ASNR Autorité de sûreté nucléaire et de radioprotection

JUNE – 2026


ROADMAP

# DIALOGUE WITH SOCIETY

# TABLE OF CONTENTS

# 1. THE REASONS AND PRINCIPLES FOR ESTABLISHING A ROADMAP FOR DIALOGUE WITH SOCIETY

## 1.1. A DELIBERATE STRATEGY BY ASNR TO CONSOLIDATE ITS POSITION

ASNR is the French independent authority responsible for nuclear safety and radiation protection. To fulfil the responsibilities entrusted to it by the legislator, the Authority draws on the best scientific knowledge, its expertise, skills and operational feedback, as well as its oversight and enforcement powers. To carry out its actions, shape its decisions and strengthen its authority, it maintains an ongoing dialogue with all local and national stakeholders.

For ASNR, dialogue takes various complementary forms: transparency, information, communication, education, and the involvement and participation of civil society stakeholders to enable them to grasp the challenges of nuclear safety and radiation protection. The aim is to support the development of skills, to mobilise the people concerned, and to foster dialogue and debate on complex issues, from knowledge-building to decision-making and monitoring, with Local Information Committees (CLIs) and their national association (ANCCLI), as well as with all stakeholders.

However, this dialogue does not constitute a shared decision, as decision-making remains the full responsibility of ASNR.

## 1.2. DIALOGUE WITH SOCIETY MEETS A REQUIREMENT OF THE LEGISLATOR AND CONTRIBUTES TO THE PRESERVATION OF A COMMON GOOD: NUCLEAR SAFETY AND RADIATION PROTECTION

Nuclear safety and radiation protection are matters of public interest, and constitute a common good at national and international levels. In this respect, dialogue with society is essential: it is a major lever for strengthening mutual understanding and consolidating trust.

The right of citizens regarding to access information, participation in decision-making processes concerning projects with an environmental impact, and access to justice in environmental matters is recognised at international and European levels through the Aarhus Convention, adopted on 25 June 1998 and translated into several European directives.

In France, this right is enshrined in the Environmental Charter, which is backed by the Constitution, as well as in the Environmental Code. The laws on Transparency and Security in the Nuclear field (known as the "TSN" Act of 2006), on the energy transition for green growth (known as the "TECV" Act of 2015) and on the organisation of nuclear safety and radiation protection governance (Act 2024-450 of 21 May 2024) have successively specified the rights and duties of nuclear stakeholders.

Dialogue between ASNR and civil society is a voluntary process that goes beyond the obligations imposed by law. Ensuring continuous public participation in all of ASNR's activities is an essential lever for strengthening the robustness of its work and the quality of its decisions.

## 1.3. DIALOGUE WITH SOCIETY IS A DEFINING FEATURE OF THE CREATION OF ASNR, BUILDING ON A RICH LEGACY AND BENEFITING FROM FRESH MOMENTUM FOR INNOVATION

### Building on actions undertaken to date: preserving strengths and addressing areas requiring attention

As shown by the ASNR Barometer on risk and safety perception[1], French people's expectations in terms of transparency and dialogue remain high.

20 years' experience of dialogue with society has shown the benefits both for ASNR - by enriching its research and expertise and by informing its decision-making - and for civil society, which can take ownership of complex issues and participate in the decision-making process.

This experience has also highlighted points requiring particular attention, such as the growing number of requests and consultations initiated by different stakeholders, the diversification of participants in the dialogue, and the link between feedback from these dialogue initiatives and governance and decision-making.

### A new context and high expectations in terms of dialogue, but a need to prioritise certain subjects and adapt the forms of dialogue to the issues at stake

The context for both the Authority and its stakeholders is undergoing profound changes:

- The emergence of new construction projects in the nuclear sector, the development of innovations in the medical sector as well as in the nuclear sector, and more generally in the building of knowledge (artificial intelligence - AI), are profoundly changing the context in which it operates.
- The prospect of extending the lifespan of facilities, and the investment required as a result, calls for ongoing, structured dialogue, both within and beyond the formal regulatory milestones.
- In a rich and complex institutional landscape for dialogue, the stakeholders - institutions and civil society – are highly solicited despite limited resources. The optimisation and prioritisation of such solicitations must be addressed on a collective basis, and are imperative in order to maintain clarity and effectiveness, while guaranteeing the active, high-quality and relevant public participation.
- Bringing together the public service missions and capabilities in research, expert assessment and regulatory oversight in the fields of nuclear safety and radiation protection provides an opportunity for dialogue that is more continuous, more transparent, better-structured and more engaging.

### The need for effective coordination with other institutions that engage in dialogue with society

Over the years, the number of forums for dialogue and opportunities for discussion has grown, with complementary missions and objectives. The aim is therefore to coordinate the various approaches to a given topic, in order to avoid overlaps and duplication.

Two institutions play a key role in this landscape: the High Committee for Transparency and Information on Nuclear Security (HCTISN), a pluralistic body that is "*the cornerstone of the transparency owed to the public in nuclear safety matters*", and the National Association of Local Information Committees and Commissions (ANCCLI), a national association that "*brings together the experiences and expectations of the 35 Local Information Committees*" and organises numerous opportunities for dialogue with all nuclear stakeholders, including ASNR.

In addition, major strategic projects (new facilities, etc.) are the subject of public debates organised by the National Commission for Public Debate (CNDP), consultations organised by licensees, and public inquiries

[1] The 2024 version of the Barometer shows that a very large majority of French people (91%, down by 1 point) think that a pluralistic structure to "*deal with risk situations*" would be useful, and 49% emphasise the importance of making understandable information on the risks associated with industrial facilities accessible to everyone: *https://barometre-perceptiondesrisques.asnr.fr/* (*Baromètre-2025_english-summary.pdf*)

organised by the prefectures. ASNR takes part in these debates as necessary and ensures that its dialogue on these projects does not interfere with them.

### The need to strengthen and develop relations with civil society

This involves, for ASNR, strengthening its existing partnerships, opening up to new stakeholders and meeting the challenge of the generational renewal of its contacts.

### The need to innovate in its dialogue practices

The creation of ASNR is an opportunity to continue to innovate in its practices, and in the way the authority promotes and facilitates dialogue with stakeholders, in particular by mobilising more local contacts (with ASNR divisions, among others) and by diversifying the methods and topics of dialogue. This can involve innovation in terms of facilitation techniques, development of dialogue tools such as “serious games”, and original ways of involving young people or local residents.

### The need to strengthen and expand networks

It would be beneficial to develop links with other national bodies pursuing public engagement policies, with which long-standing exchanges already exist on the issues concerned, such as ANSES, INERIS, INRAE, SPF, Ifremer, UGE, BRGM, INCa and INSERM[2], as well as with the network dedicated to public engagement within the bodies of the Coordination Committee for the major French health agencies (HAS, ANSM[3], etc.), through joint initiatives and by sharing practices designed to foster participation.

## 1.4. DRAWING ON IN-HOUSE EXPERTISE IN “PARTICIPATION ENGINEERING”

To ensure that its dialogue strategy is implemented, ASNR relies on a dedicated department that interacts with the Directorates and the College to identify with them the issues of concern to society and the associated actions, procedures, risks and opportunities. The construction of this roadmap for dialogue with society results from the convergence of the scientific and technical needs of ASNR and the interests, concerns, issues and contributions of the stakeholders. For this reason, it is drawn up by this department in conjunction with ASNR directorates, in line with their strategic thematic roadmaps.

To foster dialogue with society, the dedicated department draws on “participation engineering” methods. In particular, it seeks to maintain and develop in-house expertise in “participation engineering” and the associated methodologies (ASNR participation scale, assessment of the impact of dialogue with society, guidance documents, etc.).

[2] ANSES: The French Agency for Food, Environment and Occupational Health and Safety; INERIS: The French National Institute for Industrial Environment and Risks; INRAE: The National Research Institute for Agriculture, Food and Environment; SPF: *Santé publique France* (National Public Health Agency); Ifremer: The French Research Institute for Exploitation of the Sea; UGE: Gustave Eiffel University; BRGM: The French Geological and Mining Research Office; INCa: The French National Cancer Institute; INSERM: The French National Institute for Health and Medical Research

[3] HAS: The French National Authority for Health; ANSM: The French National Agency for the Safety of Medication and Health Products

## 1.5. INPUT FROM HCTISN

In drawing up this roadmap, ASNR, in addition to its 20 years' experience of dialogue with society, also drew on the insights provided by the working group set up by HCTISN at ASNR's request "on the issues of transparency and openness to civil society, procedures, and any blind spots that need to be filled" and[4] the resulting HCTISN opinion 18 , following six meetings of the group representing all the colleges of HCTISN[5]and comprising around fifteen members.

The ASNR college, which is responsible for the strategy for dialogue with society, also wanted to organise a series of meetings with leading figures in the field of public participation to discuss the challenges and practices of dialogue with society (specialists in environmental democracy and third-sector of research, as well as organisations that are signatories to the Charter on Openness to Society).

[4] All of the work of the HCTISN Working Group “ASNR Policy on Transparency and Dialogue with Society” is available at: *https://www.hctisn.fr/groupe-de-travail-politique-de-l-asnr-en-matiere-r86.html* (in French)

[5] See HCTISN opinion 18 at: *https://www.hctisn.fr/IMG/pdf/avis_no18_hctisn_-_feuille_de_route_transparence_et_ouverture_a_la_societe_de_l_asnr.pdf* (in French)

# 2. ASNR'S AMBITIONS IN TERMS OF DIALOGUE WITH SOCIETY

**In line with the commitments made in the Charter on Openness to Society, ASNR has adopted the following principles, adapting them to the specific characteristics of ASNR and of an independent administrative authority:**

## MAIN PRINCIPLES OF THE INTER-INSTITUTE CHARTER ON OPENNESS TO SOCIETY

***To strengthen risk assessment and public participation in decision-making processes:***

***Increase the transparency of its work.***
*Make its opinions, studies and research work, as well as its responses to consultations conducted by the Government and other public bodies, publicly available and accessible, while clearly setting out the criteria and processes underpinning its resolutions. Accompany such publication with accessible explanations that enable everyone to understand the issues at stake and exercise citizen oversight.*
*When carrying out work under scientific contracts, address the issue of access to results during negotiations with its partners.*
*Respond promptly to all requests for information addressed to it, in accordance with legal requirements relating to access to information.*

***Share its knowledge.***
*Develop dialogue initiatives that give stakeholders access to the information they need to understand technical issues.*
*Make scientific knowledge available while highlighting uncertainties, knowledge gaps and, where relevant, areas of controversy, so as to help the civil society stakeholders to form their own opinions in the most informed way possible, so that they can participate in the decision-making process.*
*When publishing the outputs of certain of its activities, engage in dialogue with civil society stakeholders as required.*

***Help civil society stakeholders acquire the skills they need to take part in the decision-making process, and work with them to develop risk assessments***
*Recognise the legitimacy and value of different forms of expertise and the importance of strengthening other independent expertise capacities. Consider that the existence of organised, competent stakeholders who aim to address the public's concerns is a factor in increasing vigilance with regard to risks and participation in decision-making.*
*To enable these stakeholders to become involved in technical issues relating to nuclear safety and radiation protection and to take part in the decision-making process, develop dialogue initiatives with them and support their efforts to build skills in response to their requests.*
*At the start of a dialogue, discuss with all the stakeholders how they will be involved and how the results and decisions will be reported at the end. These arrangements should be clearly communicated.*
*Participate in pluralistic assessments and endeavour to ensure that the results of this work are discussed in forums open to the public in the relevant territories.*

***To implement and strengthen dialogue with society:***

***Strengthen the capacity of ASNR staff to engage in dialogue with civil society stakeholders.***
*Consider the ability to engage in dialogue with civil society stakeholders as one of the key skills of its teams. Develop their skills in this area, in particular through training and participation in dialogue initiatives and analysis the relevant feedback.*
*Support the sharing of public engagement experience and expertise by leading and participating in networks set up in relation to this approach at national and international levels.*

***Identify and mobilise the resources required for public participation.***
*Each dialogue initiative should be supported by appropriate human and financial resources to ensure the effective participation of stakeholders, including coverage of the costs associated with their involvement.*

***Ensure effective steering of policies for dialogue with society, and report publicly on progress made and difficulties encountered***
*A dedicated public dialogue department facilitates access by stakeholders to ASNR's work and expertise.*
*Internal feedback on public engagement initiatives is organised to spread the culture of dialogue with society within the Authority.*
*Engage with stakeholders, as well as with national and international bodies involved in comparable approaches, to propose sharing of insights on progress achieved in dialogue with society.*
*Report to HCTISN and OPECST on the subjects selected for dialogue and the arrangements for their implementation.*

In addition, as an independent administrative authority, ASNR also conducts public consultations, either as part of its regulatory obligations or on a voluntary basis. In this way, ASNR gathers comments from the public via consultations on its draft regulatory decisions, taking care to set deadlines appropriate to the issues at stake. It endeavours to extend consultation times in response to requests from stakeholders, whenever this is necessary, taking into account expectations, the significance of the issues involved, and scheduling constraints (holiday periods, etc.). ASNR subsequently publishes a summary of the comments received and explains how they have been taken into account. In addition, as part of a voluntary approach, ASNR may also implement a public consultation procedure on its draft guides and certain other draft documents (draft scoping document for the preparation of a guide, draft position paper, etc.).

# 3. RENEWED STEERING AND GOVERNANCE OF DIALOGUE WITH SOCIETY

## 3.1. STEERING DIALOGUE WITH SOCIETY

### 3.1.1. A department dedicated to “participation engineering”, partnerships and networks

A dedicated department – the Department of Policies for Dialogue with Society (SPDS) – is responsible for steering and fostering the participation and involvement of civil society in all of ASNR's activities.

To fulfil this mission, the SPDS team draws on its expertise and skills in participation engineering. It supports ASNR's directorates and divisions in defining, organising and leading initiatives for dialogue with society and the joint construction of a safety and radiation protection culture. It is based on participation engineering, as well as on methodologies developed in-house and adapted to the ASNR context. One example is the development of a multi-dimensional participation scale dedicated to supporting the design of stakeholder engagement initiatives. In addition, work is underway to assess the impact of initiatives for dialogue with society.

This policy of dialogue with society means building and maintaining partnerships with stakeholders, particularly from civil society. As a result, ASNR's participation engineers are involved in networks specialising in this area in order to maintain their expertise, exchange with peers, foster innovation and promote a culture of dialogue with society within ASNR.

### 3.1.2. Internal Committee for Dialogue with Society

ASNR is setting up an internal Committee for Dialogue with Society (CoDiS), whose secretariat is provided by the SPDS, to prepare ASNR's roadmap for dialogue with society, and monitor its implementation. It works with the departments and divisions to define and prioritise the actions to be proposed in the roadmap.

Once it has been prepared in this way by the departments, the roadmap is then validated by the college, which regularly monitors its implementation.

## 3.2. GOVERNANCE AND PLURALISTIC IMPETUS FOR ASNR DIALOGUE

### 3.2.1. The pivotal role of HCTISN

Article L. 592-29-1 of the French Environment Code provides that "*The Authority for Nuclear Safety and Radiation Protection shall present to the Parliamentary Office for the Evaluation of Scientific and Technological Choices, in conjunction with the relevant standing committees of the National Assembly and the Senate, and to the High Committee for Transparency and Information on Nuclear Security, which may issue an opinion, the subjects on which public involvement is organised and the arrangements for its implementation, and shall report to them.*"

For this reason, ASNR wished to have HCTISN's input during the construction phase of its roadmap. ASNR thus shared with the working group (WG) set up by HCTISN the options and guidelines envisaged for its policy of dialogue with society. Following the work of this WG, HCTISN issued opinion 18 on 9 April 2026, and ASNR presented its draft roadmap and how it had taken these recommendations into account on 5 May

2026. The final version will be presented to the plenary session in June 2026 and then published on the 20th anniversary of the drafting of the law Transparency and Security in the Nuclear field (TSN).

To follow up on these recommendations, ASNR, in collaboration with HCTISN, will identify "important subjects" based on the requests, interests and needs expressed by stakeholders in the regions, in particular via the CLIs. A structured exchange between ASNR and HCTISN will be organised annually, as part of an annual meeting or a plenary meeting of HCTISN, in order to identify and prioritise the major nuclear safety and radiation protection issues requiring a particular effort in terms of transparency, information or dialogue with society, and to consider ways of reaching different audiences. In addition to this annual exchange, emerging issues directly related to nuclear safety can be identified on an ongoing basis through HCTISN. Furthermore, should HCTISN wish, ASNR may present to it the annual report on the state of nuclear safety and radiation protection in France.

### 3.2.2. Feedback on research expectations to the Scientific Committee and the College

With regard to research activities, ASNR will organise an ad-hoc dialogue to gather the expectations of stakeholders. ASNR's Scientific Council (SC) will consider the wishes expressed and make proposals to the college. These proposals and the initial expectations of stakeholders will be presented at regular meetings of the college.

Given the role of ASNR's Scientific Council, established by law, in guiding research, ASNR is organising an annual seminar, under the aegis of the Scientific Council, to gather the expectations of stakeholders.

### 3.2.3. Think tank dedicated to scientific support for participation engineering

In addition to discussions with HCTISN on its roadmap and its expectations on the major topics and themes, the college and the ASNR departments will be supported by a *think tank* made up of specialists in participation engineering, which will enable ASNR to keep abreast of innovations in dialogue, and to foster wider stakeholder participation in dialogue mechanisms.

# 4. A ROADMAP STRUCTURED AND PRIORITISED AROUND KEY THEMES AND MILESTONES

**ASNR proposes a structured dialogue organised around the major milestones of the decision-making process. The different types of dialogue will focus on strategy and decision-making, knowledge, research and technical controversies, and expert assessment. In each case, the aims, limits and constraints of the exercise will need to be clearly defined.**

## 4.1. MAIN SOCIETAL ISSUES EMBEDDED IN ONGOING PROCESSES

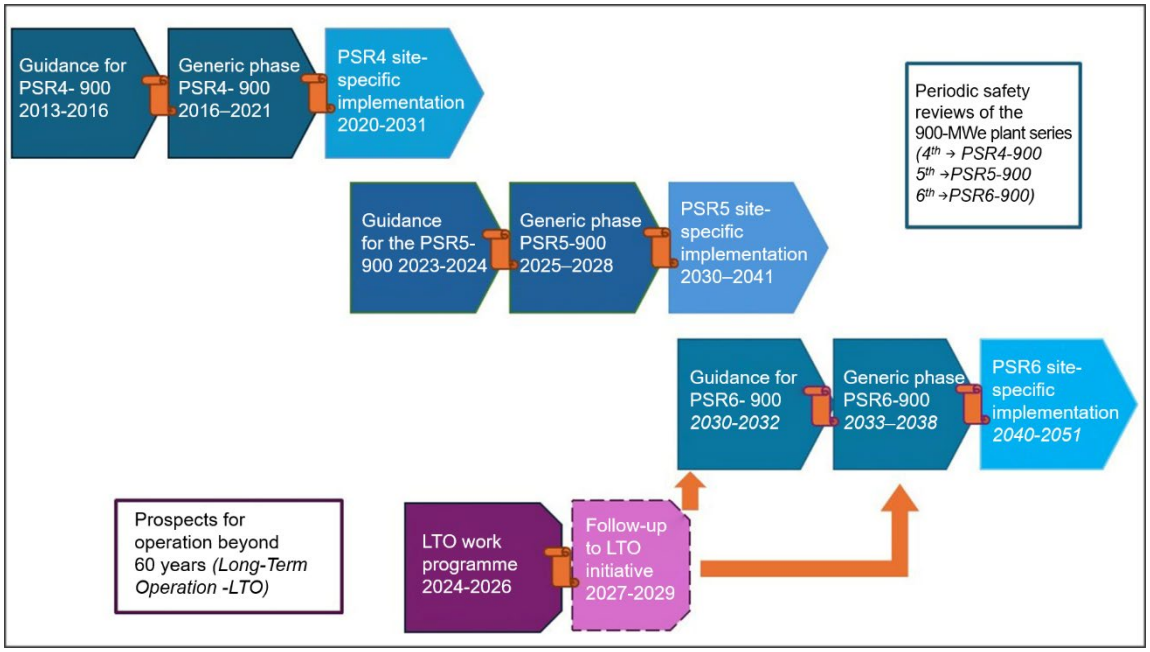
As has been the case for more than 15 years (notably in the aftermath of the Fukushima Daiichi accident, the CIGEO project, periodic safety reviews (PSR) of reactors or fuel storage facilities, etc.), many civil society stakeholders have a strong interest in authorisations relating to basic nuclear installations (BNIs) and wish to participate in the different phases of the associated decision-making process. ASNR will continue to engage in dialogue during this process, prioritising actions according to public interest in the project, its stage of development and the type of investigation process involved.

In view of the new context described in the first part of this report, dialogue on major issues will need to be considered from a long-term perspective, drawing on the operational milestones of major projects.

### 4.1.1. Nuclear power reactors: periodic safety reviews and operating life extensions

The prospects for extending the operating lifetime of nuclear power reactors are structured around major regulatory milestones associated with ongoing and future ten-yearly periodic safety reviews (PSR), together with a complementary long-term operation (LTO) initiative aimed at anticipating the challenges associated with operation beyond 60 years.

The timeline below illustrates the various milestones associated with the fourth, fifth and sixth periodic safety reviews (using 900 MWe reactors as an example), as well as those associated with the LTO initiative.



#### 4.1.1.1. The generic phase of the fifth periodic safety review of the 900 MWe reactors

Following on from the dialogues undertaken since 2014 on the fourth periodic safety reviews of 900 and 1,300 MWe reactors, two webinars were organised with ANCCLI in October 2024 to discuss the guidelines proposed by EDF[6] for the fifth periodic safety review of 900 MWe reactors, the expert assessment carried out, and the Authority's draft position on this subject. These discussions were part of the preparations for the consultation organised by the Authority in October and November 2024, and enabled several stakeholders to prepare their contributions to that consultation. Following the consultation, an exchange took place with ANCCLI in March 2025 to give them feedback on how the Authority had taken account of their very detailed opinion.

Investigation and expert assessment of the generic phase of this review began in 2025 and will continue until ASNR adopts a position and issues a resolution in 2028, both of which will be the subject of a public consultation. ASNR will propose dialogue actions on this review from 2027 onwards, in particular on the challenges of adapting reactors to the impacts of climate change.

#### 4.1.1.2. Prospects for the operation of EDF's reactors beyond the age of 60, and links with the sixth periodic safety review of the reactors

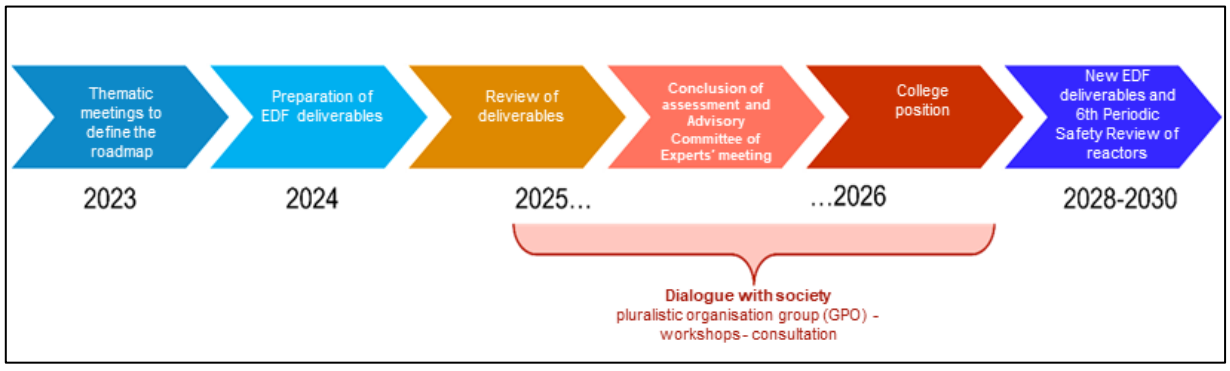
Stakeholders in France hold differing views on extending reactor operating lifetimes. For some, the issue calls for heightened vigilance. For nearly 10 years now, as part of the discussions on the fourth and fifth periodic safety reviews, there has been a desire to raise questions about "*the criteria and limits that would require final shutdown of a reactor*" (according to the ANCCLI opinion of November 2024). For others, it raises high expectations in terms of competitiveness and low-carbon electricity. The challenge is to engage with all these perspectives on the nuclear safety aspects of the issue.

ASNR's investigation and expert assessment of the prospects for the operation of EDF's reactors beyond the age of 60 began in 2025, with a meeting of the advisory committees of experts scheduled for June 2026 and a position statement expected at the end of 2026. This is a forward-looking approach that complements the review process, and aims in particular to identify the factors limiting the operating life of reactors and the actions that could be taken to remove these limitations.

At the end of 2025, ASNR initiated a dialogue with society on the issues at stake and the assessment of the possibility of continuing to operate the reactors.

This dialogue involves:

- setting up a pluralistic organisation group (GPO) to help ASNR identify the issues and subjects to be discussed and define the arrangements for dialogue,
- the organisation of workshops at national and regional levels,
- an Internet consultation to extend contributions to the general public.




The conclusions of this approach will be taken into account in the periodic safety reviews, in particular the sixth periodic safety review of the reactors. Starting a dialogue with society at this stage will enable the

[6] EDF (Électricité de France): French state-owned company that operates and maintains the nuclear power plants in France

initiation of lasting exchanges, with mechanisms that will be adapted and built as the sixth periodic safety review progresses.

#### 4.1.1.3. Third periodic safety review of the 1,450 MWe reactors

The guidelines for the third periodic safety review of 1,450 MWe reactors were the subject of a position statement issued by the Authority in July 2023. The investigation and expert assessments of the generic phase of this review are under way, and will culminate in a position statement in 2028.

As the specific reviews of the reactors concerned fall within the same timeframe (between 2031 and 2035), the objectives set for the third periodic safety review of the 1,450 MWe reactors are similar to those set for the fourth periodic safety review of the 900 and 1,300 MWe reactors (in particular, to incorporate modifications resulting from the stress tests carried out following the Fukushima Daiichi accident, and to move towards the safety objectives of third generation, EPR-type reactors). As mentioned above, these issues have been the subject of in-depth dialogue with society for over 10 years, and of two public consultations.

It does not therefore seem necessary to launch a new national dialogue on this subject. However, the two CLIs concerned - Chooz and Civaux - will be able to ask ASNR about local dialogue arrangements during and at the end of this investigation, so that they can participate in the generic and specific decision-making processes.

#### 4.1.1.4. Specific periodic safety reviews and operation of EDF reactors

The periodic safety reviews of each reactor give rise to an assessment and, where appropriate, a report by ASNR. The ten-yearly outages associated with the fourth specific periodic safety reviews of the 900 and 1,300 MWe reactors will therefore continue until 2034. As part of the ongoing discussions with society on this subject, the CLIs concerned may ask ASNR to discuss local dialogue arrangements during and after this assessment, so that they can take part in the specific decision-making process, as well as in the public inquiries held after the licensee submits its periodic safety review concluding report (PSR).

**REGARDING THE FLAMANVILLE 3 EPR REACTOR**

EDF has scheduled the first refuelling and maintenance outage for the second half of 2026 (with a forecast duration of 350 days). In addition to the usual maintenance activities and tests carried out during a reactor outage, EDF will be requalifying the primary system and carrying out various modifications during this outage.
ASNR will continue to support the Flamanville CLI in its monitoring role, particularly during the first years of operation of this reactor, including the “pre-service” inspection.

### 4.1.2. EPR2 reactor construction programme

The EPR2 is an optimised version of the EPR reactor that EDF plans to build in pairs at the Penly, Gravelines and Bugey sites. Further EPR2 sites are planned.

EDF submitted a creation authorisation application (DAC) to build two EPR2 reactors on the Penly site in June 2023. The authorisation procedure is conducted by the Minister responsible for nuclear safety. It includes a consultation phase in 2025 and early 2026 (involving the environmental authority, the local water commission, local authorities and CLIs, as well as a public inquiry and cross-border inquiries), with an opinion from the Prefect on these consultations in spring 2026. At the same time, ASNR's technical assessment of the authorisation application file is under way, with several expert assessments and meetings of ASNR's Advisory Committees of Experts (GPE) in 2025 and 2026. ASNR will then be consulted on the draft creation authorisation decree submitted by the Minister. ASNR's opinion on the draft decree will take into account the conclusions of the technical review it is carrying out and the results of the consultations that

have been held (scheduled for the end of 2026). It will then review the technical specifications in application of the creation authorisation decree; these specifications will be the subject of a public consultation.

The DAC for two EPR2-type reactors at Gravelines should be submitted in mid-2026. It will be reviewed by ASNR within the same framework as that described above for Penly. ASNR is currently assessing, in advance of the creation authorisation application, the subjects of ground preparation and consideration of seismic risk, with respect to which it will issue a position statement in autumn 2026.

In addition, when EDF submits a DAC for two EPR2-type reactors at Bugey, the application will be reviewed by ASNR within the same framework as that described above for Penly.

ASNR was involved in the three public debates organised by the CNDP on these projects, as well as in local initiatives (working group set up by the Paluel-Penly CLIN (Nuclear Local Information Committee) on the creation authorisation decree in late 2025/early 2026) and national initiatives (ANCCLI-HCTISN webinar in January 2026). Given the action already taken, ASNR does not see any need for specific national dialogue at this stage. The CLIs concerned, as well as ANCCLI and HCTISN, will be able to call on ASNR to support them in their actions and to consider ad-hoc arrangements for dialogue at local and national level, depending on the progress of the projects, in particular on the technical requirements in application of the creation authorisation decree.

### 4.1.3. Projects for Small Modular Reactors and associated fuels

Around ten small modular reactor (SMR) projects are currently being studied in France. In order to optimise preparations for the creation authorisation applications for these reactor projects, and to mobilise resources proportionate to the level of maturity of each project, ASNR has set up a framework of incremental technical exchanges[7]. Alongside the development of these modular reactor projects, there is inevitably a need to ensure the availability of the fuel required for their operation, with development challenges varying depending on the reactor type.

These projects are giving rise to a number of questions from civil society. ASNR has responded to numerous requests from CLIs, ANCCLI and HCTISN to present the progress of technical discussions on these projects. ASNR will continue to respond to this type of request, within its field of competence and activity, in particular to explain the safety issues. Where necessary, it will support the CNDP in the public debate on Newcléo projects[8].

### 4.1.4. Fuel fabrication and management plants: new plants/improving the reliability and ensuring the continuity of existing plants

Various exchanges have taken place in the past on fuel fabrication and management facilities at national level (within the framework of HCTISN, public debates on the PNGMDR[9], or expert assessments and investigations of the safety options dossier (DOS) for local or spent fuel interim storage facilities (with regard to the CLIs concerned). The interest of stakeholders in having an overview of the various fuel route facilities outside reactors (for fabrication, storage and processing) has led ASNR to propose specific training for CLIs on these facilities and their risks. The idea of sharing knowledge about this route has been raised with ANCCLI on several occasions in recent years.

New challenges are currently opening up for these facilities:

[7] Status of SMR projects: https: *//reglementation-controle.asnr.fr/controle/petits-reacteurs-modulaires* (in French)

[8] Public debate on the LFR-AS-30 project for a nuclear power reactor with a capacity of 30 MWe in the Indre-et-Loire *département* (37) and the MOX (mixture of uranium and plutonium oxides) fuel fabrication facility in the Aube *département* (10) (Newcleo) *https://www.debatpublic.fr/reacteur-electronucleaire-lfr-30-de-30-mwe-en-indre-et-loire-37-et-installation-de-fabrication-de* (in French)

[9] PNGMDR: French National Radioactive Material and Waste Management Plan

- Construction of new units and storage facilities (Orano[10]'s "Future Back-End" project), with:
  - 3 new BNIs planned in the short term at the La Hague site (fuel unloading and storage facility –"ADEC", Pu storage facility, MOX fuel fabrication plant[11]) with DOS expected in late 2026/early 2027, and creation authorisation applications in 2029/2030;
  - Several other BNIs for future fuel reprocessing facilities, with design arbitration decisions expected around 2027, with a view to DOS in the early 2030s;
  - Ahead of the DOS, several technical standards or baseline requirements will be the subject of advance exchanges between ASNR and Orano (10 in December 2025, 5 in March 2026, 4 in June 2026); they will then be appended to the DOS, so that ASNR can take a concomitant position on the latter, as well as on the technical standards on which subsequent dossiers will also be based.
- Orano's "Sustainability and Resilience" programme (with the objective of extending the existing facilities at La Hague, Melox and TU5 beyond 2040), with:
  - a number of facility modification files expected (4 between 2027 and 2029 and 1 in 2032), the first concerning the T1 facility;
  - the review and processing framework currently being defined, and the link with the periodic safety reviews for the facilities currently being specified (reviews currently under way of the periodic safety reviews of the La Hague facilities and the Melox plant).
- Other complementary projects:
  - plans to increase fuel production at the Framatome plant in Romans sur Isère;
  - modifications to the Melox facility to improve manufacturing processes (GOMOX files);
  - regarding the storage of spent fuel, implementation of the densification of the La Hague plants and the dry storage project.

This multitude of complex projects involves both overarching problems (relating to the overall balance and "systemic" safety) and a 'facility-by-facility' approach (safety challenges specific to each BNI). They are of particular interest to civil society in these two areas, and present

- on the one hand, issues of timeliness and public policy (which do not fall within the remit of ASNR); in this respect, Orano has asked the CNDP to provide advice[12] on the preparation of the forthcoming referral concerning the "Future Back-End" project at La Hague (with the aim of organising a public debate in the second half of 2027) and to support the initial public information initiatives (during the period preceding the referral to the CNDP for the organisation of this public debate);
- on the other hand, nuclear safety and radiation protection issues that will be reviewed by ASNR using a proportionate approach, and on which ASNR may engage in dialogue with society.

As an initial step, ASNR proposes to organise sharing of knowledge on the safety and radiation protection challenges of fuel management facilities in 2027, at national level and in collaboration with ANCCLI. This will help identify dialogue needs and priorities at both local level (for specific facilities) and national level (from an overall perspective), as well as appropriate arrangements for engagement with society that can be adapted over time, depending on the issues and stakeholders concerned and in coordination with debates and consultations that may be organised by Orano and the CNDP.

In addition, ASNR remains open to the CLIs concerned, in particular the Orano La Hague CLI, to speak at their meetings if they so wish, and to the CNDP for the organisation of the public debate. It will also take part as necessary in the ongoing consultation organised by Orano.

[10] Orano: French nuclear operator specialising in the nuclear fuel fabrication and management.

[11] MOX fuel: fuel composed of a mixture of plutonium oxide and uranium oxide.

[12] CNDP letter of engagement for advice relating to the preparation of the referral to the CNDP of Orano's 'Future Back-End' project at La Hague (50) and support for the initial public information initiatives undertaken by the project owner, dated 8 October 2025 https://www.debatpublic.fr/sites/default/files/2025-06/DECISION_2025_90_AVAL%20DU%20FUTUR_1%20Vu%20MP%20Sign%C3%A9.pdf (in French)

## 4.1.5. Waste, decommissioning, clean-up

### 4.1.5.1. Cigéo's creation authorisation application (DAC)

**INITIATIVES FOR DIALOGUE WITH CIVIL SOCIETY**

**Since 2012**, dialogue with civil society has taken place in support of the process for management of HLW-LL and ILW-LL waste. A technical dialogue was conducted during the expert assessment of the Cigéo's safety option dossier (DOS) in 2016-2017.

**From 2023 to 2025**, ASNR strengthened this approach by organising a continuous process of public participation throughout the referral, expert assessment and review phases with respect to the DAC for Cigéo. The technical dialogue, conducted with ANCCLI and the CLIS of the Bure research laboratory (Local Committee for Information and Follow-up), involved around forty regular participants and several thematic workshops. Around 400 contributions from civil society have been incorporated by ASNR. One notable step forward was the co-construction of an abandonment scenario for the site, designed to test the robustness of the repository, which is now being studied by Andra[13].

**In 2025**, ASNR's draft opinion was submitted for stakeholder consultation. A dedicated meeting provided an opportunity for direct exchanges between civil society and ASNR. The contributions received have been incorporated into the final opinion, presented to Parliament in December 2025. This consultation also prepared stakeholders for the public inquiry scheduled for 2026.

ASNR will continue to engage in dialogue with stakeholders during the major stages of the Cigéo project, in particular to provide enhanced support during the review and consultation on the technical requirements. In the short term, ASNR will provide technical support to stakeholders, in particular local stakeholders (the Clis of the Bure research laboratory, the Meuse *Préfecture*, etc.), within the scope of the forthcoming public inquiry. In 2026, ASNR plans to highlight on its website the safety issues raised by civil society during the discussions, as well as a table tracking the commitments made by ANDRA within the scope of the creation authorisation application file assessment. In addition, ASNR could contribute to more in-depth consideration of technical subjects and/or the exploration of new subjects according to the needs expressed by civil society.

### 4.1.5.2. Other waste

In recent years, discussions with civil society on waste have focused mainly on high-level and intermediate-level long-lived waste (HLW-LL and ILW-LL). However, other types of waste are also the subject of interest from civil society, as shown by the subjects raised during the debates on the Technocentre project at Fessenheim and the sixth public debate on the PNGMDR. This primarily concerns:

- Medical waste, with specific management challenges,
- Very low-level waste (VLLW), with questions raised regarding its characterisation, the possibility of re-use, and the possible saturation of the disposal facility.
- Long-lived low-level waste (LLW-LL), with questions raised about management options.
- Historic and orphan waste, with specific challenges regarding retrieval and conditioning as well as management options.

These issues are regularly discussed within the framework of the PNGMDR's deliberations and its working group, led by the DGEC[14] (see *paragraph 4.3.6*). In addition, ASNR will respond to requests from civil society in its areas of activity.

[13] Andra : French national radioactive waste management agency

[14] DGEC: French Directorate-General for Energy and Climate

#### 4.1.5.3. Decommissioning and clean-up

The decommissioning and clean-up of facilities has been a subject of interest to ANCCLI and the CLIs for several years, with various dialogue initiatives: at national level, a seminar organised with ANCCLI and exchanges with its dedicated group of experts[15]; at local level, presentations by ASNR divisions to CLIs. In January 2026, ASNR held a hearing with the Fessenheim CLIs in the context of its opinion on the draft decree on the decommissioning of the site's reactors.

ASNR will continue to discuss this issue with stakeholders, particularly at local level, to support the CLIs concerned during their consultations on the draft resolutions concerning operations for the decommissioning and clean-up of facilities, and to support them in their long-term monitoring of these operations.

In 2027, ASNR proposes to organise, with ANCCLI, sharing of knowledge on the major challenges of decommissioning, in particular by presenting the decommissioning observatory introduced in ASNR's annual report.

## 4.2. MAIN CROSS-CUTTING TOPICS OF INTEREST FOR SOCIETY

### 4.2.1. Climate change

The impact of climate change on facilities is a recurring topic of interest within CLIs and ANCCLI, as well as in public debates on the plans for the new EPR2 nuclear reactors at Penly, Gravelines and Bugey. This subject was identified as a major point of interest by civil society during discussions on the fourth periodic safety reviews of 1,300 MWe reactors and the guidelines for the fifth periodic safety reviews of 900 MWe reactors, as well as at the last CLI conference in December 2025. There is a need for discussions on long-term climate change scenarios, beyond the ten-year period of the safety reviews, and their impact on nuclear reactors (risks linked to climatic hazards, as well as risks of possible arbitrations in the event of insufficient water resources).

The impact of climate change is one of the key issues to be addressed in the forthcoming assessment of the fifth periodic safety review of the reactors; it is also being taken into account in the assessment of the prospects for operation of EDF's reactors beyond 60 years. A dialogue with society on this subject appears necessary, particularly in connection with those envisaged within the framework of these two reviews (see *paragraphs 4.1.1.1* and *4.1.1.2*). As a first step, the ASNR proposes to share knowledge on this subject in 2027.

### 4.2.2. Monitoring of (natural and artificial) radioactivity in the environment

#### 4.2.2.1. Site radiological studies and environmental monitoring

For the past 20 years, various initiatives aimed at engaging with the public have focused on environmental radiation monitoring. These actions have involved civil society stakeholders in various ways:

- Pluralistic expertise at the request of ministries (GRNC[16], GEP Mines[17]);
- Study in collaboration with civil society (Pilot study on radioactivity in the Loire river);
- Pluralistic monitoring of a study, radiological findings, the Loire river tritium study, and site radiological studies since 2019, starting with the Saint Alban site radiological study.

[15] ANCCLI has published two white papers on this subject: White Paper VI "What are the conditions for influential participation by CLIs and ANCCLI in regional and national monitoring of decommissioning projects?" (2017) https://www.anccli.org/livres-blancs-3/#livre-blanc-n-6-demantelement/1/ (in French) & White Paper VIII "CLIs' view of decommissioning now and in the future - Spotlight on VLL waste and gas-cooled reactors " (2020) https://www.anccli.org/wp-content/uploads/2021/07/LB-8-Demantelement-2020_BDef.pdf (in French)

[16] GRNC: Nord-Cotentin Radioecology Group http://www.gep-nucleaire.org/norcot/gepnc (in French)

[17] GEP Mines: Pluralistic expert group on uranium mining sites in Limousin http://www.gep-nucleaire.org/gep (in French)

ASNR carries out radiological monitoring of French territory on behalf of the State. This mission involves two types of action:

1. Regular monitoring actions with:
   – permanent monitoring systems in the atmospheric and continental aquatic compartments
   – an annual environmental sampling plan.
2. Scientific studies aimed at improving knowledge of the radiological status of the area and the transfer of radionuclides released into the environment and associated exposure of local populations (site radiological studies).

   By virtue of their objectives and methodology (deployment of high-precision measuring instruments, sampling in the environment and of locally-produced foodstuffs, food and time budget surveys of local residents), site radiological studies combine issues of knowledge and participation.

   ASNR will take steps to promote public participation throughout the studies, so that members of the public can embrace the scientific approach, understand the results, and facilitate the deployment of the studies (search for sites for placement of measuring instruments, volunteer households, consideration of how to report results, etc.). In 2026, the Ecarpière site radiological study will continue, and a Paluel site radiological study will begin in the second half of the year.

In addition, since 2024, ASNR and ANCCLI have organised an annual one-day event to share knowledge and experience on the involvement of civil society (CLIs, community-based laboratories) in environmental monitoring, with the aim of identifying and leveraging synergies between stakeholders.

The creation of a network of "environment" correspondents in CLIs is the result of the discussions held during these one-day events. The aim is to create links with civil society regarding ASNR's regular monitoring plan, to ensure greater interaction in relation to regular sampling around the facility concerned, to explain more about what ASNR does, to gather correspondents' points of attention, and even to allow them to take samples that ASNR could analyse. In 2026, the network of "environment" correspondents began its work by sharing information and best practices, pooling documentary resources, supporting projects and increasing the skills of correspondents through training, particularly in researching and using existing data via the National Measurement Network (RNM[18]). ASNR will also contact the CLIs that have not yet appointed a correspondent to explain the benefits and encourage them to join the network.

In addition, the correspondents may be asked to take part in research projects. In 2026, ASNR plans to initiate discussions with them, as part of the European research project MULTIPLEX[19], in order to identify any questions they have regarding the assessment of ecological risks linked to the exposure of aquatic ecosystems to ionising radiation, chemical mixtures and thermal stress.

ASNR will continue its participation in the partnership-based steering of OpenRadiation (see *paragraph 4.3.2.2*) in order to promote citizen measurement of radioactivity as a means of raising awareness, through action, of radioactivity, and the acquisition of a basis for understanding the risk and the skills to assess it, which are useful in post-accident situations. In this respect, in 2026, ASNR will continue to support citizen projects to measure radioactivity via OpenRadiation for scientific epidemiological studies (the CORALE project), and to address radionuclide dispersion in the atmosphere via measurement of radon progeny during meteorological episodes that favour their concentration.

[18] All the data from the French National Measurement Network for environmental radioactivity (RNM) can be found here: *https://mesure-radioactivite.fr/* (in French)

[19] The MULTIPLEX project aims to develop an integrated approach to assessing and managing the ecological risks associated with exposure of aquatic ecosystems to ionising radiation, chemical mixtures and thermal stress: *https://pianoforte-partnership.eu/multiplex/*

#### 4.2.2.2. Radon

**Assessment of regional radon initiatives in private homes: difficulties and levers**

For more than a decade, starting in the 2010s, ASNR has been heavily involved, notably as a joint leader of pluralistic radon risk management projects, in two pilot areas in Bourgogne-Franche-Comté and Haute-Vienne territories. The general feedback from these initiatives demonstrates the importance of the support processes put in place to raise public awareness, encourage radon measurement in homes, encourage the implementation of remediation works, and stimulate commitment as well as increased skills among those involved in the building industry. However, despite this positive feedback, one recurring observation is that it is still very difficult for local stakeholders and individuals to move beyond the measurement stage.

As part of the National Radon Action Plan 2020-2026, and more specifically the "*Information and awareness on radon risk and regulations*" initiative led by the General Directorate for Health (DGS), ASNR's departments have been commissioned to carry out an inventory of local initiatives under way in mainland France in terms of awareness and management of radon risk in private homes.

A meeting to present the results of the study was organised jointly with the DGS at the end of 2024, bringing together all interviewees as well as the radon advisors from the different Regional Health Agencies (ARS). A report was drawn up in 2025 outlining the difficulties, levers for action and prospects for ASNR in supporting regional initiatives. This report will be published in 2026. ASNR's prospective role is to support local awareness-raising initiatives, encourage the sharing of experiences, and help build the skills of those working on the ground, particularly 'radon operators' (consumer and environmental health associations that act as facilitators and coordinators of radon measurement campaigns).

**Support for local stakeholders**

For several years now, at the request of local authorities, ASNR's central departments and its regional divisions have been involved in campaigns to raise awareness of radon risk.

The regional divisions are mobilised to take action in support of private individuals (by taking part in public meetings), managers and owners of public access buildings, and building and real estate professionals (by raising awareness within departments, and as part of environmental health or occupational health prevention training courses).

For example, since 2022, the Regional Health Agency in the Department of Pyrénées-Atlantiques has asked ASNR at national level to support its campaign to distribute radon kits and raise awareness among residents, by providing support to the CPIEs[20]. For the 2025-2026 radon campaign, ASNR has already taken part in two webinars and five public meetings. Together with its regional divisions, it will continue to respond to requests from Regional Health Agencies, local authorities and associations for radon awareness initiatives.

### 4.2.3. Health (population, workers, medical field) and environmental health

#### 4.2.3.1. Medical

In the medical field, while there is considerable experience of dialogue and joint development of actions with health authorities[21], professional organisations and practitioners, experience of dialogue with patients' associations, or directly with patients and their relatives, is more limited. This finding may be explained by the difficulty in identifying patient associations that focus specifically on radiological risk, or more general associations that are interested in the subject.

One experience worth highlighting, however, is the joint creation of a brochure entitled "*Radiography and scanners: Let's ask the right questions*"(in French), signed by multiple partners (institutions, medical

[20] CPIE Permanent Centre for Environmental Initiatives –NGO

[21] Health authorities with which ASNR is in dialogue: General Directorate for Health (DGS), Regional health agencies (ARS), General Directorate for Healthcare Provision (DGOS), French National Authority for Health (HAS), National Agency for Food, Environmental and Occupational Health & Safety (ANSES), French National Agency for Medicines and Health Products Safety (ANSM), etc.

professionals and associations)[22]. This brochure is designed as a tool for dialogue between patients and healthcare professionals on the benefits and risks associated with an imaging examination using ionising radiation. It has been widely distributed to hospital information centres, medical imaging departments and general practitioners, to be handed out in waiting rooms and incorporated into good practice in doctor-patient dialogue.

Furthermore, ASNR has been working with the French League against Cancer (NGO) for many years and responds to requests from associations and CLIs to give presentations at public meetings. In addition, the cooperation agreement with the National Cancer Institute (INCa) includes a component dedicated to discussions on healthcare democracy and dialogue with society. ASNR has also contributed to the drafting of numerous information documents for healthcare professionals and patients in collaboration with several professional organisations[23].

The DOSIPAT (Patient-Centred, Personalised and Simplified 177Lu-PSMA Dosimetry) research project, launched in 2025, includes a component dedicated to dialogue with patient associations. Initial exchanges have already taken place with ANAMACaP[24], and will continue in 2026.

In the coming years, ASNR will play its part in multi-partner dialogue (including with patient associations) on medical radiation protection, in particular with regard to the following:

- Involvement of patient associations, patient partners, carers and relatives in research aimed at reducing the side effects of radiotherapy treatments, with the long-term objective of developing participatory research in this field;
- Identification, together with INCa, of information needs and responses to frequently asked questions concerning the effects of ionising radiation in diagnostic radiology and radiotherapy;
- Strengthening of exchanges with patient associations while also paying particular attention to the needs of healthcare professionals who prescribe examinations and treatments.

Accordingly, in 2026 ASNR will initiate discussions with patient associations on the guidance to be provided to patients and their relatives and carers on discharge from hospital following internal targeted radiotherapy, drawing on the work of ASNR's Advisory Committee for radiation protection.

In addition, in 2026, ASNR will initiate new discussions, in particular by organising a seminar to share knowledge on public exposure to radiation linked to medical diagnostic procedures (based on the ExPRI report[25], for example) and the latest research results (EPI-CT on paediatric scanners[26], for instance).

#### 4.2.3.2. Population and workers

The potential health effects of ionising radiation, particularly at low doses, are difficult to assess, often involve long latency periods, remain subject to significant scientific uncertainty, and continue to be a source of public concern.

In response to requests from CLIs on the topic of health, and particularly on the effects of low doses, seminars and knowledge-sharing meetings have been organised with ANCCLI for around fifteen years.

[22] Partners involved in the brochure (published in 2012): Association for Assistance to Victims of Medical Accidents (AVIAM), French Association of Paramedical Electroradiology Personnel (AFPPE), Swiss Romande Association for Radiation Protection (ARRAD), Centre for Evaluation of Protection in the Nuclear Field (CEPN), Reims University Hospital, French National Council of Physicians, French National Authority for Health (HAS), French Cancer League, Manip Info, French Society of Medical Physicists (SFPM), French Society of Radiology (SFR), French Society for Radiation Oncology (SFRO), and IRSN.

[23] Examples of patient safety bulletins produced in collaboration with professional organisations: No. 2 *The first "dry run" session* (in French), No. 11 *The Patient as a partner in care safety* (in French).

[24] ANAMACaP: National Association of People Suffering from Prostate Cancer

[25] Report on "The exposure of the French population to ionising radiation from diagnostic procedures": *https://research-assessment.asnr.fr/assessment-reports/publications-and-reports-health*

[26] The EPI-CT study is an international epidemiological study designed to assess the risk of long-term effects for children and adolescents exposed to ionising radiation during scanner examinations: *https://research-assessment.asnr.fr/research/epi-ct-study*

In addition, in response to questions raised by several CLIs regarding how health studies around nuclear facilities should be approached, a methodological guide was jointly developed with ANCCLI and *Santé publique France*[27].

More recently, the issue of the health of people living near nuclear sites and of workers was raised again during consultations on the fourth periodic safety reviews of 1,300 MWe reactors. This shows the need to continue to share knowledge and discuss these issues with civil society.

#### Sharing information on public and worker exposure and low doses

Status reports on the exposure of the French population to ionising radiation (Expop report)[28] and on the monitoring of occupational exposure (ExPro report)[29] are regularly published on the ASNR website.

In addition, the INWORKS study, a major investigation into the effects of low doses of ionising radiation on nuclear workers in France, the United Kingdom and the United States, was frequently cited during the public debates on the EPR2 and on "Radioactive Materials and Waste: the plan for 2027–2031", and was the subject of numerous questions (the study was included in the documentary resources made available for those debates). At the CNDP's request, it was also presented during the public debate entitled "Technocentre: creation of a facility for the recycling of very low-level radioactive metals at Fessenheim" in 2024.

Accordingly, ASNR proposes the organisation of knowledge-sharing webinars on these issues: a first webinar on public exposure to ionising radiation at the end of the second quarter of 2026 (based on the next Expop report, due to be published in spring 2026), and a second webinar on the results of the INWORKS study in 2027.

#### Dedicated participatory projects

*ORRCH-IDEeS*: The participatory multi-partner research project "Pluralistic orientation of research on chronic risks – initiatives for the environment and health in the Dunkirk area" (ORRCH-IDEeS), in which ASNR is involved through the health impacts of low-dose radiation component, was established in the Dunkirk region in response to these public concerns (see *paragraph 4.3.2.1*)

*OSARIB*: Since its creation, the Clis of Bure research laboratory has called for a baseline health assessment and epidemiological monitoring programme to be established around Bure in order to measure, over the long term, the potential impact of the future disposal facility on the health of neighbouring populations. A working group bringing together the Clis of Bure research laboratory, the Meuse *Préfecture*, the Grand Est Regional Health Agency (ARS), ASNR and *Santé publique France* therefore recommended the establishment of a health monitoring scheme with the creation of the Regional Observatory for the Health of Residents Living in the Vicinity of the Bure Project (OSaRiB), led by *Santé publique France* and coordinated by the Health regional Observatory Grand Est.[30]. The observatory aims to establish a health profile of the approximately 60,000 residents living within a 25 km radius of the site (extended to 50 km) and compare it with that of a similar reference area. ASNR will keep a close eye on the follow-up to this project and will provide support to those involved as necessary.

### 4.2.4. Crisis preparedness (emergency and post-accident)

In the event of an accident, ASNR is responsible for providing the public with reliable and transparent information about how the situation is evolving, potential risks and recommended protective measures. It ensures the continuity of this information throughout the management of an accident (during both the emergency and post-accident phases, collectively referred to as a crisis), in accordance with legal

[27] "*Public health near nuclear facilities: How to address questions raised*" https://recherche-expertise.asnr.fr/rapport-dexpertise/guide-methodologique-invs-anccli-irsn-sante-publique-proximite-des-installations (in French)

[28] Report on "The exposure of the French population to ionising radiation": https://recherche-expertise.asnr.fr/savoir-comprendre/sante/lexposition-population-francaise-radioactivite (in French)

[29] Report on "Occupational exposure to ionising radiation in France": https://expro.asnr.fr/rapports (in French)

[30] https://ors-ge.org/ (in French)

requirements and the principles of transparency in nuclear safety and radiation protection. In addition to this mission, ASNR is also responsible for verifying the appropriateness of the measures implemented by the operator of the facility to limit the consequences of the accident, advising the Prefect on measures to protect the population, and acting as the competent authority under international conventions.

Given the current international and geopolitical context, it is more vital than ever to develop a widespread culture of radiation protection in the regions, and also to involve civil society in crisis preparedness and post-accident management.

CLIs, elected representatives and local stakeholders living near nuclear facilities are showing a growing interest in raising awareness, preparing for and participating in crisis management. This cooperation between decision-makers, experts and civil society is crucial to maintaining public confidence and ensuring a coordinated and effective response in the event of a crisis.

#### 4.2.4.1. Raising awareness and preparing local stakeholders for a crisis

For more than 15 years, a number of initiatives to raise awareness and prepare local stakeholders for post-accident situations have been carried out with ANCCLI and the CLIs: development of the OPAL mapping tool, which has been available to all CLIs since 2014; and development, in conjunction with the work of CODIRPA, of a dedicated website[31]. In addition, research projects on the crisis have incorporated this societal dimension (Confidence, Territories at European level, Demeterres Mousse in France). In particular, workshops were organised in 2024 with the Blayais CLIN (Nuclear Local Information Committee) and ANCCLI, using a “serious game” developed by ASNR as part of the Demeterres Mousse project.

On the basis of these experiences, ASNR proposes to continue raising awareness and preparing local stakeholders for a crisis. Discussions with ANCCLI and the CLIs will enable local stakeholders’ needs regarding the emergency and post-accident phases to be identified, in order to define the regional actions that could be carried out jointly.

In addition, as part of the “Natech” project run by the Risks PEPR (Priority Research Programme and Equipment), initiatives are being carried out with stakeholders in the Gironde *département,* particularly the Blayais CLIN and the Ambès Peninsula S3PI (Permanent Secretariat for the Prevention of Industrial Pollution)[32] on the management of a crisis involving a combination of natural, technological and nuclear risks.

#### 4.2.4.2. Exchanges with civil society in accident situations

CLIs and associations can play an important role in crisis situations, both as credible sources and relays of information, and as providers of citizen environmental measurements. In the post-accident phase, measurements taken by associations and citizens could usefully supplement institutional measurements, particularly at locations that could not be measured by ASNR.

In this context, ASNR will continue discussions with these stakeholders to identify their needs. These exchanges could take place with ANCCLI, the network of CLI "environment" correspondents, associations (including from the National Measurement Network), and contributors to Openradiation as well as to citizen measurements in general, with a view to a complementary deployment strategy for measurement resources.

[31] "Let's talk about the nuclear post-accident phase in the regions" website *https://www.post-accident-nucleaire.fr* (in French)

[32] French multi-stakeholder body that brings together public authorities, industry, experts, and civil society to promote dialogue, transparency, and information-sharing on industrial environmental risks and pollution prevention

## 4.3. A CONTINUOUS DIALOGUE FROM KNOWLEDGE BUILDING TO DECISION-MAKING AND MONITORING

### 4.3.1. Dialogue on research

#### 4.3.1.1. Listening to societal expectations to inform the development of research strategies

ASNR proposes to organise a dialogue with stakeholders on research orientations. This dialogue could be added on to one-day events showcasing ASNR's own research. One of the aims of this dialogue will be to gather feedback from stakeholders on their expectations in terms of research, for example regarding areas of research or the expected impact of such research.

It is proposed that an annual seminar be organised under the aegis of the Scientific Council, with the support of the department dedicated to dialogue with society, to gather the expectations of stakeholders in terms of science and research policy. This feedback will be recorded, and will feed into the research strategy, its implementation and evaluation. It will be presented at regular updates to the college.

#### 4.3.1.2. Involvement of civil society in studies and research

For several years, civil society has been involved in studies and research projects in which ASNR participates: on crisis management and post-accident situations (the European projects Prepare, Confidence and Territories, and the French project Demeterres Mousse); on environmental monitoring (ERS, see *paragraph 4.2.2.1*) on environmental risk assessment (MULTIPLEX); and, more recently, in the medical field (the ongoing research project DOSIPAT, see *paragraph 4.2.3.1*).

In the coming years, ASNR will continue to involve civil society in the research projects that it conducts or in which it participates.

#### 4.3.1.3. Sharing of data and research results

ASNR has an open science policy. In particular, it aims to publish all its scientific publications on its HAL portal[33]. ASNR is also committed to the publication of research databases, subject to respect for the rights of potential project partners.

ASNR is also involved in a number of initiatives to publicise its research, including partnerships with journals (in particular *Pour la Science*[34]) and national radio stations. Additional channels will be further developed, including "popularised" dissemination of research results in support of selected ASNR publications (scientific publications, along with corresponding articles for the general public and social media posts), as well as project presentation videos.

ASNR proposes to organise one or two annual information and knowledge-sharing events devoted to its research activities, covering areas of research focus, flagship projects, and key results along with their societal impact and their contribution to the expert assessment and decision-making process. These one-day events would be open to stakeholders and the press.

Finally, each year ASNR presents the content and main results of its research programmes to HCTISN.

[33] HAL (an acronym for "Hyper Articles en Ligne") is the national multidisciplinary archive chosen by the French scientific and university community for open-access sharing of its research results *(https://hal.science/)*. The ASNR HAL institutional portal *https://asnr.hal.science/* enables ASNR's scientific output (scientific articles, conference papers, theses and institutional reports) to be saved to the archive.

[34] View articles produced by ASNR in partnership with *Pour la Science* *https://www.pourlascience.fr/auteur/asnr* (since 2025, in French) and *https://www.pourlascience.fr/auteur/irsn* (from 2020 to 2024, in French)

## 4.3.2. Participatory research and studies

Initially implemented in the field of expert assessment, engagement with society has been extended to ASNR's research projects, particularly on the chronic risks to health and ecosystems from the many forms of environmental pollution.

### 4.3.2.1. ORRCH-IDEeS

In response to growing societal concerns, ASNR has decided to develop participatory environmental health research initiatives aimed at gaining a better understanding of the combined effects of multiple exposures, and involving the public in controlling its exposure.

In 2018, ASNR initiated, together with French public research institutions Ineris and INRAE, a working group on the pluralistic orientation (involving academics, institutions and associations) of research on chronic risks (GT ORRCH) within the Alliance Sciences-Sociétés (ALLISS[35]) platform. This group has laid the foundations for future participatory research into multiple environmental exposures.

These reflections led to the creation of the ORRCH-IDEeS participatory research project, which was selected under ANR's SAPS[36] call for proposals. The project focuses on multiple exposures in an area characterised by a dense industrial environment and the presence of already engaged local stakeholders: the Dunkirk area, under the regional supervision of the University of the Littoral Côte d'Opale and the Local Health Observatory, with the active participation of ASNR, INERIS and the Institut Ecocitoyen (Ecocitizen Institute, NGO).

The aim of the project was to set up a citizens' panel, to strengthen their knowledge and to jointly formulate three major research questions:

- How can multiple exposures be better characterized, including territorial inequalities?
- What are their impacts on human health?
- How are pollution-related studies and expert assessments produced and perceived at the local level?

The next stage of the project is to secure funding opportunities that will enable the continuation of this collective research effort, notably through the joint design and production, with both engaged and non-engaged citizens, of protocols for data collection, analysis and interpretation, as well as for disseminating results relating to the issues identified.

### 4.3.2.2. OpenRadiation and related projects

With almost one and a half million measurements of ambient radioactivity taken, the OpenRadiation *https://www.openradiation.org/* platform for citizen radioactivity measurement is continuing to develop, and is attracting interest from the world of research.

Since 2025, it has been used in an epidemiological study called CORALE (*COmposante RadioLogique de l'Exposome* - Radiological Exposome Component) conducted by Inserm and ASNR.

The year 2026 will be marked by the launch of a European project aimed at using this citizen-generated database to support expert assessment activities. The CIThARA project seeks to develop artificial intelligence tools to improve the speed and accuracy of analysis and modelling capabilities in the event of a radiological or nuclear emergency. In this context, citizen measurements represent a valuable source of data that complements expert measurement data.

In addition, the Cosmic On Air project is a citizen science initiative aimed at collecting dose rate measurements taken on board aircraft by the public. The *https://cosmic-on-air.org/* platform makes consolidated data from measurements taken by the public on flights available to the scientific community as open data, for the study of cosmic radiation and solar flares.

[35] ALLISS is French platform dedicated to fostering collaboration between the research community and civil society.

[36] "Science with and for Society" (SAPS) call for proposals from the French National Research Agency (ANR)

### 4.3.3. Dialogue between expert assessment and decision-making

ASNR has identified in *Chapter 4.1* the main subjects of interest to society relating to decision-making processes on which it plans to engage in dialogue during the various phases of the investigation and decision-making process:

- consultation on draft referrals to ASNR for expert assessment and to the Advisory Committees of Experts (GPE),
- dialogue during investigation as a whole,
- technical dialogue on expert assessment (see focus below),
- participation in GPE meetings (in an observation capacity, and limited to a few people),
- support for consultations on draft acts (from the college or delegates) or public inquiries,
- accountability and feedback on how contributions to the various phases have been taken into account.

In particular, ASNR will: regularly publish a provisional list of planned consultations on facilities of interest to CLIs; improve the visibility of ongoing consultations; and explain the influence of public participation on its work and decisions.

In addition, other local issues of more specific interest to CLIs or local associations may be the subject of dialogue at local level (mainly handled by the regional divisions). For example:

- governance of discharges and water intakes: for such investigations, ASNR proposes to systematically inform CLIs prior to consultations on draft resolutions, in order to analyse with them their needs for support and assistance, and enable them to prepare their contributions in advance;
- consultations on draft individual resolutions: the divisions will endeavour to inform the relevant CLIs of forthcoming consultations relating to their sites so that they can prepare accordingly; the CLIs may then ask the licensee and the division to explain the dossier concerned and the issues involved;
- significant events: ASNR will pay close attention to CLI expectations and needs regarding understanding of these events and the operational experience feedback that can be drawn from them, whether at local, national or even international level;
- transport-related issues.

**SPOTLIGHT ON TECHNICAL DIALOGUE RELATING TO EXPERT ASSESSMENT**

Technical dialogue relating to expert assessment serves several purposes:

- preparing stakeholders to participate in the various stages of decision-making;
- identifying the main issues and concerns for each category of stakeholder (public authorities, licensees, elected representatives, NGOs, trade unions, etc.);
- enabling participants to understand the technical aspects of the case, form their own views and participate actively in discussions.

This dialogue can be an opportunity to highlight uncertainties and controversies, and the pluralism of viewpoints. It can also facilitate the emergence of non-institutional forms of expertise - lay, local, action-based, or experience-based knowledge—and acknowledges their contribution.

Technical dialogue is a participatory process that takes place during the expert assessment phase of the investigation of a dossier, and sometimes earlier if appropriate. It is therefore, by its very nature, at the interface between the expert assessment process and the decision-making process.

### 4.3.4. Participation in inspections

The ASNR monitors civil nuclear activities in terms of technical, organisational and human aspects. Its primary aim is to ensure that all persons responsible for nuclear activities fulfil their obligations in terms of nuclear safety and radiation protection. Regulatory oversight is implemented through decisions, requirements, on-site inspections and, where appropriate, enforcement actions.

As part of the CLIs' mission to monitor facilties, ASNR, through its regional divisions, already invites certain CLIs to attend inspections as observers. ASNR is currrently considering extending this practice to all CLIs, taking into account various constraints (a limit on the number per year to ensure more effective support, agreement of the operator, radiation protection aspects) and depending on the topics of interest to CLIs. This will enable CLIs to gain a better understanding of ASNR's oversight mission and to contribute to it by providing an outside perspective on inspections, which will continue to be led by ASNR inspectors.

A discussion will take place between the regional division and the CLI to determine the inspections for which an observation will be proposed to the CLI members. Dialogue will be established with CLI observers, both before the inspection, to support their preparation via briefings on the objectives, constraints and issues associated with the inspection, and afterwards, through debriefing sessions to facilitate understanding. Following the inspection, the observing CLI members will report back at a CLI meeting on what they have observed, while inspectors may clarify particular points and respond to comments. This will contribute to a better understanding of ASNR's oversight mission and of inspection follow-up letters.

In addition, ASNR regional divisions will continue to forward inspection follow-up letters (which are published on the ASNR website) to the heads of the CLIs concerned, encouraging them to forward them to all CLI members. At the request of the CLI, they may present the highlights of inspections at CLI meetings and produce a summary of certain key inspections (which may be published on the ASNR website).

Lastly, the divisions remain available to present, on an annual basis, ASNR's assessment as well as the highlights of site monitoring at CLI meetings (in particular items relating to the annual report on the state of nuclear safety and radiation protection at the site), as well as for specific requests from CLIs.

To explain the process, ASNR will organise a webinar with the ANCCLI and CLIs in the fourth quarter of 2026. This will enable the inspection process to be explained, and facilitate understanding of the structure of follow-up letters and the monitoring of licensees' responses.

### 4.3.5. Discussions on topical issues

#### 4.3.5.1. REVES safety expert meetings

In addition to the dialogue mechanisms for the various expert assessment and investigation phases, it has become necessary to engage in regular dialogue on current nuclear safety issues that may raise questions or even give rise to controversy.

This is why ASNR is planning to continue with the "*Rendez-vous expert de la sûreté*" (REVES) safety expert meetings, while broadening their scope to cover more extensively ASNR's activities relating to expert assessment and oversight of the safety of facilities (excluding waste) and transport activities.

This involves regularly bringing together experts from civil society and representatives of ASNR for a direct and spontaneous technical discussion on current safety issues, in terms of expert assessment, regulation and monitoring.

Members are limited in number, and include non-institutional experts, experts from associations, representatives of CLIs and ANCCLI, as well as ASNR representatives from the fields of expert assessment, regulation, monitoring, and dialogue with society.

A steering committee, made up of representatives of civil society and ASNR, is responsible for selecting the topics to be discussed at the meetings, developing and updating the framework for discussions and identifying the need for further participation.

#### 4.3.5.2. *"Jeudi'scute"* Thursday Meetup

In response to the desire for greater proximity expressed by CLI members, ANCCLI and ASNR have set up an open meeting for CLIs to directly express their projects, concerns and requests, and to share information. In practical terms, the "*Jeudis'cute à midi*" bi-monthly one-hour meetings by videoconference on Thursday lunchtimes provide a forum for listening and an access point for CLIs, with the aim of creating links between CLIs, ANCCLI and ASNR.

### 4.3.6. Pluralistic construction of public policies

#### 1. The National Action Plan for Radon Risk Management (PAR)

The fourth plan (covering the period 2020-2026) is a continuation of the previous plan, but emphasises the need to continue efforts, particularly to raise public awareness. It was in this context that ASNR was commissioned to carry out an inventory of the local initiatives under way in mainland France (see *paragraph 4.2.2.2*) in order to highlight the difficulties and levers for action in raising awareness and managing the radon risk in private homes at regional level. The report on this inventory, which is currently in the process of being published on the ASNR website, will be able to be used in the construction of the new plan.

#### 2. The Steering Committee for Managing the Nuclear Post-Accident Phase (CODIRPA)

Since 2005, CODIRPA's mission has been to conduct research on post-accident management within a multi-stakeholder framework. It is set up and chaired by the Authority at the request of the Prime Minister, who defines its mandate. This committee brings together government departments, ASNR, expert institutes, nuclear facility licensees, CLIs, ANCCLI and associations. ASNR chairs the committee and provides the technical secretariat. Its remit is to make recommendations to the Government on the strategy for managing the consequences of a nuclear accident. These recommendations can be incorporated into national crisis planning. During various mandates, the involvement of local stakeholders in post-accident management has been the subject of several working groups, the development of guides and a website, and several local trials. The next mandate, proposed to the Prime Minister at the end of January 2026, aims to make progress on the development of a culture of radiation protection and more effective involvement of local stakeholders in post-accident reflections.

#### 3. The National Radioactive Material and Waste Management Plan (PNGMDR)

The PNGMDR Governance Commission is responsible for advising the project owner on the preparation and content of the plan (in the form of a steering committee) and for monitoring its implementation (in the form of the PNGMDR working group). This body has a pluralistic makeup. The PNGMDR is a planning document for the sustainable management of radioactive materials and waste. It is drawn up and updated by the Government. Four editions have been issued to date. ASNR participates in the work of this body and the associated working groups.

#### 4. Steering Committee for Human, Social and Organisational Factors (COFSOH)

In 2012, ASN set up the Steering Committee for Human, Social and Organisational Factors (COFSOH) in order to make progress in reflections and activities relating to the contribution of individuals and organisations to the safety of nuclear facilities and the protection of workers. COFSOH is a multidisciplinary, pluralistic body intended as a forum for discussion and reflection on the complex topic of human, social and organisational factors. In addition to ASNR, it includes institutional representatives, environmental protection associations, individuals chosen for their scientific, technical, economic or social expertise, nuclear activity managers (in particular BNI licensees), professional federations in the nuclear sector and representative employee trade unions. Since 2024, COFSOH has served as a forum for promoting and sharing the work carried out in the field of human and organisational factors, structuring its discussions around annual thematic cycles. The first cycle was devoted to complexity. The second is devoted to mechanisms for developing and managing skills in the light of the nuclear industry's considerable needs. The third cycle in 2026 will return to these two themes.

### 4.3.7. Scientific mediation and dissemination of radiation protection culture

As part of its remit under the Act of 21 May 2024, ASNR is responsible for developing a radiation protection culture among the general public.

To achieve this objective, it builds close relationships with local communities through its regional divisions, the ANCCLI and the CLI network, elected representatives and all relevant local stakeholders.

It raises public awareness of the effects of ionising radiation, the different exposure situations and means of protection, taking advantage of initiatives to develop a culture of risk as well as national and regional resilience policies. This includes touring its “Radioactivity” exhibition, issuing prevention messages on European Radon Day, hosting high-school students on work experience, and participating in educational initiatives such as “*Sciences en classe”* (“Science in class”) and “*Scientifique toi aussi”* (“You can be a scientist too”).

Finally, it endeavours to make the information it produces, including that resulting from its research activities, accessible by adapting it to the target audience.

In addition to these information initiatives, ASNR is also developing dialogue with society to help strengthen radiation protection culture. It forms partnerships with associations involved in risk prevention and scientific outreach, such as IFFO RME[37] and Planète Sciences[38]. It provides technical and scientific support to the National commission for public debate (CNDP) in organising its debates. It runs campaigns to raise awareness of the radon risk in individual homes, organises workshops and annual meetings for secondary school pupils on radiation protection, encourages citizens to measure radioactivity through the OpenRadiation platform, and works on post-accident issues and nuclear waste management, using innovative dialogue tools such as “serious games”.

[37] Iffo-RME: French Institute of Instructors in Major Risks and Environmental Protection https://www.iffo-rme.fr/ (in French)

[38] Planète Sciences is a French NGO that promotes science and technology education through practical projects and outreach activities, especially for young people

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