

The 2019-2023 Strategic Plan of the Spanish Society of Radiological Protection (SEPR)

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Abstract. The Spanish Society for Radiological Protection (SEPR) is a scientific and technical organization that aims to bring together all radioprotection professionals from all the sectors of activity where ionizing and non-ionizing radiation is produced. The development of the SEPR's Strategic Plan every 5 years is the cornerstone of all the different activities that the Society carries out. This document establishes the SEPR goals and objectives for that period, as well as the activities planned to achieve them. It is a living and open document that draws on past experiences, while looking to the future. The Strategic Plan 2019-2023, approved on June 2019, is the Third Strategic Plan of the SEPR. In its preparation, account has been taken of the experience obtained in the application of the two previous Strategic Plans, as well as of the new demands of the general public and of professionals in the area of RP that have become apparent during the previous period. This paper describes the development of the current Strategic Plan, as well as the Plan itself, and briefly analyzes its implementation in the conclusion.

KEYWORDS: *Strategic Plan; Radiological Protection Societies, SWOT analysis*

1 INTRODUCTION

The Spanish Society for Radiological Protection (SEPR) was founded in 1980 as a scientific and technical organization. Since its inception, its aim has been to bring together all radioprotection professionals from the different sectors of activity where ionizing and non-ionizing radiation is produced. Therefore, one of its most peculiar characteristics is a high multidisciplinary component. Its members include biologists, physicists, engineers, doctors, chemists and other professionals.

The SEPR has the vocation, above all, of creating a space for dialogue, information sharing and communication, and of working for the progress of Radiological Protection (RP) in our country. SEPR represents only its own members. It does not represent economic interests or those of any other type of corporation or organization. Its Statutes rule out profit-making purposes, as well as trade union activities. Its multidisciplinary character especially guarantees its neutrality. The systematic gathering of experts from different sectors of activity guarantees the formulation of rigorous and independent critical analyses.

The development of the Strategic Plan every five years is the cornerstone of all the different activities that SEPR carries out, keeping in mind its goal of contributing to the progress of RP in Spain, while considering the needs, demands and expectations of its members and society as a whole. This document, valid for five years, outlines the SEPR objectives for that period, as well as the activities planned to achieve them. This is always a living and open document that draws on past experiences, but always looks to the future.

The Strategic Plan 2019-2023, approved on June 2019, is the Third Strategic Plan of the SEPR. In its preparation, account has been taken of the experience obtained in the application of the previous Strategic Plans, as well as of the new demands of society and of professionals in the area of RP that have become apparent during the previous period, many of them as a result not only of new technological developments and applications, but also of the evolution of the nuclear industry as a whole. Consideration has also been given to the new challenges for the future that will help to consolidate the role of the Spanish Society for Radiological Protection as a leading organization in the promotion and dissemination of the knowledge and use of the principles of the radiation protection.

2 METHODOLOGY

The work to develop the current Strategic Plan started with the review of the Strategic Plan 2015-2019 that the members of the SEPR Board carried out at the end of 2018, analyzing its degree of compliance and identifying any errors or shortcomings. This evaluation assessed the progress made very positively, identifying complementary areas of work in which further progress should be made. These included the creation of thematic working groups related to the sectors least represented in the SEPR; the strengthening of relations with the official bodies and agencies and the establishment of relations with new ones; the drawing up of an Action Plan to establish better communication channels with the media; and the upgrade of the SEPR website to improve its content and to serve as a link between members.

Once this review was finalized, the Board of the SEPR appointed a committee to draw up the new Strategic Plan. This committee made up of senior SEPR members with recognized experience in the different areas of radiation protection work. On this occasion, this group was reinforced with the presence of a member of the Society's youth group (J-SEPR). This measure was meant to reaffirm SEPR's commitment to being a professional society open to the future and which, therefore, takes into consideration the needs, opinions and problems of its youngest members, promoting their presence and participation in the forums where SEPR's activities and vision for the future are defined and discussed.

This committee considered that, in addition to the objectives previously defined by the Board, other issues had to be taken into considering when developing the new Strategic Plan. First was the fact that Spain was at the time working to transpose the European Directive 2013/59/Euratom on radiation protection into national legislation, which represented an opportunity for the participation of professionals in the revision of the national standard on the subject. Second was the significant generational change that was ongoing among RP professionals, which created new challenges and opportunities for the SEPR.

In view of the above, it was considered that the basic principles of the previous Strategic Plan were still valid for the structuring of the new Plan, leading to the following key objectives:

1. To consolidate and extend the role of the SEPR as a scientific society promoting the dissemination and development of the knowledge and use of the principles of the radiation protection in all its fields of application.
2. To maintain and improve services to members.
3. To promote interaction with the Society, from a position of rigor and independence, to become a national reference in RP issues

On this basis, and as they did with the previous Strategic Plans, the committee developed this new Plan on the basis of the results obtained by way of a SWOT (Strengths, Weaknesses, Opportunities, and Threats) and a CAME (Correct, Adapt, Maintain, and Explore) analysis. The conclusions of these analyses led to the identification of five "levers" that the SEPR has at its disposal to advance the achievement of its objectives. These levers are:

- Its members
- Its image
- Its institutional relations
- Its collaboration with other related professional associations
- Its activities

Considering the results of the SWOT and CAME analyses, different activities were proposed for each of the identified levers, the expected deliverables were defined and, for most of them, an evaluation criterion was proposed.

The final product of this process, a Strategic Plan proposal, was submitted to the SEPR Board and its members for several rounds of comments. Once all the comments were received, successive versions of the Plan were prepared until consensus was reached among the parties involved. The final document was submitted to the SEPR members' assembly for approval, obtaining unanimous approval.

This paper outlines the results of the SWOT analysis for each one of the levers identified by the Strategic Plan committee, together with the activities proposed, the expected deliverables and the evaluation criteria.

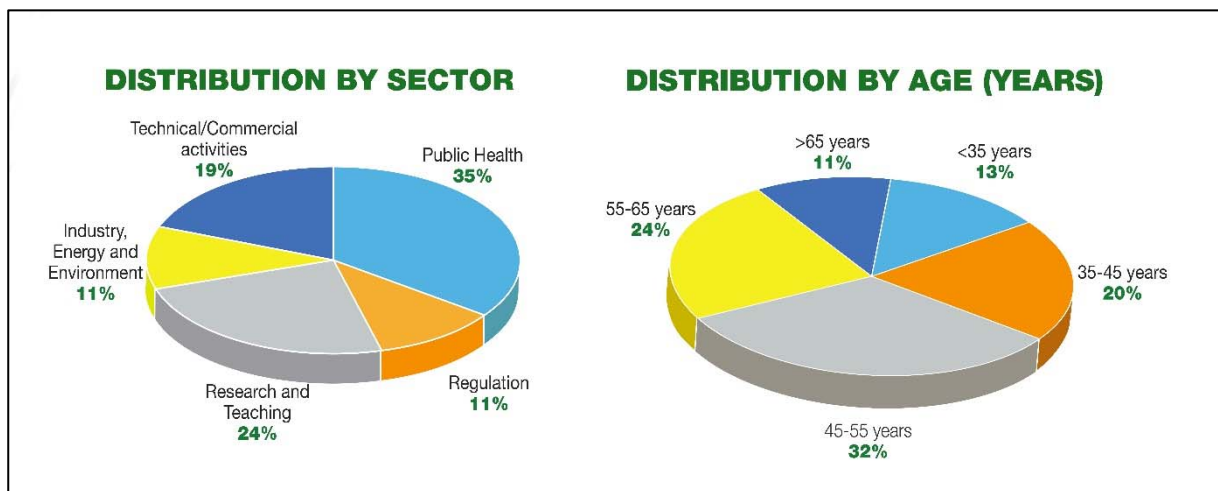
3 2019-2023 STRATEGIC PLAN

3.1 LEVER 1: The Members and Partners

At the SEPR there are individual members and partners.

The SEPR has 670 individual members. Their distribution by age and field of activity is shown in Figure 1, and it demonstrates how not only all ages, but also all fields of activity are represented in the SEPR.

Figure 1: Distribution by sector and age of the members of the SEPR



Regarding the partners, it should be pointed out, that the main official bodies and agencies organizations and the companies with an interest in areas related to radiological protection - industry, healthcare, research and regulation - are partners of the SEPR. Not only is their financial support an important asset, but so is their collaboration in defining policies and strategies, as well as in carrying out different activities.

Therefore, the SEPR members and partners have the following characteristics: **(Strengths)**

- Multidisciplinary character
- Highly qualified and professional
- Spirit of personal collaboration and altruistic participation in SEPR activities

However, there has been a decreasing involvement of young professionals in the SEPR, especially from the healthcare sector, and an unbalanced participation of its members in SEPR activities: a few are involved in many things while the rest do not participate as much. Another weakness is that the specialization and individual capacity of each member is not well known, so it is not possible to propose collaborations to them individually. Likewise, their needs are not known either, and therefore, some members from very specialized sectors do not find useful returns in SEPR. Finally, the geographical distribution of members is strongly unbalanced. **(Weaknesses)**

One of the consequences of these weaknesses is the lack of generational replacement, which is particularly evident in the decrease in the participation of Spanish professionals in international organizations, the saturation of some of the members and the distancing of some of them, as they do not find sufficient returns. **(Threats)**

To deal with the above, the activities appearing in Table 1 were proposed.

Table 1: Proposed activities related to Lever 1

LEVER 1 – The members and partners - Activities
Design a process of interaction with each member in order to obtain more information about their specialization, capacity and needs, incorporating this information to the SEPR website database in order to be able to offer each member individualized activities and services and collecting their impressions through targeted surveys.
Increase the participation of active SEPR professionals, mainly of those starting their professional careers in the healthcare area.
Develop and offer to members certified or accredited SEPR activities, such as courses, technical reviews, etc., which provide greater value to their participation in the SEPR.
Organize activities especially addressed at partners so that they obtain greater value from their participation in the SEPR.
Promote and disseminate the activities of international professional and scientific bodies to encourage members of the SEPR to participate.
Promote on-line activities as a mechanism to attract members who carry out their activities in geographical areas with low representation of the SEPR.

The expected deliverables, together with the evaluation criteria, are the following:

Expected deliverables

- Updated database with personal and professional information on each member
- Individualized communication system with each member for automatic transmission of information according to their profile and predefined criteria

Evaluation criteria

- Total number of individual members actively participating in SEPR activities
- Total number of partners or survey of existing and potential partners

3.2 Lever 2: The image of the SEPR

Over the years, the SEPR has built up an image as a reference in the field of radiation protection, both in Spain and in Latin America, a task that has been achieved thanks to the following assets: **(Strengths)**

- The high professionalism of our members in all areas of RP.
- The recognized balanced and impartial character of the SEPR, with synergies and good relations with other companies and institutions related to RP in all sectors.
- The always active participation of the SEPR in IRPA and ICRP.
- The communication activities: journal Radioprotección, participation in social networks and web section "Ask SEPR".

In spite of this, **(Weaknesses)** there are weak points in the Society's image, such as the current website, with limited information and some difficulty in finding some of the contents. In addition, the SEPR is still not seen as a leading body in the field of non-ionizing radiation and the media does not cover the work and activities of the SEPR as a scientific society promoting RP in Spain.

These facts, together with the gradual disappearance of RP from university courses and the existence of other groups in the vicinity which are trying to gain space, threatens the current position of SEPR as a reference in RP in ionizing radiation, as well as its chances of achieving this position in non-ionizing radiation. **(Threats)**

Therefore, in order to maintain, consolidate and improve those fundamental aspects that have promoted the image that the SEPR currently has, the activities shown in Table 2 should be carried out.

Table 2: Proposed activities related to Lever 2

LEVER 2 - The image- Activities:
Enhance the image of the SEPR and bringing it closer to its members and partners and to society in general. Visits by SEPR members to training centers such as schools, institutes and universities, for discussion between the institutions and society on current issues related to RP could be organized.
Take advantage of the potential of the groups of young members, SEPR Youth Commission, to exploit all the new communication technologies.
Establish agile mechanisms to reduce response times to events or news that require a rapid reaction from the SEPR.
Give a new impulse to the SEPR web page, to achieve a friendlier interface, which would facilitate the general public's access to all the included content.
Improve knowledge of the needs of the SEPR by identifying groups with similar interests, establishing a system for members to send information of interest to the SEPR, allowing open access to some issues of the journal Radioprotección and/or informative publications on specific current topics.
Become the go-to body for the media in all those subjects that affect radiation protection, through agreements with press associations or with the set up of a communication section in the SEPR.

The expected deliverables, together with the evaluation criteria, were the following:

Expected deliverables

- Communication plan, to position SEPR as the reference in the media for RP issues
- Rapid response plan on issues that may require a position of RP professionals
- Updated website
- Web edition of publications on topics of interest to the general public and dissemination by social media.

Evaluation criteria

- Mentions of the SEPR in the media and social media
- Visits to the website
- Number of informative publications generated
- Number of digitized technical documents

3.3 Lever 3: The Institutional relations

The SEPR, as a scientific and technical association whose mission is the scientific promotion and dissemination of RP, is recognized for its knowledge in the field, its impartiality, and its willingness to collaborate with institutions and the general public. This position is particularly important in the field of ionizing radiation, which, in some of its applications, generates concern and social rejection.

In this sense, the following strengths can be highlighted: **(Strengths)**

- The participation of SEPR members in the Spanish National Medical Physics Commission.
- The organisation of training activities in conjunction with the CSN (Spanish Nuclear Safety Council), ENRESA (National Organization for the Management of Radioactive Waste), the Spanish Ministry of Health, the Spanish Ministry of Industry and other professional organizations.
- The existence of the CSN-SEPR discussion forums.

However, due to generational changes, the transversal nature of RP, globalization, and the rapid dissemination of information that is not always correct, it is necessary to promote new actions that strengthen the relationship between the SEPR and other institutions and to create channels of communication between these institutions, RP professionals and society at large. **(Weaknesses).**

In the period 2019-2023, the incorporation of the European Directive 2013/59 into Spanish law must be completed. This is an opportunity for the SEPR and, at the same time, a commitment of the SEPR with its members to disseminate it and facilitate the exchange of experiences between professionals and institutions. **(Opportunities)**

In order to strengthen the relationship of the SEPR with the institutions by promoting channels of communication between the institutions, professionals and society at large, the activities shown in Table 3 should be addressed:

Table 3: Proposed activities related to Lever 3

LEVER 3- The Institutional relations - Activities:
Identify decision-making centers and ensure the presence of the SEPR or a regular and stable contact with them.
Formalize the relationship with the competent bodies in radiological protection, also including all aspects of radiological protection for patients, through collaboration agreements.
Promote the activity of the CSN-SEPR forums and create working groups with the participation of institutions and professionals.
Establish agile mechanisms to make the institutions aware of the needs, interests or difficulties of professionals with regards to the use of radiation, its risks and the application of regulations; collaborate with them in the search for solutions.
Organize meetings with the bodies responsible for transposing Directive 2013/59 to offer the collaboration of the SEPR in its dissemination and interpretation.
Encourage the participation of SEPR members in international institutions. Seek support from other countries in our immediate neighborhood.

The expected deliverables, together with the evaluation criteria, were the following:

Expected deliverables

- Updated database with a list of organizations and proposed contact persons
- The activation of the discussion Forums with the CSN
- Leadership in the implementation of the Directive
- Updated database with Spanish representatives in international institutions

Evaluation criteria

- Number of meetings of CSN-SEPR forums

3.4 Lever 4: The Collaboration with other professional societies

Since its foundation in 1980, the SEPR has managed to maintain its position as a reference for radiological protection in Spain in a very changing environment, due to the fact that it integrates all the professional sectors involved in radiological protection into a single entity **(Strengths)**.

However, the cross-cutting nature of an important part of the multidisciplinary nature of its members are also at the origin of some of the weaknesses of this Society. Radiation protection is applied to different professional tasks and, therefore, its professionals are represented not only by the SEPR, but also by other professional associations which may have initiatives related to aspects of RP. **(Weaknesses)**

This weakness could also increase the risk of SEPR's disappearance, the main threat to any professional society. In our case, because RP in the nuclear energy sector may feel more represented by the SNE (Spanish Nuclear Society) and because health professionals may have more affinity for the SEFM (Spanish Medical Physics Society). **(Threats)**

For this reason, an effort must be made to maintain the SEPR's position as an independent professional society. Collaboration with other societies can be strengthened by taking advantage of both sides' complementarity, although always respecting each other's areas of competence. Thus, it is necessary to

further develop existing collaboration agreements between societies with a particular focus on the SEPR's members.

To this end, the activities shown in Table 4 are proposed.

Table 4: Proposed activities related to Lever 4

LEVER 4 - Collaboration with other professional societies - Activities:
Organize regular meetings with related societies in search of synergies and joint activities.
Encourage the involvement of representatives from the different societies in the organization and development of SEPR activities. The aim is also to ensure that SEPR has a presence in the activities carried out by other societies.
Promote collaboration and joint activities between the societies' youth groups.
Promote joint participation in international events related to common aspects in the areas of action of the different societies.
Facilitate access to SEPR products under special conditions for members of other companies and vice versa, with the aim of expanding the knowledge and the contents of the SEPR.
Lead in the analysis and implementation of the transposition of Directive 2013/59/EURATOM

The expected deliverables, together with the evaluation criteria, were the following:

Expected deliverables

- Regular meetings with like-minded societies
- Offer of SEPR products under special conditions for other companies and vice versa
- Leadership in the implementation of the Directive

Evaluation criteria

- Number of meetings with related companies
- Number of joint activities with other companies

3.5 Lever 5: The SEPR activities

SEPR's activities are well-established and valued events that stand out because of the variety of topics covered and their highly relevant content. They are free for members.

The SEPR promotes the development of RP in Spain and favors synergies in R&D&I activities between knowledge generators, technologists and users through the PEPRI platform. **(Strengths)**

However, as these activities are focused on a sector as multidisciplinary as RP, there are work areas that the SEPR should reinforce, such as those related to the NORM, Radon and Non-ionizing Radiation industries.

The active participation of members in the organization and management of the SEPR is another aspect to be promoted. A tendency towards lower participation is observed in some sectors, either because of the greater specialization of the members, because of the current ease of obtaining information on any subject from alternative sources, or because of the difficulties some members are facing when getting their companies and/or institutions to support these collaborative activities. This has been evident, for example, during SEPR's biennial congress, which has been losing non-health RP content, thus decreasing the participation of members from sectors beyond healthcare. **(Weaknesses)**

However, SEPR's own resources can be used to develop these products, in collaboration with the J-SEPR, the Scientific Activities Committee, the PEPRI Platform, among others. **(Opportunities)**

To change this trend, SEPR should perform the activities shown in Table 5.

Table 5: Proposed activities related to Lever 5

LEVER 5 Activities: The SEPR activities:
Carry out a critical analysis of the state of RP in Spain, from the point of view of professionals and other actors involved, and see how the SEPR could help to improve this state.
Promote R&D&I activities in RP aimed at protection against ionizing and non-ionizing radiation, as well as the knowledge and minimization of its effects, in particular through the PEPRI platform.
Create annual activity plans that include all sectors of RP and that include initiatives by members to collaborate in SEPR activities and requests for training or others activities. Establish a "collaboration exchange" of members, organized by topic and type of activity.
Improve communication of SEPR's activities and grants to its members, as well as in other media. Open channels for participation of new members: web links, sending emails when opportunities arise.
Improve knowledge management and encourage its transmission launching courses of recognized curricular value.
Upgrade SEPR resources and tools.

The expected deliverables, together with the evaluation criteria, were the following:

Expected deliverables

- SEPR action plan to help improve the state of RP in Spain
- Individual improvement plan for SEPR activities

Evaluation criteria

- Survey of members on implemented improvements, midway through the development of the strategic plan

4 CONCLUSIONS

The SEPR Strategic plan for 2019-2023 was launched in June 2019 after its approval by the Society's General Assembly. In spite of the disruption caused by the global COVID-19 pandemic, the Strategic Plan has been a unique tool to guide the strategies of the Organization during 2020. Several activities had to be cancelled or postponed but other alternatives were put in place. Some of the main milestones are summarized below.

- ✚ Renewed website (<https://www.sepr.es>); more presence online and on social media.
- ✚ Activities during the pandemic: Free access to SEPR journal, multiple webinars and online events on a range of topics, including RADON control and standards, NORM, NIR, Fukushima accident anniversary, etc.
- ✚ New communications unit led by an expert on communication whose mission is to promote radiological protection knowledge and awareness in the public and to increase the visibility of the Association in the media.
- ✚ Twitter threads on radiation protection: radon in buildings, induction cooking, food irradiation, proton therapy, etc...
- ✚ New responsibilities and greater involvement of the Young Generation Committee in the Society's decision-making. Grant and fellowship plan.
- ✚ FAQ on ionizing and non-ionizing radiation risk.
- ✚ New agreements with other associations and organizations.
- ✚ Involvement in international congresses' scientific committees

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