



European Reference Networks (ERN)

Guide for patient advocates

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For further information:

EURORDIS web section on ERN:

www.eurordis.org/european-reference-networks

European Commission webpage:

http://ec.europa.eu/health/ern/implementation/faq_en.htm

1. European Reference Networks

a) What is an ERN?

It can be a challenge to provide highly specialised treatment or care for patients who have complex conditions. This is especially true when the prevalence of such conditions is low, as is the case for rare diseases. This challenge is due to both the scarcity of expertise and to the scattering of small patient populations across the EU, sometimes in isolated locations where expertise does not exist or cannot be accessed.

From 2017, European Reference Networks (ERN) exist as legal entities by the European Union. The European Reference Network Board of Member States has [approved these ERNs](#). ERNs will provide for the first time a unique opportunity for clinicians to work cross border in Europe in order to tackle this challenge.

ERN are networks of centres of expertise and healthcare providers that are organised across borders so that clinicians and researchers can share expertise, knowledge and resources across the EU. ERN create a clear governance structure for knowledge sharing and care coordination across the EU to improve access to diagnosis and treatment, as well as the provision of high-quality healthcare for patients.

Due to the low prevalence and complexity of rare diseases, as well as to the nature of small and scattered patient populations, the system of ERN that is being established can bring real added value to rare disease patients. By ensuring doctors have the most recent and expert knowledge possible, they will be better informed to make decisions on how to adapt treatment and care pathways. This in turn contributes to improvements in clinical outcomes and the quality of life of people living with a rare disease.

The ERN initiative of the European Commission and Member States, supported by the European Parliament, aims to address common challenges faced by professionals when diagnosing and providing highly specialised healthcare in complex, rare or low prevalence diseases. It does not interfere with already existing networks. ERN are part of the legal framework of the EU Directive on Patients' Rights in Cross-Border Healthcare Directive adopted in 2011.

Funding will be provided by Member States and the European Commission to run these networks. EURORDIS works to ensure that [patient involvement](#) is a key element of ERN and their governance, and this stance has been adopted by the European Commission Expert Group for Rare Diseases.

Services provided by the ERN members (healthcare providers¹) will include delivery of specialist advice on diagnosis, care and treatment of rare and complex cases. This specialist advice will be based on collective experience, knowledge and expertise generated in the network. Other services will include patient referral, specialist care planning advice to local services for complex cases, multidisciplinary disease teams case reviews, highly specialised surgery, and treatment planning, review follow-up and discharge.

ERN will facilitate the sharing of knowledge, experience, medical research, teaching, training and resources. They use relevant communication and eHealth tools to enable the mobility of expertise across borders, rather than the movement of patients that travel to access care and expertise that does not exist in their country. ERN will also reduce inequalities of treatment amongst different diseases and countries within Europe. In addition to overcoming disease-specific challenges, ERN will help to realise economies of scale and the efficient use of resources for healthcare provision across the EU.

¹ The terms 'healthcare provider' and 'center of excellence' are used interchangeably throughout this guide.

Care delivered by an ERN is always provided by one of the ERN's member healthcare providers and is delivered under the Member State law of the respective healthcare provider. The decision making for treatment is with the treating physician, but informed by knowledge and expertise from the ERN.

b) Who is a member of an ERN?

ERN are a network of centers of expertise on rare diseases, endorsed nationally by their country of affiliation.

At least 8 EU Member States and 10 healthcare providers are required as main members of an ERN. For clinicians who already network widely, the ERN will represent the formalisation of their networking structures/practices in highly specialised healthcare. For those without current specialist networking communities, ERN will promote expertise and support healthcare providers in order to bring local, regional and national provision of healthcare closer to the patients.

One of these healthcare providers acts as the coordinating centre of an ERN. Healthcare providers should be a single institution, not a whole existing network. Only healthcare providers that have been identified as expert in the Member State legislation can become a member of an ERN, formally sit on the ERN Board and be assessed in the application process against the European Commission legislation.

To be an ERN member healthcare provider a centre must:

- a) Be located in a country which is a formal member of the EU
- b) Be endorsed as a centre of excellence by their Member State
- c) Have completed an assessment based on providing comprehensive documentary evidence of activities. All healthcare providers will be assessed on the criteria of patient-centred care and involvement, organisational capacity, management and business continuity, research and training capacity, exchange of expertise, information systems and e-health tools and expertise, patient safety, quality and good practice.

In addition to the EU 28 Member States, the three EEA countries are eligible and have the right to participate in the Board of Member States for ERN. Members of ERN are expected to collaborate with others national or international centres and networks. It is not possible for centres and networks outside of the EU and EEA to be formal members of ERN and therefore they are not formally assessed by the European Commission. These centres and networks can participate in and contribute to ERN and this is actively encouraged, but this participation cannot be formalised.

c) Affiliated/collaborative centres

In order to ensure universal coverage of ERN across all member states, ERN can have affiliated associated and collaborating centres.

Those providers might be designated as Associated National Centres focusing on the provision of healthcare or as Collaborative National Centres focusing in the production of knowledge and tools to improve the quality of care. Affiliated and collaborative centres can join an ERN even if they are not officially endorsed as a ERN member healthcare provider by their Member State.

Currently, there is no definition for affiliated centres in the European Commission ERN Delegated acts and they are not assessed as part of an ERN application. It is the responsibility of Member States to identify,

endorse and define the role and function of collaborative and associated centres in an ERN. This will be undertaken for affiliated centres, only for successful ERN, in 2017.

d) The IT platform

Clinical services in a virtual environment are at the centre of ERN. These will help to ensure common approaches to patient registration, standards in data collection, and interoperability. The European Commission will provide ERN with a common IT platform including communication and networking tools in order to help the networks fulfil their roles, such as virtual multidisciplinary care teams.

ERN will use a virtual clinical patient management system that will support networks in the diagnosis and treatment of rare or low-prevalence complex diseases or conditions across national borders, and between ERN for multisystem conditions. Through this system, healthcare providers in different EU Member States will be able to connect to share their expertise, knowledge and experience of specific disease cases.

e) ERN groupings by therapeutic area

It is unfeasible to create a separate ERN for every one of the over 6000 rare diseases that exist; the clinical community therefore organised ERN according to disease groupings. This grouping of diseases does not prevent a patient from being able to go to a disease-specific centre of expertise.

The European Reference Network Board of Member States has [approved the following ERNs](#)

1. ERN BOND

- European Reference Network on Rare Bone Disorders

2. ERN CRANIO

- European Reference Network for rare and/or complex craniofacial anomalies and ear, nose and throat (ENT) disorders

3. Endo-ERN

- European Reference Network on Rare Endocrine Conditions

4. ERN EpiCARE

- European Reference Network on Rare and Complex Epilepsies

5. ERKNet

- European Reference Network on Rare Kidney Diseases

6. ERN-RND

- European Reference Network on Rare Neurological Diseases

7. ERNICA

- European Reference Network on Rare inherited and congenital digestive anomalies

8. ERN LUNG

- European Reference Network on Rare Respiratory Diseases

9. ERN Skin

- European Reference Network on Rare Skin Disorders

10. ERN EURACAN

- European Reference Network on Rare Adult Solid Cancers

11. ERN EuroBloodNet

- European Reference Network on Rare Haematological Diseases

12. ERN eUROGEN

- European Reference Network on urogenital diseases and conditions

13. ERN EURO-NMD

- European Reference Network for Rare Neuromuscular Diseases

14. ERN EYE

- European Reference Network on Rare Eye Diseases

15. ERN GENTURIS

- European Reference Network on Genetic Tumour Risk Syndromes

16. ERN GUARD-HEART

- European Reference Network on Rare and Low Prevalence Complex Diseases of the Heart

17. ERN ITHACA

- European Reference Network on Rare Congenital Malformations and Rare Intellectual Disability Disorders

18. MetabERN

- European Reference Network for Rare Hereditary Metabolic Disorders

19. ERN PaedCan

- European Reference Network for Paediatric Cancer (haemato-oncology)

20. ERN RARE-LIVER

- European Reference Network on Rare Hepatological Diseases

21. ERN ReCONNET

- European Reference Network on Rare and Complex Connective Tissue and Musculoskeletal Diseases Network

22. ERN RITA

- European Reference Network on Rare Primary Immunodeficiency, Autoinflammatory and Autoimmune Diseases

23. ERN TRANSPLANT-CHILD

- European Reference Network on Transplantation in Children

24. VASCERN

- European Reference Network on Rare Multisystemic Vascular Diseases

It is expected that multi-systemic rare diseases will be supported in a number of relevant ERN, with these networks working together to meet the needs of rare disease patients. It is important to ensure that, by working with ERN applicants, the scope of an ERN application includes these diseases.

*This scheme is recommended as a model for the purpose of grouping rare diseases thematically and is the result of extensive expert stakeholder collaboration, including: EUCERD (EU Committee of Experts on Rare Diseases) Scientific Secretariat Scoping study, EUCERD Recommendations on RD ERN, meetings of the European Commission Expert Group on RD, a dedicated workshop in October 2014 and a period of written Expert Group review & revision.

*The networking of rare cancers is currently under discussion in EC Expert Group on Cancer Control expertise, nor from benefiting from the expertise of several ERN.

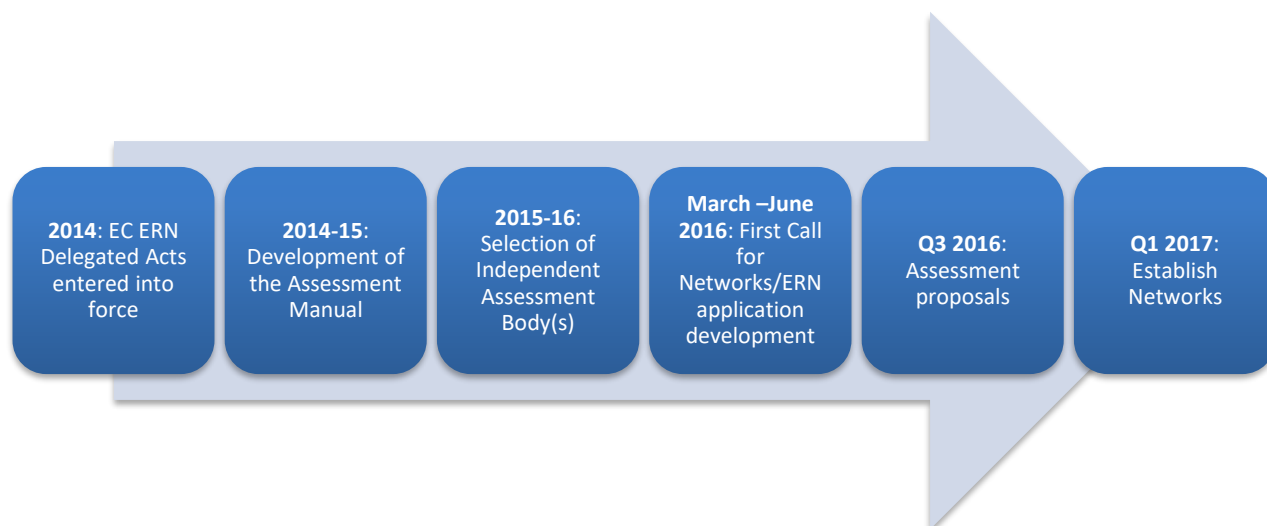
2. Timing

The European Commission launched the [first call for interest from networks wanting to apply to become an ERN on 16 March 2016](#). The first ERN were [validated by the European Commission](#) at the end of 2016. There will be further calls for networks to apply to become ERN in the future. After consulting the Member States, the Commission will decide on the appropriate timing for the publication of subsequent calls for interest.

The ERN applications have to pass three steps:

1. The eligibility check by the Commission and the Independent Assessment Body(ies)
2. The technical assessment by the Independent Assessment Body(ies) and
3. The approval by the Board of Member States.

The addition of affiliated centres and the relevant process will only take place after the approval of the ERN and following the formal designation of each of the affiliated partners by its national authorities.



3. Patient involvement in ERN – European Patient Advocacy Groups

ERN have to demonstrate they are patient-centred and empower patients as defined in the European Commission [Delegated Decision](#). Patients and patient organisations play a critical role in rare disease ERN due to their expertise in their rare disease. The [Commission Expert Group on Rare Diseases’ Addendum](#) gives a clear strategic message that ERN should involve patient representatives to play an active role in the governance structures of ERN.

Today, patients are fully represented and active participants in the ERN via the [European Patient Advocacy Groups](#) (ePAGs), created by EURORDIS. ePAG membership is open to ALL patient organisations, including non-members of EURORDIS. EURORDIS has strongly advocated for a structured and democratic ePAG approach for each of the 24 [ERN groupings](#) to enhance patient representation and empower ePAG patient representatives in each ERN to participate in ERN decision-making processes and activities. **To register the interest of your patient organisation in becoming an ePAG member organisation please fill out [this form](#) indicating [which ERN you wish to be affiliated to](#).** If you are interested in becoming an ePAG representative please contact lenja.wiehe@eurordis.org.

EURORDIS is also implementing an ePAG leadership capacity-building programme, which will empower ePAG patient representatives with the knowledge and skills they need to be able to effectively participate in ERN activities.

This initiative stems from the 2015 EURORDIS General Assembly in Madrid, was further developed by the EURORDIS Council of European Federations in October and approved by the EURORDIS Board of Directors in November 2015. All EURORDIS members have been consulted during the first quarter of 2015 to discuss which ERN grouping they belong to and elections of representatives to the ePAGs took place in May 2016, ePAG representatives have been actively engaged in the development of ERN applications and patient representation in future ERN.

Through ePAGs, patient representatives will help organise and exchange information, contribute to the decision-making process within the ERN, take action to collect feedback from patient groups at national levels and from patients and families, and participate in the creation or maintenance of registries and best practices guidelines. Today, 85 patient representatives are elected in these groups and engaged with clinicians of ERN supporting them:

- With the preparation of their ERN application to help shape the scope of rare disease ERN,

- In potential services provided by successful ERN and
- To ensure patient representation in the potential boards and sub-clinical committees of successful ERN.

Specifically, ePAGs and ePAG Representatives will:

- Contribute to the ERN Board to provide the perspective of patients on all relevant aspects of the ERN strategy, policy & organisational processes;
- Advocate for care that is patient-centred and respectful of patients' rights and choice;
- Ensure that processes to address all ethical issues and concerns for patients are in place, balancing patient and clinical needs appropriately;
- Advise on transparency in quality of care, safety standards, clinical outcomes & treatment options
- Advise on overall planning, assessment and evaluation of ERN activities and initiatives;
- Develop an ePAG feedback and evaluation framework across all ERN to provide patient experience feedback of ERN and healthcare providers' activities;
- Contribute to the development and dissemination of patient information, policy, good practice, care pathways and guidelines;
- Contribute to research e.g. defining research areas important to patients and their families and disseminating research-related information; and
- Identify expert centres to join the ERN as a full member or affiliated partner.

EURORDIS is working to ensure that every rare disease patient has a home within the ERN system. As a key partner in the [European Joint Action on Rare Diseases](#), EURORDIS works with the Commission Expert Group on Rare Diseases, clinical leads and patient representatives to help shape the scope of rare disease ERN, potential services provided by successful ERN and to ensure patient representation in potential ERN boards and sub-clinical committees.

EURORDIS plays an important role in ensuring the participation of patient representatives in the establishment of ERN through the following activities:

1. Actions to identify the needs and expectations of patients and families'

- EURORDIS has established a [European Patient Advocacy Group](#) (ePAG) for each ERN disease grouping. Patient organisations can become ePAG member organisations and patients can become ePAG representatives (2016 and onwards). EURORDIS is also implementing an ePAG leadership capacity-building programme, which will empower ePAG patient representatives with the knowledge and skills they need to be able to effectively participate in ERN activities;
- Consultation of EURORDIS Members on proposed ERN grouping (2015);
- Participation in workshop 4 of the first day of the 2nd European Commission Conference on ERN: [How to build thematic and patient-centred rare disease networks](#) (October 2015) and presentation of '[The Patient View](#)' at the same conference;
- Consultation of members at the EURORDIS Membership Meetings (May 2015 & 2016) and discussion of ERN at the European Conference on Rare Diseases & Orphan Products;
- EURORDIS Membership Meetings 2006 and 2008 were dedicated to Centres of Expertise and European Networking;

2. Advocacy actions for the implementation of ERN

- Meetings and activities of the Council of European Federations, Council of National Alliances, EURORDIS Board of Directors and EURORDIS Public Affairs Committee (October 2014/2015);
- Contribution to [EUCERD \(EU Committee of Experts on Rare Diseases\) Recommendations on Rare Disease European Reference Networks](#) (January 2013);

- Publication of [position paper on ERN](#) (May 2012);
- EURORDIS started its work on Centres of Expertise and ERN in 2006 with the EURORDIS Care surveys, the results of which are recorded in the [Voice of 12,000 Patients](#) book. These surveys investigated patients' experiences and expectations regarding access to diagnosis and to health services; and
- Participation in the European Commission High Level Group on Medical Care and Health Services since 2006.

3. Technical role in the development of ERN

- EURORDIS led the [PACE-ERN](#) (Partnership for Assessment of Clinical Excellence in European Reference Network) consortium to develop a clinically-led, patient-centred programme for the assessment of potential ERN for the European Commission (2015 – 2016);
- EURORDIS has actively developed the vision of what ERN will provide as clinical services for our population as well as the costing model for these services under the EC project “Potential services for future ERNs”; and
- EURORDIS and ePAG representatives worked in partnership with the coordinating centres of ERN applications to develop the scope of the network applications that were submitted to the EC call for ERN applications on 21 June 2016. This was to ensure the scope of the future ERNs meet the needs, aspirations and ambitions of the patient community.

4. Funding

The first call for ERN applications with funding grants was launched 16 March – 21 June 2016. The funding grant available is €2,500,000 per year for the first 5 years to cover all approved networks.

In addition, it is considered that ERN will be in a strong position to secure research grants and other funding due to the fact that they will have been successfully awarded a European Commission ERN status following a formal assessment process.

5. Quality of expertise

Ensuring quality of centres of expertise is four fold:

1. Each Member State has a named representative on the [Board of Member States](#) (BoMS). The BoMS oversees and approves ERN applications. These representatives are working with their respective Member States to ensure that the endorsement process is established in their Member State. It is each Member State's responsibility to assess the quality of their centre of expertise and endorse their participation in an ERN application, according to their respective national legislation.
2. During the application process, the ERN itself will define the threshold or required level of disease-specific expertise or competency that centres of expertise and healthcare providers will need to meet to be a member of an ERN. Each applying health care provider is peer reviewed by experts in the

same area of expertise against the specific competency criteria set by the ERN. In addition, each health care provider needs to complete a self-assessment against these specific criteria which are externally validated by published evidence or professional and/or academic bodies. The ERN has to validate their application by providing evidence that the required level of expertise is met.

3. As part of the assessment process for ERN applications, the European Commission will assess the quality of each centres of expertise and healthcare providers in an application against the [Delegated Decision](#)'s general operational and specific criteria. This will ensure that centres of expertise and healthcare providers participating in an application meet clear and robust quality criteria both at a national and EU level. A technical assessment by [Independent Assessment Bodies](#) (IABs) ensures that centres can demonstrate meeting the general operational criteria.
4. ERN are required to continuously monitor their participating health care providers within their network to verify that each centre continues to meets the required competency in terms of clinical outcomes and quality and safety measures, throughout the 5 years that networks have been approved for operations. If one or more centre of expertise or health care provider, at any point in the five years, ceases to comply with the conditions and criteria set out in the Delegated Decision, they are required under the legislation to highlight this to the Network's Board, whose members should then report this to the [Board of Member States](#). Likewise, ERN applications will need to demonstrate compliance with the conditions and criteria in the [Delegated Decision](#). If a network application does not meet some of these conditions and criteria it will need to include a plan on what it will do to achieve compliance in the first five years. This will be monitored by the Network's Board. At the end of the five years, these networks will be evaluated by the European Commission for a renewal of their network as an ERN.

6. Clarification of impact of ERN

ERN create a clear governance structure for knowledge sharing and care coordination across the EU. They are networks of centres of expertise and healthcare providers that are organised across borders.

Patients will continue to visit their local hospital and not see any changes in how their care and treatment is given, but they will see improvements to the outcome of their treatment; the changes will be seen in how, because of ERN, clinicians will be able to liaise through a wider clinical network spanning Europe, connecting up with experts in specific rare diseases and getting advice or sharing knowledge of complex and rare cases that will ultimately improve the outcome of the care provided.

Patients have the right to choose where they receive care and need to liaise with their own national healthcare system to make an informed choice. ERN support local provision of care to the patient where possible, and encourage experts to share their expertise and knowledge with national, regional and local healthcare systems. **ERN promote the sharing and mobility of expertise, rather than the movement of patients themselves across borders.**

7. Incentive for clinicians

ERN applications require strong cooperation between clinicians as this will reflect their ability to provide a functional and operational ERN if an application is successful.

There are significant benefits and opportunities in the creation of an ERN, which clinicians will respond positively too, including:

- Connecting up scattered expertise to increase understanding of rare diseases, natural history and increase in diagnosis and outcome to treatment
- Increased critical mass for research and ability to successfully secure research grants
- Improve access to high quality diagnosis and healthcare and reduce inequalities in care
- Contribute to the development of EU evidence based practice, clinical standards and protocols and utilise EU best practice to support clinicians drive improvement and advancement in available treatments within their Member States
- Share learnings and eHealth / IT platforms support
- Reduce ineffective treatment and inappropriate use of scarce resources
- Maximise integration and interoperability of EU and national strategic projects
- Provide a clear interface for industry, attracting investment opportunities and economic growth

For the rare disease community, sharing of knowledge and expertise and connecting up the clinical community will enable a levelling up of the knowledge of healthcare practitioners in the ERN, as well as to national, regional and local healthcare systems, bringing this expertise to the patient. This will see improvement to the outcome of diagnosis and treatments available in Member States.

8. Existing legislation & documentation

Below is a summary of the key policies and documents that have shaped the development and implementation of ERN:

- The European Commission webpage on [the policy behind European Reference Networks](#),
- The [Directive on patients' rights in cross-border healthcare](#)
 - Article 12 of this directive sets out that the Commission and Member States have shared responsibility for the establishment and development of ERN
- The European Commission legislation includes:
 - The [delegated decision](#) outlines the legal criteria and conditions a network and its healthcare providers are required to fulfil
 - The [implementing decision](#) defines the mandated requirements for a network application, including a minimum of 10 healthcare providers in 8 Member States
- [The Board of Member States](#), which is responsible for the approval of ERN proposals
- [June 2015 Addendum to EUCERD Recommendations](#)
- [EUCERD Recommendations on Rare Disease European Reference Networks](#)
- [EUCERD Recommendations on quality criteria for Centres of Expertise](#)

The first [European Commission call for ERN](#) was open from 16 March 2016 to 21 June 2016.

The relevant materials needed to prepare for this first call are listed below:

- Call webpage on the [European Commission webpage](#), detailing grants
- The European Commission manual and technical toolbox for the assessment of networks that apply to become ERN. This manual and toolbox has two parts:
 - [Assessment Manual and Technical Toolbox for Applicants](#) applying to become an ERN

- Assessment Manual and Technical Toolbox for Independent Assessment Bodies that assess the applications from networks wanting to become an ERN
- The [mapping report](#) of the current state of the art on national assessment systems, completed in the development of the above toolbox for the assessment of ERN applications, shows that whilst there is variation in the processes member states employ to assess their respective health care providers and centres of expertise, the themes they assess these centres by are in line with the European Commission's Delegated Decision.
- European Commission ERN [Frequently Asked Questions](#)
- [Stepwise assessment process once a network has applied to become an ERN](#)
 - Healthcare providers providing highly specialised healthcare need written certification of endorsement from their Member State to take part in a network application. Read the European Commission's [written consultation](#) on the state of the art of the EU's national designation and assessment practices in highly specialised healthcare or [national reports on Centres of Expertise](#).
- [EUCERD Joint Action workshops on preparation for ERN](#)
- [European Commission information on the implementation of ERN](#)
 - Including [requirements for independent assessment bodies](#) capable of performing the technical assessment of ERN applications. The EU Commission's call for selection of the independent bodies will end in November 2015. Contracts will be awarded in spring 2016.
- [RD-Action Informal FAQs and Discussions on RD ERN](#) (based on the Workshop 'Realising Rare Disease European Reference Networks' (July 2015))