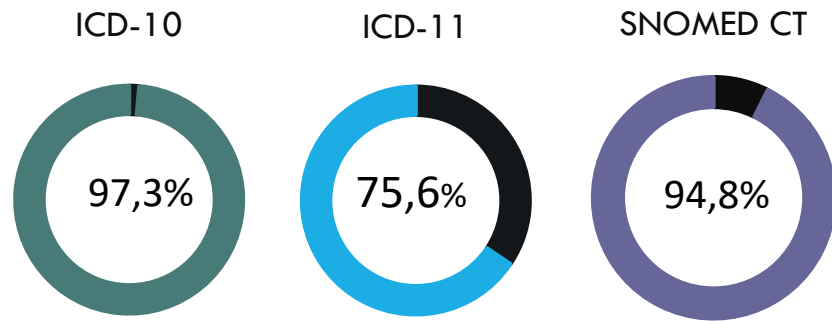
A specificity relationship (WHO terminologies)



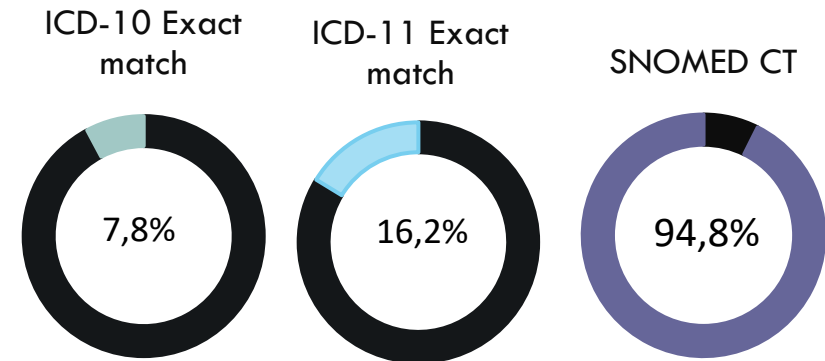


MAPPINGS COVERAGE

% active disorders coverage [July 2025]



% of Exact matches [July 2025]





MAPPINGS AND OD4RD3

Subtask 2.2.1: Produce and maintain cross-terminologies alignments:

- Complete alignments at the disorder level
- Produce, update and publish the alignment rules (external procedure)
- Conduct the collaboration with SNOMED International and with WHO

Subtask 2.2.2: Ensure consistency of cross-terminologies alignments: Lead BfArM

- Monthly QC meetings (committee composed of medical terminologies' alignments officer and BfArM medical experts)
- Incorporate insights from actual usage contexts, facilitating the detection and solving of
- inconsistencies/ambiguities





WP2 INTEROPERABLE NOMENCLATURE INDICATORS

Specific Objective Number	2
Specific Objective	Ensure the interoperability between ORPHAcodes and other terminologies in use (in particular ICD-10, ICD-11 and SNOMED-CT) so as to provide an accurate and consistent resource for transcoding.
Process Indicator(s)	Target
Validation meetings with the scientific officer for ICD-10, ICD-11 and SNOMED-CT mappings	15/year
QC Meetings	6/Year
Survey of OMIM (phenotypes) updates	10 /year
Output Indicator(s)	Target
% of ORPHAcodes (at the disorder level) aligned with ICD-10, including inexact mappings	100%
%of alignements quality controlled (on the basis of mapping discrepancies)	15%
% of ORPHAcodes aligned with ICD-11 terms, including inexact mappings	100%
Number of ORPHA-SNOMED CT human-readable mapping files released	3
Outcome/Impact Indicator(s)	Target
Satisfaction and utility of the nomenclature mappings according to end users (assessed through online surveys and ERN proactive surveys)	Increase compared to baseline (Satisfaction survey 2025)
Number of downloads of the nomenclature with alignments and of the human-readable ORPHA-SNOMED CT files in Orphadata	Increase compared to baseline (Activity report 2025)



WP4

DATABASE IMPROVEMENT AND EXPLOITATION



WP4 DATABASE IMPROVEMENT AND EXPLOITATION AT THE EUROPEAN LEVEL



Objectives:

Expand and update the Orphanet knowledge base content in collaboration with ERNs so as to contribute to its exploitation for primary use (improved patients' healthcare pathways) and secondary use (data exploitation)

Provide Orphanet knowledge base exploitation and analysis to support the evidence based decision making by EC, BoMS and ERN coordination

Tasks:

T4.1 Gene-Disease database update and maintenance

T4.2 Production of definitions for each RD

T4.3 RD summary information update in collaboration with ERNs

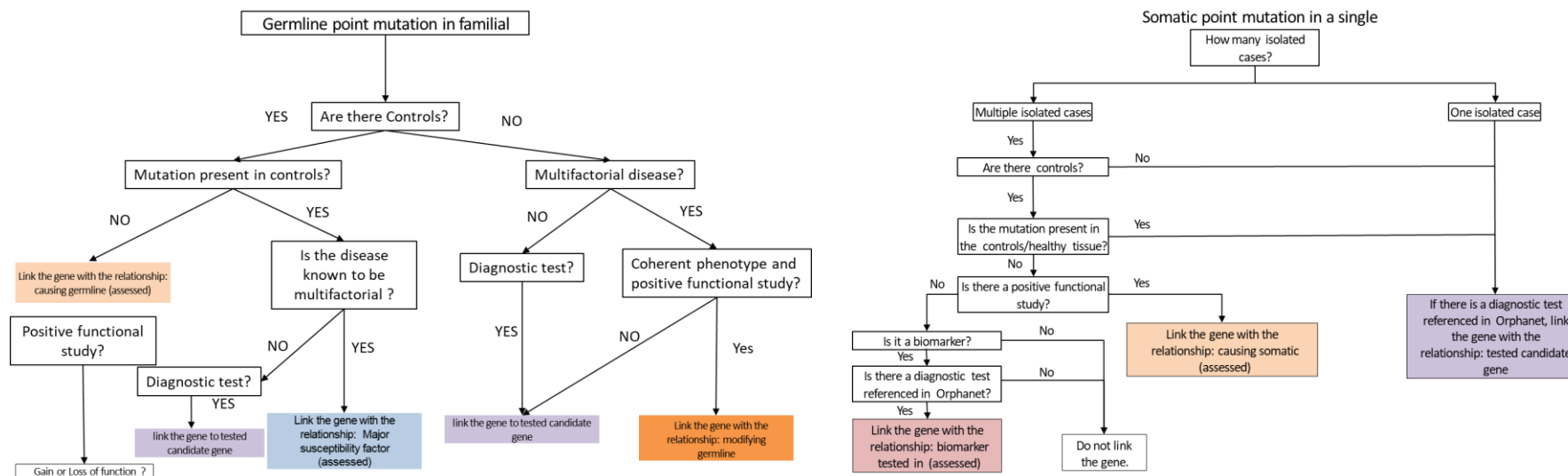
T4.4 Production of reports based on the exploitation of the Orphanet database together with other data to inform EC, BoMS and ERN coordination decision making

Leader: INSERM

GENE-DISEASE DATABASE UPDATE AND MAINTENANCE



- Type of annotations: DNA or RNA sequences
 - gene with protein product: DNA sequence translated into protein
 - non-coding RNA : RNA transcript not translated into protein
 - disorder-associated locus: chromosomal region associated with disorder without any precision on the possible associated gene
- Dedicated workflows to assess **gene-disease relationships**



GENE-DISEASE DATABASE UPDATE AND MAINTENANCE



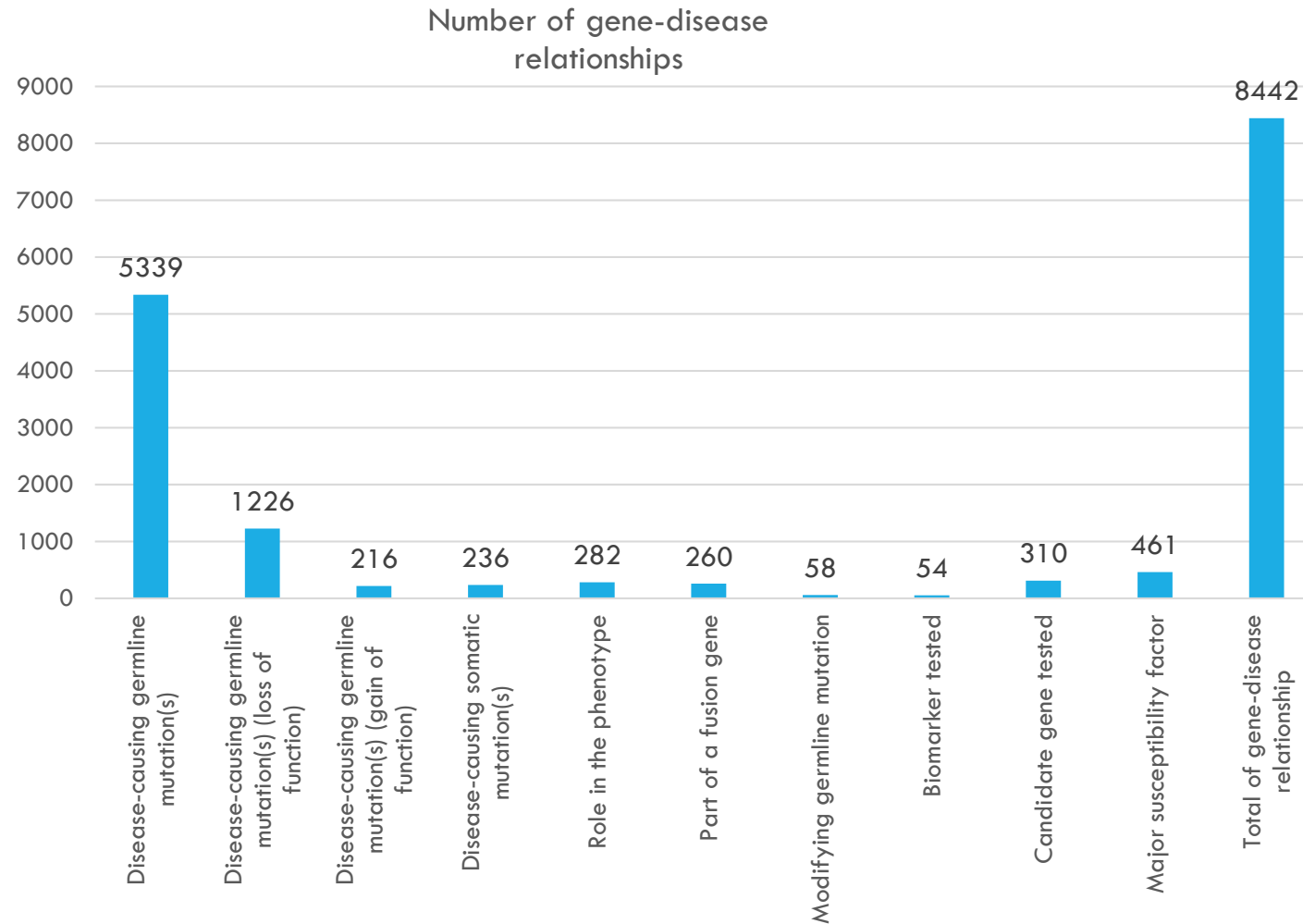
Type of gene-disease relationships	Definition
Disease-causing germline mutation(s)	A gene mutation in a germ cell that is sufficient to produce the disorder and that can be passed on to offspring
Disease-causing germline mutation(s) (loss of function)	A gene mutation in a germ cell that impairs the function of the corresponding protein and that is sufficient to produce the disorder and that can be passed on to offspring
Disease-causing germline mutation(s) (gain of function)	A gene mutation in a germ cell that provides a new function of the corresponding protein and that is sufficient to produce the disorder and that can be passed on to offspring
Disease-causing somatic mutation(s)	A gene mutation in a somatic cell that is sufficient to produce the disorder but that cannot be passed on to offspring
Role in the phenotype	A gene included in a chromosomal rearrangement, and proved to have a major influence in the phenotype of the chromosomal rearrangement
Part of a fusion gene	A gene that has fused with a promotor and/or other coding DNA sequence from a different gene
Modifying germline mutation	A gene mutation in a germ cell that modifies the clinical presentation of the disorder and that can be passed on to offspring
Biomarker tested	A gene in which a variation is used to monitor disease activity and/or patient outcome
Candidate gene tested	A gene in which a mutation is suspected, but not yet proven, to be responsible for a disorder, and that is tested for in a clinical setting
Major susceptibility factor	A gene mutation in a germ cell that predisposes to the development of a disorder, and that is necessary but not sufficient to develop the disorder

GENE-DISEASE DATABASE UPDATE AND MAINTENANCE



Type of gene-disease relationships	Number of gene-disease relationships as of April 2026
Disease-causing germline mutation(s)	5339
Disease-causing germline mutation(s) (loss of function)	1226
Disease-causing germline mutation(s) (gain of function)	216
Disease-causing somatic mutation(s)	236
Role in the phenotype	282
Part of a fusion gene	260
Modifying germline mutation	58
Biomarker tested	54
Candidate gene tested	310
Major susceptibility factor	461
Total of gene-disease relationship	8442

GENE-DISEASE DATABASE UPDATE AND MAINTENANCE



GENE-DISEASE DATABASE UPDATE AND MAINTENANCE



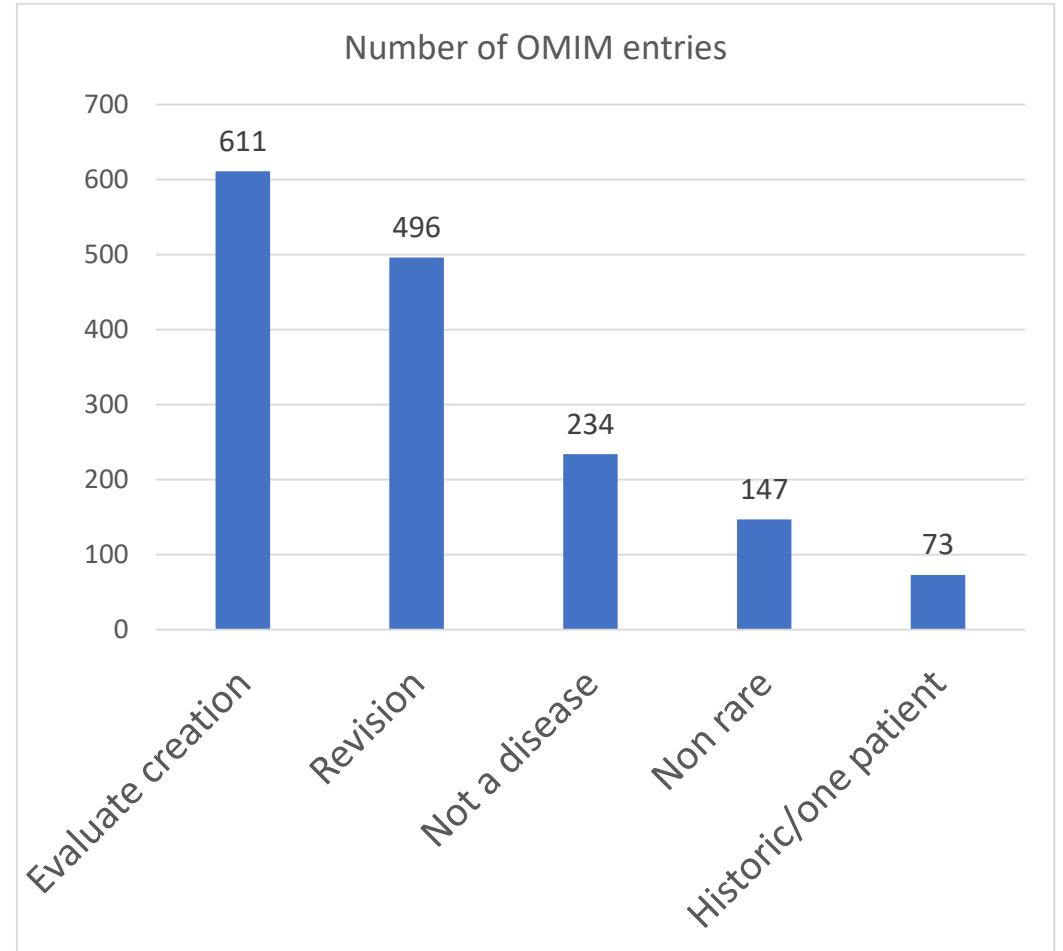
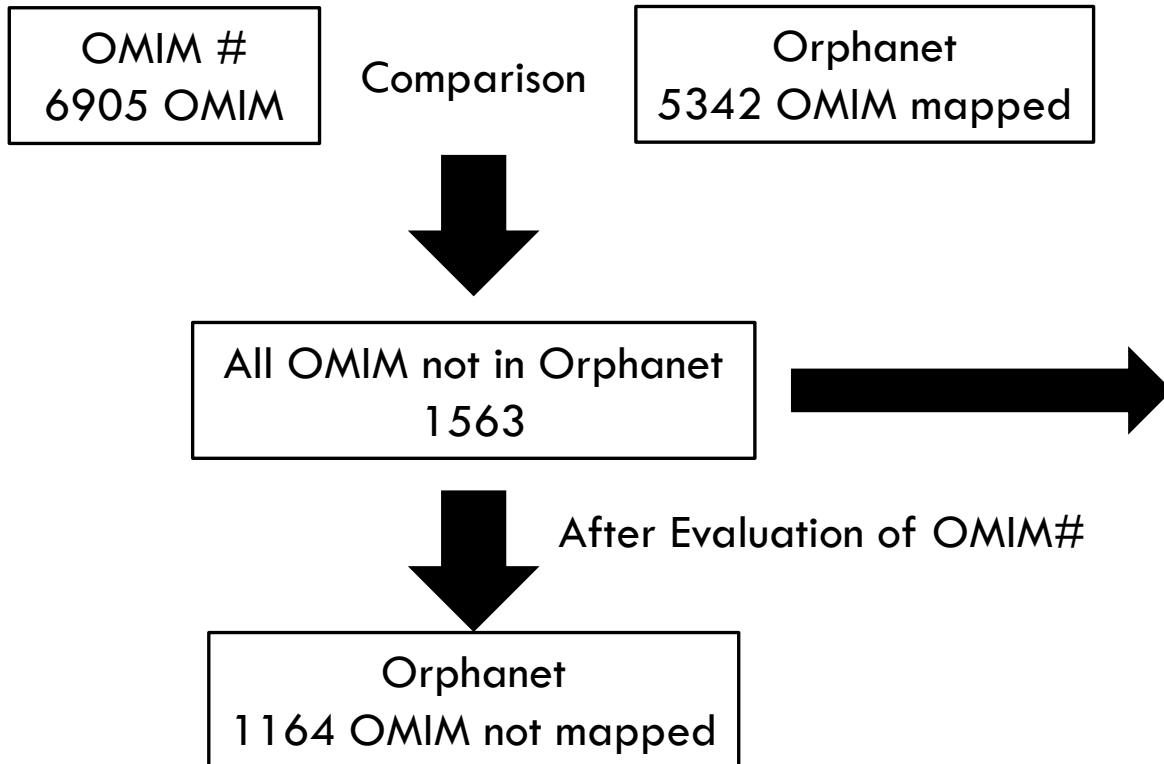
New discoveries around genes related to RD during OD4RD2

Actions	# of the corresponding action
Number of new genes added to the Orphanet knowledge base	245
Newly added gene-disease relationships	818
Modification of existing gene-disease relationships	1
Suppressed gene-disease relationships	711
Total of curations	1530 (for 3 years expectation 1350)



GENE-DISEASE DATABASE UPDATE AND MAINTENANCE

➤ OMIM # (called Number symbol) represents a descriptive entry.





OD4RD3 WP4 GENE-RELATED INDICATORS

Specific Objective Number	4
Specific Objective	Expand and update the Orphanet knowledge base content in collaboration with ERNs so as to contribute to its exploitation for primary use (improved patients' healthcare pathways) and secondary use (data exploitation)
Process Indicator(s)	Target
Survey of OMIM (genes) updates	10 /year
Collaboration progress as assessed by completion of agreed texts and calculated as a percentage of agreed diseases (including both definition quality controls and production/updates of disease information summaries) completed per cycle. Calculated annually based on the cycles completed during the year.	95%
Output Indicator(s)	Target
New or updated disease-gene associations	450/year
Total number of produced disease summaries/definitions (new and updated) per year	350/year
Outcome/Impact Indicator(s)	Target
Satisfaction and utility of the relevant category (gene-disease database and encyclopedia) according to end users (assessed through online surveys and ERN proactive surveys)	Increase compared to baseline (Satisfaction survey 2025)
Number of downloads of the Gene-disease associations file in Orphadata	Increase compared to baseline (Activity report 2025)



PRODUCTION OF TEXTUAL INFORMATION (DEFINITIONS & ABSTRACTS)

Definition

- Describes part of nomenclature
- Required for all disorders, including historic entities (>25 years since last report)
- **Reviewed & internally validated by medical doctors**

Abstract

- Is produced for prioritized entities (relatively high prevalence, >100 cases described in the literature)
- Contains 8 – 10 sections
- **Reviewed & validated by THE experts of the given entity**

PRODUCTION OF TEXTUAL INFORMATION (DEFINITIONS & ABSTRACTS)-PRIORITIZATION



***Monthly SPRINTs**

Most out of date texts (> 3 years old)

Diseases with no text

Requests from internal and external
Orphanet users

Relatively high prevalence (>1/100.000)

Recent clinical guidelines/review articles

Orphan drugs

20 definitions/25-30 abstracts per SPRINT

PRODUCTION OF TEXTUAL INFORMATION (DEFINITIONS & ABSTRACTS)-INDICATORS OD4RD2



Summary of produced text (published & ongoing abstracts and definitions)

Indicators (01.04.2023-31.03.2026)			Total
Number of produced texts			1059
Abstracts (new/updated)	Published	321 (188 with ERNs)	387
	Ongoing	66 (37 with ERNs)	
Definitions	Published	454 (103 with ERNs)	505
	Ongoing	51 (49 with ERNs)	
Quality controlled definitions	Published	108	167
	Ongoing	59	

Objective for the OD4RD2: 1015 texts

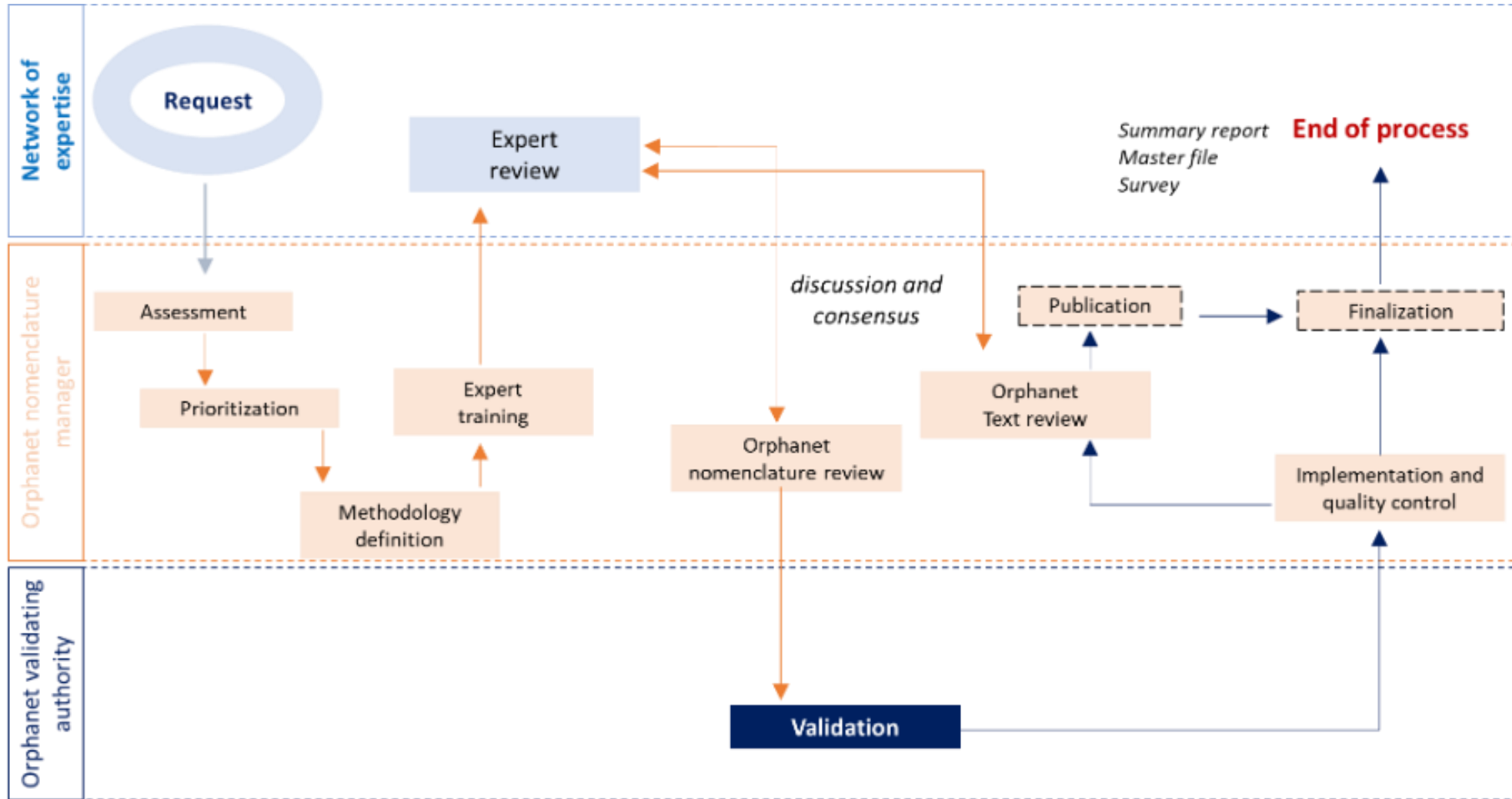


PRODUCTION OF TEXTUAL INFORMATION (DEFINITIONS & ABSTRACTS)-HIGHLIGHTS

- ❖ In total 225 abstracts among 387 (58%) and 152 definitions among 505 (30%) were produced in collaborations (structured and/or punctual) with 20 ERNs
- ❖ The close relationship between the activities conducted in WP2 and WP3, particularly in relation to the validation of definitions and disease summary information following nomenclature revisions, has demonstrated to be a point of strength for the project
- ❖ For OD4RD3 more structured and harmonized coordination process between nomenclature updates and validation of updated associated textual content will be established.



PROPOSED WORKFLOW (WIP)





OD4RD3 WP4 TEXT-RELATED INDICATORS

Specific Objective Number	4	
Specific Objective	Expand and update the Orphanet knowledge base content in collaboration with ERNs so as to contribute to its exploitation for primary use (improved patients' healthcare pathways) and secondary use (data exploitation)	
Process Indicator(s)	Target	
Survey of OMIM (genes) updates	10 /year	
Collaboration progress as assessed by completion of agreed texts and calculated as a percentage of agreed diseases (including both definition quality controls and production/updates of disease information summaries) completed per cycle. Calculated annually based on the cycles completed during the year.	95%	
Output Indicator(s)	Target	
New or updated disease-gene associations	450/year	
Total number of produced disease summaries/definitions (new and updated) per year	350/year	
Outcome/Impact Indicator(s)	Target	
Satisfaction and utility of the relevant category (gene-disease database and encyclopedia) according to end users (assessed through online surveys and ERN proactive surveys)	Increase compared to baseline (Satisfaction survey 2025)	
Number of downloads of the Gene-disease associations file in Orphadata	Increase compared to baseline (Activity report 2025)	



PRODUCTION OF REPORTS BASED ON THE EXPLOITATION OF THE ORPHANET DATABASE

Update the [quantitative RD coverage](#) analysis

Perform a [qualitative RD coverage](#) analysis

- Per country
- To support patients' [healthcare pathways](#) understanding and design
- To [map further expertise](#) needed to increase RD coverage

Contribute to the ERN governance discussions and decisions

To co-develop user-friendly tool for EC to keep RD coverage mapping up-to-date

- Understand the needs
- Specify the tool in collaboration with DG Santé IT colleagues
- Implement data workflows





GAP ANALYSIS (UPDATED)

In April 2025, the Orphanet analysis found in the GAP 7.76% RD uncovered.

When applying the Group of Disorder principle (2026), and after revision of the “Gap” by ERNs,

- only **161 RD (2.5%) are left out of the ERNs' coverage**. This is a major further improvement.
- After excluding a set of RD to be revised for their relevance in Orphanet, **the final gap could be of only 2.1%**.



WP4 BASE EXPLOITATION INDICATORS

Specific Objective Number	5	
Specific Objective	Provide Orphanet knowledge base exploitation and analysis to support evidence-based decision-making by EC, BoMS and ERNs coordination	
Process Indicator(s)		Target
Meetings with EC, ERN chairs and BoMS to assess the needs in terms of reports and tools		1/y
Output Indicator(s)		Target
<ul style="list-style-type: none"> - Reports on requested data analysis progress at BoMS, EC and/or ERN coordination meetings - Reports on RD coverage (quantitative and/or qualitative) (to be replaced by another report analysis if more priority) 		Minimum 1 2
Outcome/Impact Indicator(s)		Target
End-users' satisfaction on the report (s) & services provided		>90%



WP3
SUPPORTING ORPHACODES IMPLEMENTATION





WP3 SUPPORTING ORPHACODES IMPLEMENTATION/USE AT NATIONAL LEVEL

Objectives: Scale-up the support for ORPHAcodes implementation in MS by expanding the capacity and the geographical coverage of the Network of Orphanet Nomenclature Hubs (NONH), so as to cover all EU MS, by adapting the National hubs action plans to the local situations

Tasks:

T3.1 Scientific coordination of the NONHN

T3.2 Organisational coordination of the National Hubs

T3.3 Development, update and execution of National action plans by the ONH

Leader: OUS-BAR

Participants: All project partners/affiliated entities

OD4RD3 NH PARTICIPANTS



1. Austria
2. Belgium
3. Bulgaria
4. Czech Republic
5. **Denmark**
6. Estonia
7. Finland
8. France
9. Germany
10. **Greece**
11. **Iceland**
12. Ireland
13. Italy
14. Latvia
15. Lithuania
16. **Luxembourg**
17. The Netherlands
18. Norway
19. Poland
20. Portugal
21. Romania
22. Slovenia
23. Spain
24. Sweden

National Hubs Network

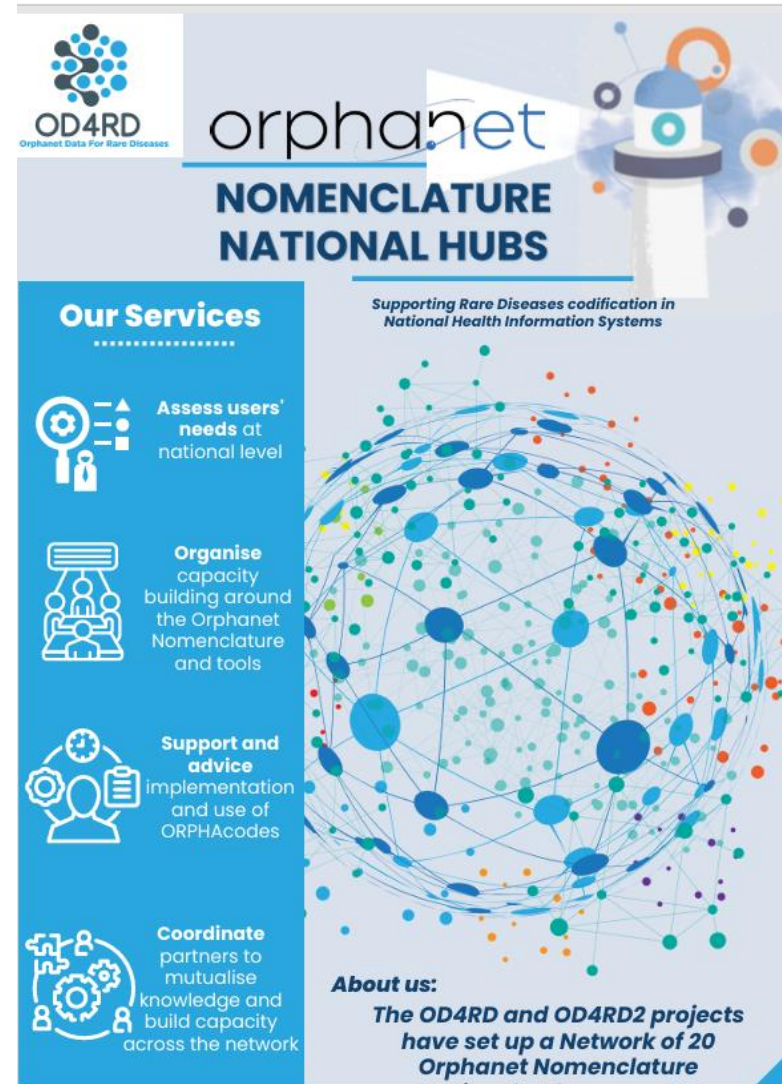
ANNUAL NATIONAL ACTION PLANS

Monthly meetings: May-Nov 2026

Bimonthly meetings: Jan 2027-Dec 2028

Time and place

- Thursday 13-14:30
- Teams



The poster features the OD4RD logo (Orphan Data For Rare Diseases) and the Orphanet logo. The main title is 'orphanet NOMENCLATURE NATIONAL HUBS'. Below the title, it states 'Supporting Rare Diseases codification in National Health Information Systems'. The poster is divided into two main sections. The left section, titled 'Our Services', lists four key activities: 'Assess users' needs at national level', 'Organise capacity building around the Orphanet Nomenclature and tools', 'Support and advice implementation and use of ORPHAcodes', and 'Coordinate partners to mutualise knowledge and build capacity across the network'. The right section features a large, colorful network diagram of interconnected nodes and lines, with the text 'About us: The OD4RD and OD4RD2 projects have set up a Network of 20 Orphanet Nomenclature' at the bottom.





TASK 3.2

ORGANISATIONAL COORDINATION OF NATIONAL HUBS

OUS-BAR

OUS = Oslo universitetssykehus
Oslo University Hospital

BAR = Barne- og ungdomsklinikken
Child and adolescent clinic





Task 3.2 (Norway Oslo University Hospital)

Organisational coordination of national hubs

- Distant meetings monthly in 2026 and bimonthly from 2027
- Prepare state of play survey
- Promote appropriate collaborations with hospital managers and entities responsible for national registries
- With WP1: organize events for reaching out to hospital managements
- Establish interactions with JARDIN to ensure complementarity
- Collect and transfer needs related to ORPHAcodes implementation and use to relevant WP for follow-up
- Monitor activities by indicators at national and coordination level

Task 3.3 (All countries)

Development, update and execution of annual national action plans

Promote the adoption of ORPHAcodes, provide support for implementation and use, disseminate and encourage good coding practices.

Increase the number of health care providers (HCP) using ORPHAcodes. Provide ERN-specific support for use of ORPHAcodes.

Use template and adapt to local situation



Template action plan

NATIONAL ACTION PLAN

Country:



PLANNED ACTION	TIMELINE
<u>Trainings/Workshops:</u>	
<u>Networking:</u>	
<u>Helpdesk Implementation:</u>	
<u>Further Activities:</u>	



Specific activities in task 3.3

- State of play survey
- Organize training sessions, workshops and meetings as needed
- Provide support in your country for using the coding files and tools
- National helpdesk for coding (GitHub or other). Most requests should be handled by the national teams by end of 2028
- Provide ERN-specific support for use of ORPHAcodes for their respective disease groups
- Attend the network meetings, share experience, provide feedback to colleagues and to the Orphanet coordinating team
- Promote the Orphanet nomenclature towards national decision-makers (Ministry of Health, Directorate of health, hospital managers)



Upcoming activities

State of play survey

- End of May (M2): Finalize survey (Inserm-OUS) (**MS1**)
- Early June: National hubs launch survey/interviews
- September 5th: Deadline for national hubs to complete survey/interviews
- September 30th: Report delivered to EC by OUS (**D3.1**)



Upcoming activities

Annual national actions plans

- New countries: Establish a national action plan based on template
- Others: Update the national action plan
 - Y1: **MS2** - Deliver national action plan M6 by September 30th
 - Y2: **MS5** - Deliver national action plan M15 (**D3.2** by M18)
 - Y3: **MS7** - Deliver national action plan M27 (**D3.4** by M33)



Network meetings

Monthly meetings

- May-November 2026

Bimonthly meetings

- January 2027-December 2028

Time and place

- Thursday 13-14:30
- Teams



Network meetings in 2026

- May 28
- June 25
- August 27
- September 24
- October 29
- November 26

Teams invitations will
be sent out this week

WP3.1 SCIENTIFIC COORDINATION OF THE NONHN



Overall objective: scientifically coordinate, empower and support the NONHN for their tasks to support ORPHAcodes implementation, exploitation, and standardization across countries.

- Central scientific coordination and support
- Capacity building across all national hubs to support ORPHAcodes implementation and exploitation
- Ensuring consistent practices across countries

3.1.1 Network empowerment for supporting ORPHAcodes implementation

3.1.2 Development and harmonization of standardized ORPHAcodification good practices

WP3.1 SCIENTIFIC COORDINATION OF THE NONHN



3.1.1 Network empowerment for supporting ORPHAcodes implementation

Trainings:

- Annual Training for Trainers (TfT) (a doodle with date propositions (early July) will be sent out shortly)
- Targeted trainings/formations

Goal: basic → advanced level

Development & sharing of training and promotional materials

- Trainings, promotional material, guidelines, tools,...

Central helpdesk extension to all hubs:

- national ↔ central coordination

<https://github.com/OD4RD/Main-Help-Desk/wiki>

OD4RD / Main-Help-Desk

Home

sylmaiOR edited this page on Jun 27, 2025 · 18 revisions

ORPHA C O D E S

To provide a sustainable and homogeneous, standardised support to the Rare Diseases community, a 'Questions and Answers' section within GitHub has been developed by the coordinating team based on users' questions and issues. It aimed to provide standardised and generalised answers among 11 main topics:

- Orphanet Nomenclature of Rare Diseases -ORPHAcodes
- Why an ORPHACode is not available in my System?
- Orphanet classification
- Alignments with other terminologies
- Good practice guidelines on Orphanet Nomenclature
- Orphanet Tools for coders

Pages 13

Find a page or section...

Home

- *** Welcome to the Main Orphanet H...
- 1. Orphanet Nomenclature of Rare DI...
- 2. Why an ORPHACode is not availabl...
- 3. Orphanet classification
- 5. Alignments with other terminolo...

WP3.1 SCIENTIFIC COORDINATION OF THE NONHN



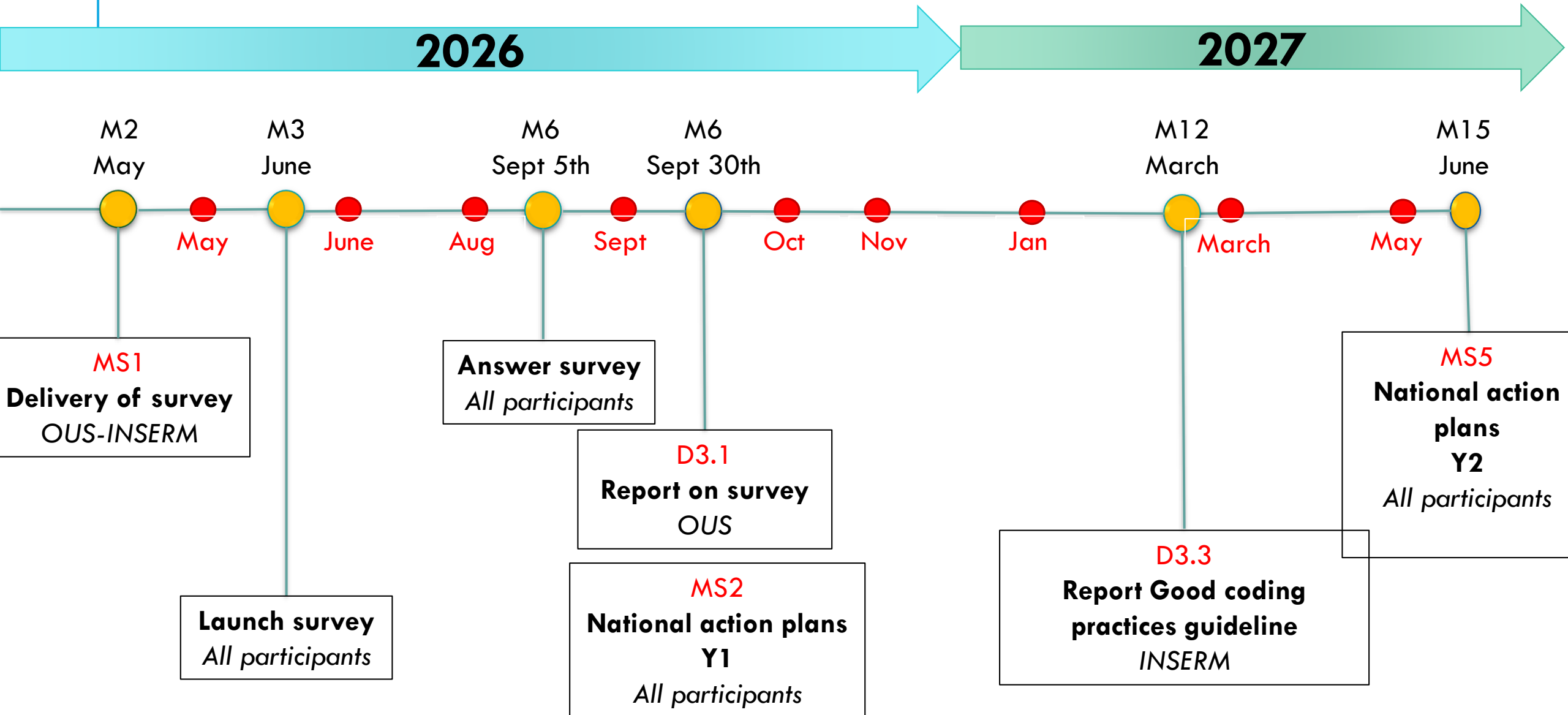
3.1.2 Development and harmonization of standardized ORPHAcodification good practices

Ensure a consistent, standardized, and validated approach to ORPHAcodification across hospitals and countries

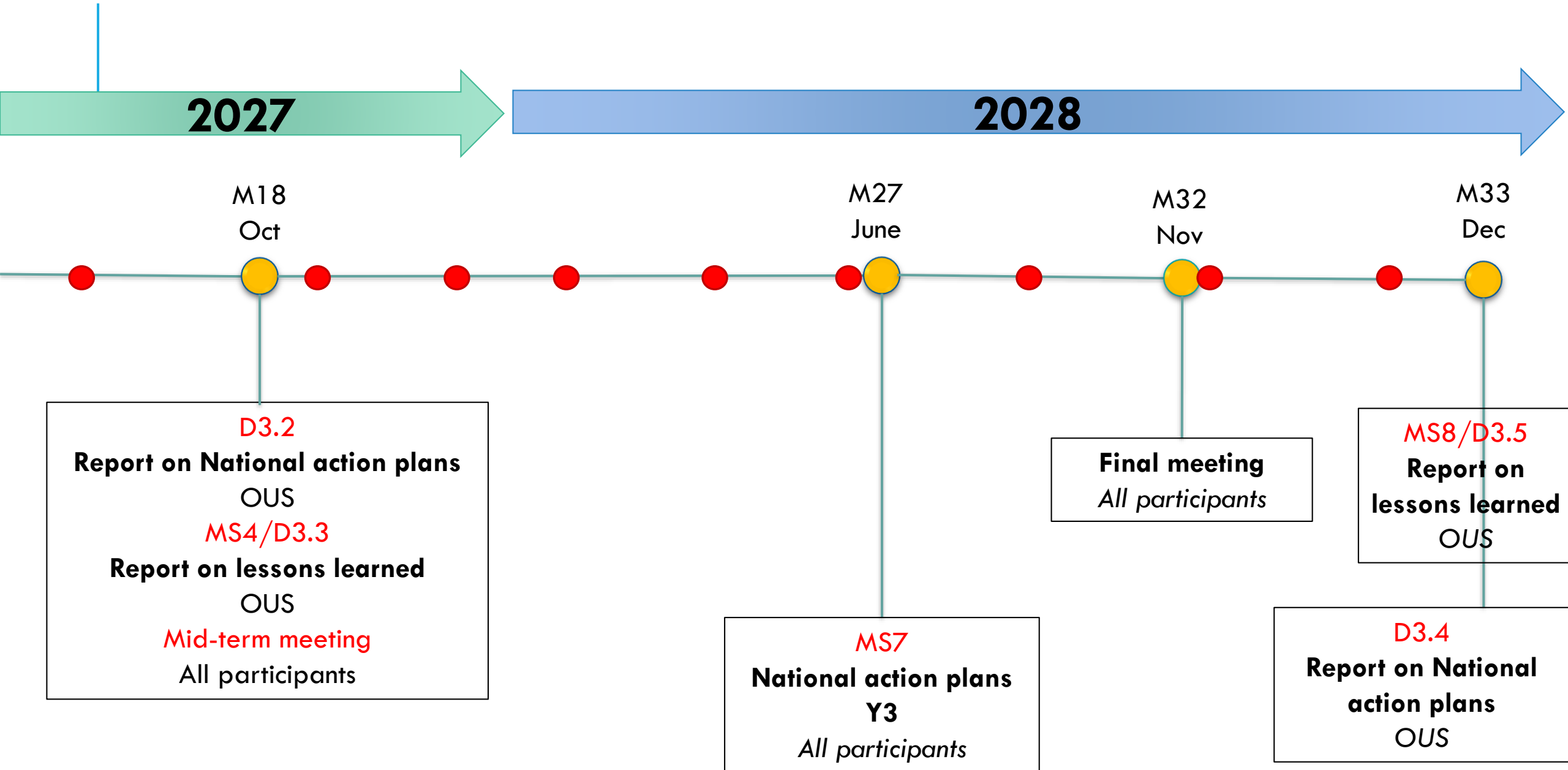
- Feedback collection (github, ORPHAcoding solutions sessions, ERN advice,...)
- analyse use cases to develop standard responses
- production/update of guidelines
- annual validation by external medical experts
- disseminate via the NONHN

<https://github.com/OD4RD/Main-Help-Desk/wiki/6.-Good-practice-guidelines-on-Orphanet-Nomenclature>

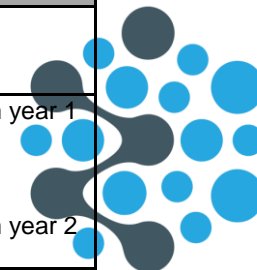
Timeline of milestones and deliverables



Timeline of milestones and deliverables



INDICATORS



Specific Objective Number	3
Specific Objective	Scale-up the support for ORPHAcodes implementation in MS by expanding the capacity and the geographical coverage of the Network of Orphanet Nomenclature Hubs (NONH), so as to cover all EU MS by adapting the National hubs action plans to the local situations
Process Indicator(s)	Target
Survey of the State of Play of ORPHAcodes implementation in participating countries, including a baseline survey for new countries/ semi-structured interview when needed	2 (mid-term & final)
Meetings of the national hubs for alignment on implementation questions and to build capacity within the network of hubs	6 /year
Survey each year about improved capacity in national hubs	1 /year
Attendance of each hub to Train-for-Trainers (TfT) sessions	1/hub
Implementation of a clear and traceable workflow for helpdesks activities (from reception to closure of demands to the national hubs) using a ticketing tool	1/hub
National action plan described and published in the project intranet, with annual revisions	1/year
Mailing to ERNs centres to inform them of the central helpdesk and the neighbouring national hubs and the possibility to organise an event online	1

Output Indicator(s)	Target
Availability of an active local GitHub or similar ticketing system for national hub helpdesks demands	1/Hub
Autonomous treatment of first-level end-users' demands (based on basic-level training received) at end of year 1 of acting as a hub	100%/hub from year 1
Autonomous treatment of second-level demands (based on advanced-level training received) at the end of year 2 of acting as a hub	100%/hub from year 2
Organisation of training-workshops or other event by each hub	Min 1 /year
Organisation of an English online training for the MS where there is no National Hub	2
% achievement compared to National Plans	75%
Outcome/Impact Indicator(s)	Target
Compiled report on implementation questions to serve as a lessons learned base for other countries joining the network of hubs in the future	1 (M36)
Increased number of ERN HCPs engaged in a dialogue/exchange to NH compared to baseline	10% compared to OD4RD2 baseline
Feedback by national training/events participants on knowledge gain after the training/event (short survey) including online English event for non-covered countries	85% have gained knowledge
Feedback on satisfaction by users on the tool used to receive demands by the national hub (short survey)	90% users are satisfied
Feedback on quality of interaction by national users with national hubs (short survey)	90% users are satisfied
Feedback by TfT Participants on knowledge gain after the training event (short survey)	85% have gained knowledge

Target in the proposal are low as they are minimum thresholds and during OD4RD2 they mostly have been out-reached => your internal target in the NAP should obviously adapted to the resources available within the new funding

The background features a complex network diagram with various sized nodes in dark blue, light blue, and grey, connected by thin grey lines. Some nodes are highlighted with larger circles. A dark grey rectangular box is positioned in the lower right, containing the word 'THANKS' in white. A thin light blue horizontal line is located below the text box.

THANKS