



Autorité environnementale

The background of the entire page is a photograph of a river. The water is a deep blue, and the sky is a lighter blue. The riverbanks are lined with trees that have bright pink blossoms, likely cherry blossoms. The blossoms are in full bloom, and their reflection is visible in the water. The overall scene is peaceful and scenic.

## 2016 ANNUAL REPORT



# CONTENTS

02



EDITORIAL

This document contains QR codes, as shown in the diagram below, allowing smartphone users to view videos or directly access web pages.

## HOW TO READ QR CODES:

1. Download the free app on your smartphone.
2. Open the app.
3. Point the camera at the QR code.
4. Access the content.



QR CODE

04



THE Ae IN 2016

06

EXPERTISE AND MISSIONS

10

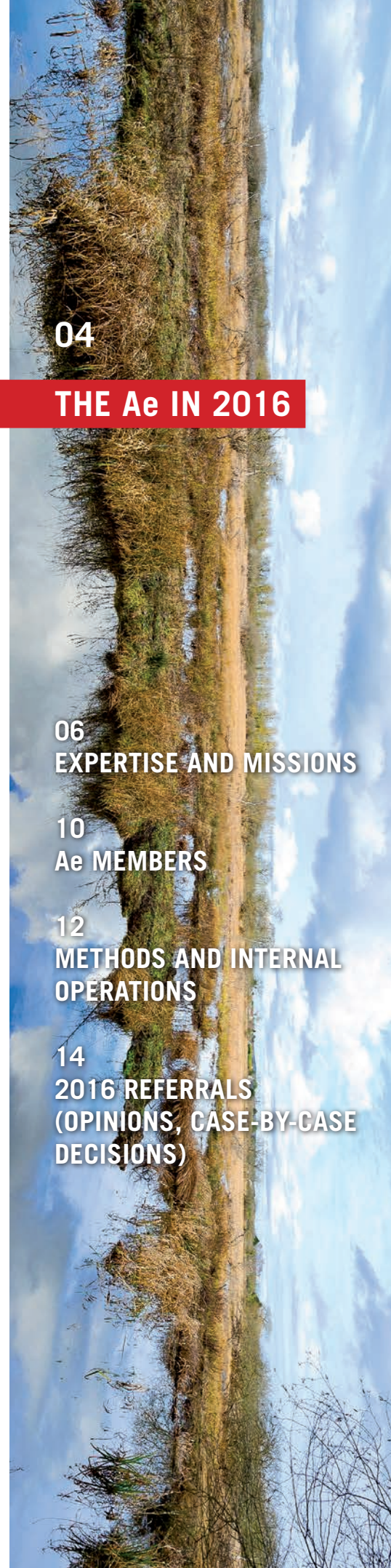
Ae MEMBERS

12

METHODS AND INTERNAL OPERATIONS

14

2016 REFERRALS  
(OPINIONS, CASE-BY-CASE DECISIONS)







20

● **2016  
HIGHLIGHTS**

22  
THE «PROJECTS» AT THE  
HEART OF ENVIRONMENTAL  
ASSESSMENTS

27  
AT THE HEART OF  
ENVIRONMENTAL IMPACT  
ASSESSMENTS

35  
NATIONAL PLANS AND  
PROGRAMMES

42  
NEW TYPES OF PLANS AND  
PROGRAMMES SUBMITTED  
TO THE Ae IN 2016

44  
FOLLOW-UP OF Ae OPINIONS

45  
Ae ADMINISTRATIVE  
COMMUNICATIONS



46

● **APPENDICES**

48  
OPINIONS AND  
CASE-BY-CASE DECISIONS  
TAKEN BY THE Ae IN 2016

52  
ABBREVIATIONS AND  
ACRONYMS



# EDITORIAL



Gour de Tazenat



## The Ae, an actor in environmental assessment reforms, for fully informed public decisions on their environmental effects

2015 and 2016 were particularly rich in terms of environmental law development. After the enactment of the Energy Transition for Green Growth Act in 2015, 2016 was the year for the Reclaiming Biodiversity, Nature and Landscapes Act, as well as major developments in environmental assessments and environmental impact assessments. 2016 also saw the cancellation by the Council of State of the Decree of 3 May 2012 on the environmental assessment of plans and programmes, due to the lack of independence of the environmental authority designated by this legislation vis-à-vis the authority responsible for drawing up or approving such plans and programmes.

Once again and for the third year in a row, the Ae's business has been stable: it deliberated on 110 approximately opinions. 2016 was characterised by very irregular activity (few referrals at the beginning of the year, followed by intense activity in the latter half), and the reform of the environmental assessment of plans and programmes that led to the Ae deliberating on plans of a new nature. The Ae produced several opinions on the multi-year energy programmes provided for by law and made several decisions on whether or not to submit risk prevention plans for environmental assessment.

Environmental Authority Regional Missions (MRAe) have been set up in each region on a collegiate model: plans and programmes, which were previously subject to opinions from regional or departmental prefects, are now entrusted to the MRAes or the Ae.

The principles of the Ae and MRAes are the same: to provide valuable, independent expertise and facilitate public participation in order to improve public decision-making. This means that approximately 500 opinions and 1200 decisions have been handed down in France by all these structures, respecting the same philosophy and similar methods.

The 2016 report showed contrasting results: as in previous years, the Ae noted the visible improvement in a large majority of impact studies, with their quality being incommensurate with that often observed before the establishment of environmental authorities, apart from a few exceptions. The Ae nonetheless noticed several recurring inadequacies on certain topics and methods, with no clear improvement. This annual report elaborates on these issues in particular, where improvement is now a priority.

Finally, the Ae is preparing to implement the new legislation, published in 2016 and coming into force in 2017, concerning projects' environmental impact assessments: a project-based approach, probably more decisions after a «case-by-case» review, perhaps fewer opinions on some smaller projects, but also a more iterative process, based on regularly updating environmental impact assessments.

However, the distribution of expertise between environmental authorities on the environmental impact assessments of projects remained unchanged on the whole. The Ae believes that the move towards authorities that are truly independent of the decision-making authorities is now inevitable, particularly in light of the reasons that led to the 2016 reforms.

The environmental authority model for plans and programmes is in place. The Ae has also led the way since 2009 on many high-stake projects. A model that presents at least the same guarantees of independence for all projects has yet to be designed.

*Members of the Environmental Authority  
of the General Council for the Environment and Sustainable Development*









## THE Ae IN 2016





THE Ae IN 2016

## EXPERTISE AND MISSIONS

**Some projects, plans and programmes are subject to environmental assessment based on their specific characteristics and their potential impacts on the environment.**

The petitioners themselves are responsible for these assessments. For the public to be properly informed during its consultation and to participate in the decision-making process, an «environmental authority» is expected to issue an opinion to the public on the quality of assessments and the proper consideration of the environment by the assessed operations.

**The Ae exercises its powers as an environmental authority on project environmental assessments in the following two cases:**

- when the Minister for the Environment is the authority responsible for making the decision to authorise the project or propose it to the government, under his/her departmental competencies;
- when the project owner or petitioner is the State represented by a department under the authority of that Minister or a public institution under its authority.

**The Ae's range of jurisdiction also extends to<sup>1</sup>:**

- all projects in a functionally linked operational programme, where one of the projects in this programme is the result of a decision taken by the Minister for the Environment or proposed by the Government;
- all projects that require several administrative decisions, when one of them falls within the competence of the same Minister or is proposed to the Government by the Minister.

In other cases, this opinion is given by the Minister himself, based on his department, or by the prefects, depending on the case<sup>2</sup>.

The Ae also has the power as environmental authority regarding projects that do not necessarily require an environmental assessment but are subject to a «case-by-case» review<sup>3</sup>. The review results in a decision on whether or not to submit the project for an environmental impact assessment.





Bief d'Etoz and rocks

Until 2016, the Ae was the competent authority on a fairly restricted list of plans/programmes initially defined by Decree No. 2012-616 of 2 May 2012. Drawing on the consequences of case law from both the Court of Justice of the European Union and the Council of State<sup>4</sup> on the need to set up environmental authorities with real autonomy and provided with administrative and financial means of their own, Decree No. 2016-519 of 28 April 2016 amended the list of plans/programmes subject to environmental assessment and Decree No. 2016-1110 of 11 August 2016 allows the Minister for the Environment to submit an entire category of plans/programmes that are not on this new list to a systematic environmental assessment or a «case-by-case» review.

The decree of 28 April 2016 also created the Environmental Authority Regional Missions (MRAe) of the General Council for the Environment and Sustainable Development (CGEDD). In particular, it transferred the environmental authority expertise to the training of the CGEDD (Ae) environmental authority or to the MRAEs, depending on the nature of the plans/programmes, whereas it was previously entrusted to regional prefects or departmental prefects. These regional missions, of which there are 19 nationally, now have the power to issue environmental authority opinions on certain local or regional plans or programmes and on most urban planning documents (Territorial Coherence Plans (SCOT), land use plans (PLU) and municipal maps) instead of the prefects. On a more marginal scale, they

are also the competent authority on projects that are referred to the National Commission for Public Debate and are not subject to an opinion from the Minister for the Environment or the Ae. To this end, they have technical support from officials in the Regional Directorates for Environment, Planning and Housing (DREAL) placed under the functional authority of the presidents of MRAe to carry out this environmental authority mission.

At the same time, the Ae has seen an increase in the number of plans/programmes on which it has the authority to issue an opinion<sup>5</sup>, on the basis that (as with the principles established for the projects) the Ae is the competent authority, in particular when a plan/programme is prepared by the Minister for the Environment's department or is approved by him (or by another Minister) and the Ae supervises the projects' execution. The Ae is also responsible for all national plans or when a plan/programme goes beyond the territorial limits of a region<sup>6</sup>.

This extension of the Ae's work on plans/programmes concerns both the documents that must give rise to an opinion and certain documents that are subject to decisions on a «case-by-case» basis, such as natural risk prevention plans (PPRNs) or technological risk prevention plans (PPRTs).

1 \ In accordance with Article R. 122-6 II 3° and 4° of the Environmental Code. It should be noted that the concept of work programme will disappear in 2017, with the entry into force of the Ordinance of 3 August 2016 and the Decree of 11 August 2016.

2 \ See Article R. 122-6 of the Environmental Code.

3 \ Presented and defined in Articles L. 122-1, R. 122-2 and R. 122-3 of the Environmental Code.

4 \ Judgement CJEU C-474/10 "Seaport" of 20 October 2011 and EC decision – France Nature Environment (FNE) Association – 3 November 2016 – 360212.

5 \ The Ae is now responsible for 27 plans/programmes out of a total of 42, compared to 14 plans/programmes out of a total of 43 before the entry into force of Decrees No. 2016-519 of 28 April 2016 and No. 2016-1110 of 11 August 2016.

6 \ See Article R. 122-17 of the Environmental Code.





Helicopter flight in the Var

The decree of 28 April 2016 cited above also provided the Ae with the option to exercise the jurisdiction normally vested in a MRAe, both for plans/programmes and urban planning documents, on its own initiative and by a justified decision with regard to the case's complexity and environmental issues (known as the «evocation decision»).

Finally, the Decree of 2 October 2015 on the General Council for the Environment and Sustainable Development, last amended by the Decree of 28 April 2016, now provides that the Ae president will ensure the correct operation of the environmental authority's function exercised by the Ae network and the MRAEs.

To bring the practices and approaches of environmental authorities closer together, the MRAe Chairs shall inform the Chair of the Ae, upon request, of the cases that present significant complexity or environmental issues in order to enable the Ae to exercise its power of evocation, if it considers it appropriate. They shall also inform the Ae of the agenda of each of their MRAe meetings. Symmetrically, when a case specifically concerns several regions, the Ae Chair invites the Chairs of the relevant MRAEs to the session at which this deliberation is included. The latter may be represented by one of the members of the MRAEs they chair. The MRAe experts and representatives are not voting members at the Ae meeting.

## A European Exercise Framework

The opinions and decisions of an «environmental authority» are established under two European Union Directives<sup>7</sup> transposed into French law<sup>8</sup>. This was substantially changed in 2016 by the provisions of Order No. 2016-1058 of 3 August 2016, codified in Articles L.122-1 to L.122-14 of the Environmental Code and L.104-1 to L.104-8 of the Urban Planning Code, and by the provisions of Decrees No. 2016-519 of 28 April 2016 and No. 2016-1110 of 11 August 2016, codified in Articles R.122-1 to R.122-28 of the Environmental Code and R.104-1 to R.104-33 of the Urban Planning Code. Their entry into force shall range from 12 May 2016 to 17 May 2017.

Issued at a sufficiently early stage in the decision-making process, the opinions are intended to improve the quality of the environmental assessment process, regardless of its purpose and environmental considerations. They relate to the quality of the impact assessment report (or environmental impact assessment) that reflects this approach and analyses how the environment has been taken into account by the project or plan/programme.

### The opinions are aimed at:

- the petitioner or the project owner, usually assisted by one or several consultants, who conducted the process and prepared the documents submitted to the environmental authority;
- the public, in accordance with the principle of participation and the right of access to environmental information, in order to clarify the quality of the documents submitted and to enable the public to take part in the debates;
- the authority responsible for approving the project or plan/programme at the end of the whole process.

The aim is to improve the design of projects or plans/programmes in an iterative process, and to involve the public in the decision-making process of issues that relate to them.



Fox cub seen at the side of a road

<sup>7</sup> \ See Directive 85/337/EEC known as «Projects» (codified by Directive 2011/92/EU of 13 December 2011) and Directive 2001/42/EC known as «Plans and programmes».

<sup>8</sup> \ Directive 2011/92/EU was amended in 2014 by Directive 2014/52/EU of 16 April 2014 for which the transposition deadline for the Member States is 16 May 2017.





Landscape along the Loir

## An independent environmental authority

The function of the Ae is that of a guarantor who must attest to the proper consideration of environmental issues by the contracting relevant authorities/project owners and decision-making authorities. The credibility of the guarantor therefore requires the absence of any tie to the latter. This led to the establishment of a dedicated body backed by the General Council for the Environment and Sustainable Development (CGEDD), with specific operating rules preserving its autonomy of judgement and expression, in cases where the decision to be taken falls within one of the ministerial responsibilities of the Minister for the Environment.

The Ae strives to remove any suspicion of bias, even manipulation, in its opinions. The collegiality of deliberations and the public nature of opinions and decisions at the end of the meetings are in all likelihood the best guarantees in this field, as well as the public criticism to which they are subject.

## The Ae also implements the provisions set out in its internal rules:

- individual declarations of interest filed by all members;
- publication of the names of the voting members on each opinion;
- non-participation of members liable to conflicts of interest in certain proceedings.

In 2016, this last provision applied to 25 opinions, concerning eight different members of the Ae in total.

**ABOUT THE Ae:**  
Composition, operation, referrals,  
opinions and decisions rendered:  
the Ae's website:  
[www.cgedd.developpement-durable.gouv.fr](http://www.cgedd.developpement-durable.gouv.fr)  
Ae Section



# WEB



## Ae MEMBERS

### CGEDD permanent members



**Philippe  
LEDENVIC**



**Fabienne  
ALLAG-DHUISME**

*(since 1 February 2016),  
also president of the Pays-de-Loire  
and Corsica MRaE*



**Christian  
BARTHOD**

*also president of the Île-de-France  
MRaE*



**François  
DUVAL**

*(as of 19 December 2016)*



**Thierry  
GALIBERT**

*also member of the Nouvelle  
Aquitaine MRaE*



**Marie-Odile  
GUTH**

*(until 1 February 2016)*



**Claire  
HUBERT**

*(until 1 October 2016)*



**Étienne  
LEFEBVRE**

*(until 1 October 2016),  
also president of the  
Centre – Val de Loire MRaE*



**François-Régis  
ORIZET**



**Thérèse  
PERRIN**

*also member of the Pays-de-Loire  
MRaE*



**Pierre-Alain  
ROCHE**

*(until 23 December 2016)*



**Mauricette  
STEINFELDER**

*also president of the French Guiana,  
Guadeloupe and Saint-Pierre-et-  
Miquelon MRaE*



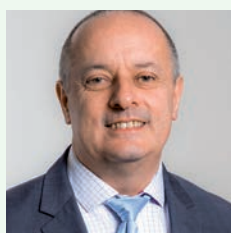
**Éric  
VINDIMIAN**

*Also member of the Provence –  
Alpes – Côte d'Azur MRaE*

### The permanent team



**Charles  
BOURGEOIS**



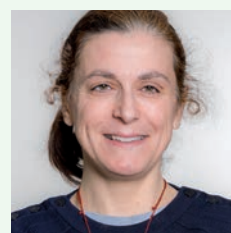
**Thierry  
CARRIOL**



**Armelle  
DIF**



**Nadia  
FRÉRY**



**Caroll  
GARDET**

*(as of 1 September 2016)*



## Members appointed as qualified persons



**Barbara BOUR-DESPREZ**

General engineer of bridges, water and forests. Member of the General Council of Food, Agriculture and Rural Areas.



**Marc CLÉMENT**

Public Reporter at the Lyon Administrative Court of Appeal, founding member and member of the executive committee of the European Law Institute, president of the «Natural Resources and Energy» section of the Society of Comparative Legislation.



**Sophie FONQUERNIE**

Farmer in the Doubs. Vice-president of the Burgundy – Franche-Comté region in charge of agriculture, viticulture and agri-food. Associative commitment to French Farmers and International Development (AFDI). Previous responsibilities in agricultural trade unionism, the commune, intermunicipality and the Chamber of Agriculture.



**François LETOURNEUX**

Vice-chairman of the French committee of the International Union for Conservation of Nature (IUCN), former Director of the Coastal and Lake Shore Conservatory, former Director of Nature and Landscapes within the Ministry for the Environment.



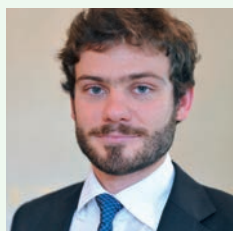
**Serge MULLER**

Professor of the National Museum of Natural History, Vice-chairman of the Standing Committee and Chairman of the Flora Commission of the National Council for Nature Conservation (CNPV), Member of the Scientific Council of Natural Heritage and Biodiversity (CSPNB), Chairman of the Species Protection Committee of the French committee of the IUCN.



**Gabriel ULLMANN**

Expert near the Grenoble Court of Appeal specialized in environment, investigations commissioner, doctor-engineer, MBA from HEC.



**Maxime GÉRARDIN**



**Sarah TESSÉ**

(until 1 September 2016)



**Vincent THIERRY**



**François VAUGLIN**



## METHODS AND INTERNAL OPERATIONS

The working methods are described below for each type of production: opinions, decisions to submit or not submit cases for environmental impact assessments on a «case-by-case» basis, preliminary framing.

The Ae always delivers its opinions within a maximum of three months after the referral, by a collegiate deliberation, based on projects prepared by its members (or by non-voting members of the Ae permanent team). The implementation of the Environmental Authority Regional Missions (MRAe) provided an opportunity for MRAe members to be the rapporteurs of draft Ae opinions, with the aim of developing a common culture.

The rapporteurs, usually two per project<sup>9</sup>, carry out their investigations independently<sup>10</sup>, based on an analysis of the cases provided by the petitioners, organising site visits and those interviews they consider useful. If necessary, they request contributions from experts to provide the Ae with a basic understanding of complex issues. They prepare draft opinions according to a common framework, submit them for peer review, and then deliberate them at the collegiate level as detailed below. Opinions are made public as soon as they are deliberated. Opinions on preliminary framing are adopted according to the same principles, within a time frame which, although not fixed in a regulatory perspective, rarely exceeds two months.

The «case-by-case» review of projects and the final decision-making process follow the same principle: a review panel, composed of two Ae members appointed quarterly, presents the draft decisions for signature to its chair, who has been delegated by the Ae. Decisions are rendered within the statutory time limit of 35 days after referral and made public immediately. For

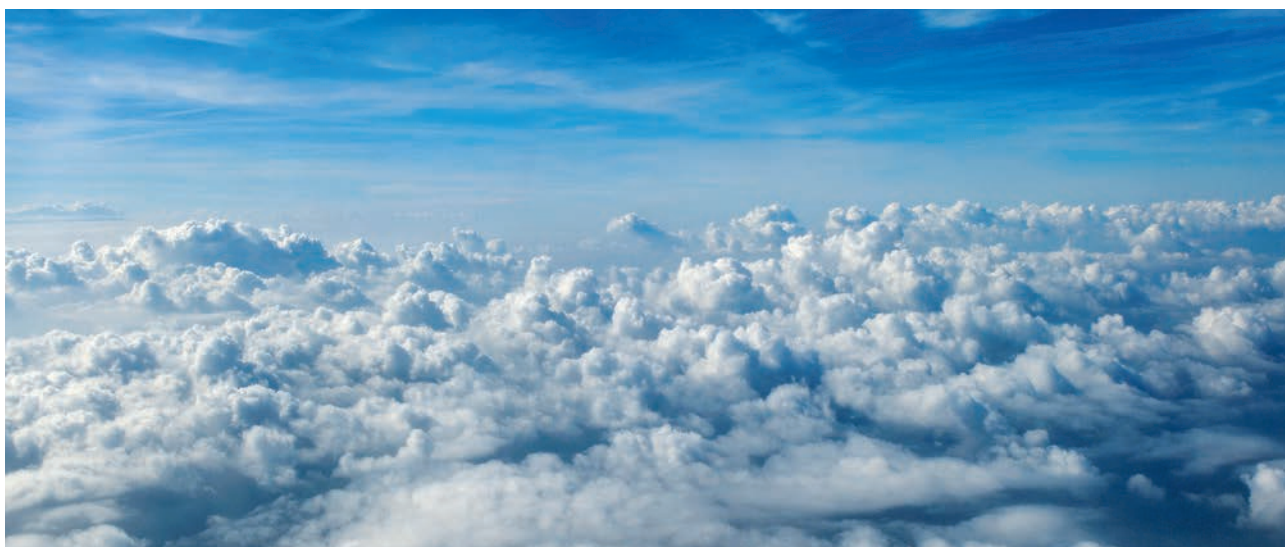
«case-by-case» decisions on programme plans, the Ae has a two-month deadline. If it is not possible to delegate these to the Ae President, decisions are taken by the Ae's collegiate deliberation and signed by the President on behalf of the Ae.

With regard to preliminary framing, according to Article R.122-4 of the Environmental Code, a project owner may ask the authority responsible for approving the project – which then turns to the French Environmental Authority – to «specify the information to be included in the environmental impact assessment». The Ae also asks this authority to clarify any specific questions and the difficulties in interpreting the provisions of the Environmental Code which justified the request for a preliminary framing. These opinions are deliberated and published, like all other Ae opinions.

### The opinions

The draft opinions prepared by the rapporteurs are distributed to all members one week before the Ae's bi-monthly plenary meetings. They are the subject of remarks and exchanges written by members prior to the meeting, followed by debates in plenary on all the substantive issues raised during this preliminary examination. Whether substantive or procedural, each comment is explicitly taken into account. The definitive drafting, which has been systematically based on consensus for several years, is thus decided in session.

The contribution of the collegial discussion is decisive because it makes it possible to cross-reference expert assessments and complementary readings on each of





the opinions and progressively establish stable elements of response to the questions of principle mentioned later in this report.

The opinions are posted on the Ae's website<sup>11</sup> on the same day as the opinion drafting session and are formally circulated to the petitioner and the authority responsible for examining the case by the following day.

The Ae does not provide an opinion on the appropriateness of a project: it therefore never concludes its opinions with a synthetic statement of a «favourable» or «unfavourable» rating.

Article L. 122-1 IV of the Environmental Code, which is still in force as of the end of 2016<sup>12</sup>, states that «the decision of the competent authority which authorises the petitioner or the project owner shall take into consideration (...) the opinion of the competent administrative authority on the environment ...». The Ae recalls these elements in a box in the preamble of each of its opinions.

For plans and programmes, the texts anticipate that the Ae will issue an opinion on the environmental impacts and the draft plan or programme.

## Decisions on whether or not to submit an environmental impact assessment or an environmental assessment on a «case-by-case» basis

A draft decision is prepared by a rapporteur and then submitted to a review board, composed of two permanent members, which ensures the Ae's collegiality<sup>13</sup>. Here also, the collegial discussion's contribution is decisive as regards the reason of the decision and the meaning retained. Each decision is motivated by three considerations: the nature of the project, its location, and its projected environmental impacts<sup>14</sup>. When the case is part of a larger project that is subject to an environmental impact assessment (for example, land clearing within the framework of completing a high-speed line (HSL) or a compression installation in the framework of building a gas pipeline), the decision then includes a preamble stating that it is under the overall project that an environmental impact assessment is to be produced. Signing off on the decision is delegated to the Chair of the French Environmental Authority (and, if the latter is unable to do so, to a permanent member of the Ae).

The decision taken is either to submit the case for environmental impact assessment or not. It is not a recommendation.

Regarding the decisions on certain plans/programmes for which the Ae was granted competence in 2016, the scheme adopted is almost identical, except that the draft decisions are examined by the Ae during the meeting (the regulatory texts do not provide for delegation) and the reasons for decisions fall into two main categories: the characteristics of the plan/programme or its modification, on the one hand, and the characteristics of the negative impacts and the areas likely to be affected, on the other<sup>15</sup>.

## Decisions for evocation

On the basis of feedback from the MRAe Chairs, the Ae Chair consults the Ae members on the advisability of exercising the expertise normally assigned to the MRAe on a plan/programme or a given urban planning document, in view of the complexity and environmental issues involved. Once the decision-in-principle has been adopted, a rapporteur from the permanent team prepares a draft decision of evocation, on the basis of elements given by the DREAL acting on behalf of the MRAe. This is then subject to deliberation by the Ae in the same way as the deliberations on the opinions.

## The permanent team

As of 31 December 2016, the French Environmental Authority's permanent team comprises nine persons. This team contributes to the day-to-day running of the Ae: analysing incoming cases (completeness of the case, the Ae's competence), administrative follow-up of cases and activity, online uploads, organising meetings, answering questions from project owners, administrative authorities and other interested bodies. Six of its members also participate as rapporteurs in the technical analysis of cases and the preparation of draft opinions and decisions on a "case-by-case" basis and in the authoring of draft administrative communications.

9 \ In 2016, 28 opinions were written by a single rapporteur, 75 opinions by two rapporteurs and 9 opinions by three rapporteurs.

10 \ See the CGEDD rules of procedure (decree of 12 May 2016), and in particular Article 12 thereof: «The rapporteur has full powers of investigation and consultation on the case under his/her responsibility, in accordance with the conditions defined by the mission guidelines and the CGEDD charter and within the limits imposed by the laws and regulations in

force. In addition to the departments for which consultation is provided for by the regulations, the rapporteur consults any person whose opinion he/she considers useful.»

11 \ Internet link: [http://www.cgedd.developpement-durable.gouv.fr/rubrique.php3?id\\_rubrique=145](http://www.cgedd.developpement-durable.gouv.fr/rubrique.php3?id_rubrique=145).

12 \ This provision was incorporated in substance in Order No. 2016-1058 of 3 August 2016 and is now included in Article L. 122-1-1 (I) in a wording which will enter into force in 2017.

13 \ The analysis is based on the information provided by the petitioner, as indicated in Article R. 122-3 of the Environmental Code.

14 \ With reference to the three criteria described in Annex 3 to Directive 2011/92/EU of 13 December 2011.

15 \ With reference also to the two categories of criteria in Annex II to Directive 2001/42/EC of 27 June 2001.



## 2016 REFERRALS

In general, the number of cases subject to Ae opinions remained stable in 2016 (119 cases leading to 112 opinions, with some opinions on several cases, compared with 111 opinions in 2015) and the number of cases under the so-called «case-by-case» decision procedure doubled, mainly due to the new competencies recognised by the Ae in certain plans/programmes (117 decisions in 2016 compared to 58 decisions in 2015).

### The opinions

As usual, the largest proportion of opinions relates to railway and road infrastructure cases.

As regards the railway sector, the most significant cases concern infrastructures in the Île-de-France region: the Charles-de-Gaulle (CDG) Express project, extension of line 11 of the Paris metro, line 15 between Saint-Denis Pleyel and Champigny centre, modification of the declaration of public utility (DUP) and the «Waters Act» case of the extension of the Regional Express Network (RER) line E towards the west, the «Waters Act» case or single authorisation of the tangential west project (Tangentielle Ouest) and line 16, 17 south and 14 north. In other regions of France, the second modernisation phase of the Marseilles – Gardanne – Aix-en-Provence line, as well as the new Nîmes – Manduel railway station project are worth mentioning. The multi-modal interchanges stations of Saint-Nazaire and Nantes were also examined by the Ae as well as five cases regarding the elimination of level crossings.



Four major motorways were referred to the Ae (the Rouen East bypass, development of 2x2 lanes on the Central Europe-Atlantic Road (route Centre Europe Atlantique – RCEA) between Montmarault and Digoïn, 2x2 lane development of the RN154 and RN12 and the Castres – Toulouse motorway link) as well as several upgrades to 2x2 lanes (three developments on the RN 164 in Brittany and a development on the RD 1330 in Hauts-de-France). The number of land-use and agricultural planning and forest management (AFAF) projects related to this type of development has decreased considerably (from 21 in 2015 to 10 in 2016).

The Ae has also had to deal with a significant number of cases regarding nuclear installations in 2016: a change of regulated nuclear facility (INB) (INB 138 at the Tricastin site) and in particular several cases regarding the dismantling of regulated nuclear facilities (INB 105 in Pierrelatte, INB 52 at the Cadarache site, INB 94 in Chinon and INB 93 at the Tricastin site). In this section, mention should also be made to the development of the ANDRA subterranean laboratory in Bure.





In 2016, in the context of energy transition for green growth, following Law 2015-992 of 17 August 2015, the Ae deliberated on opinions on the multi-annual energy programmes (PPE) of mainland France and several overseas departments (Guadeloupe, French Guiana, Reunion and Mayotte), as well as cases on new projects such as the tidal energy farms at Raz-Blanchard (Nephtyd and Normandy-Hydro projects) and cross-Channel electricity links with Britain (the «FAB» project and IFA-2 project). The Ae also delivered an opinion on a fourth offshore wind farm off Saint-Brieuc.

The Ae also decided on a number of large-scale mixed development zone (ZAC) projects, including the Gonesse Triangle in the Val d'Oise, Île de Nantes South-West, Bercy Charenton in Paris, and the Part-Dieu West in Lyon mixed development zones. The Ae also deliberated a second time on the Flaubert eco-neighbourhood in Rouen, as well as on the accesses to the Flaubert bridge, with the two operations falling under the same work programme.



In the port sector, several major maritime port (GPM) projects were the subject of an opinion from the Ae. They have focused on the development of new wharves (requalification of the Southampton wharf of the Havre GPM, the Petit-Couronne platform of the Rouen GPM), or even new sites (Carnet site of the Nantes – Saint-Nazaire GPM), or on the management of dredged sediments (mainly maintenance dredging operations in the Seine and disposal of sediments at the Machu site by the Rouen GPM, but also the creation of a median strip at the Havre GPM oil wharf).







Three Ae opinions have focused on projects regarding sea floodwalls in Charente-Maritime (Yves, Fouras and Île d'Aix).

The Ae has also issued several opinions on the new authority granted to it by the Decrees of 28 April and 11 August 2016, in particular the Authion interdepartmental Water Planning and Management Scheme (SAGE), the Sarthe and Mayotte departmental quarry plans and the draft charter of the Sainte-Baume and Oise – Pays-de-France regional natural parks.

The Ae exercised its new evocation authority and issued the corresponding opinions on the territorial coherence plan (SCOT) of the Nantes – Saint – Nazaire conurbation and on the compatibility of urban planning documents related to infrastructure projects or ZACs<sup>16</sup>. This compatibility procedure made it possible to improve the clarity of the environmental authority's opinion by issuing a single opinion from a single authority whereas there were previously two opinions from two different environmental authorities on two aspects of the project.

Lastly, there are a few unique cases that can be mentioned in relation to previous opinions issued by the Ae. These include national programs such as the National Forest and Timber Programme (PNFB) or the National Programme for the Management of Radioactive Materials and Waste 2016-2018 (PNGMDR), as well as some more specific projects: a single multi-annual water withdrawal permit for irrigation-purposes in the Marais Poitevin, the Transpolis platform, innovation and research on transport and the city of the future in the Ain, dismantling of the Séchillienne dam, demolition of the old healthcare facilities in Saint-Hilaire du Touvet and renaturation of the site in Isère and regularisation of several heliports on Reunion island.

The Ae also gave a second opinion on the proposed final closure of the Stocamine facility and a third opinion on the National Nitrates Programme.

Lastly, unlike last year when seven requests for preliminary framing were registered, the Ae did not have to decide on a request for preliminary framing in 2016.

With 19 cases, the Île-de-France region alone accounts for 16% of the Ae's 2016 referrals. This is followed by the regions of Normandy, Grand Est, Nouvelle Aquitaine, Auvergne – Rhône-Alpes and Pays-de-Loire, each with around a dozen cases. These six regions alone account for two thirds of the opinions issued by the Ae in 2016.







Replacement of the Siagne railway viaduct at Mandelieu-la-Napoule

## «Case-by-case» decisions

The increase in the number of decisions is mainly due to the new authority attributed to the Ae in the area of plans/programmes, and more particularly on plans for preventing foreseeable natural risks (especially floods and mudslides, avalanches). In total, the Ae made 117 decisions, of which 69 were for projects<sup>17</sup> and 48 were for programme plans, compared to 58 decisions for projects in 2015.

Infrastructure (railway or road) relates to four-fifths of the decisions issued. This thematic classification is purely indicative, as the majority of operations are mixed, with some being both railway and road developments, or jointly involving development and transport infrastructures.

Of the 69 cases reviewed, 11 (16%) resulted in a decision to submit it for an environmental impact assessment. Of these 11 decisions, 6 gave rise to requests for «stand-alone» environmental impact assessments, the other decisions being related to the fact that, upon examination, the operation was an integral and inseparable part of a project that was subject to a mandatory environmental impact assessment.

No decisions made on projects in 2016 were subject to a mandatory prior administrative appeal (RAPO).

Four regions (Île-de-France, Nouvelle Aquitaine, Auvergne – Rhône-Alpes and Occitania) account for almost two-thirds of the «case-by-case» decisions processed in 2016 (64%).

As regards «case-by-case» decisions on plans/programmes, the Ae issued 48 decisions, three of which were subject to an Environmental Assessment Plan<sup>18</sup>. The information initially provided by the petitioners was often inadequate and, in a significant number of cases (20 out of 48 cases), substantial additional information was required based on the provisions of Article R. 122-18 of the Environmental Code.



Replacement of the deck of the Gilly-sur-Loire viaduct

Three informal appeals were made to the Ae on these decisions, two concerning a decision of submission and the other on a decision of non-submission by a local association. After review, the Ae confirmed its decisions in all three scenarios.

Referrals on «case-by-case» plans/programmes come from the entire national region, predominantly from the Auvergne-Rhône-Alpes region (31%), due to the mountain ranges there, and the Nouvelle Aquitaine region (17%), as a result of this region's coastline.

Since the Ae was established, all opinions have been delivered within the statutory three-month period: no opinion was therefore considered to have been tacitly rendered without observing the deadline. The same applies to «case-by-case» decisions, all of which were made within the statutory period of 35 days for projects and two months for plans/programmes.

The Ae has had to adapt, as in previous years, to low visibility and a rather considerable irregularity in its short-term work programme. Indeed, this is entirely determined by the referral schedule chosen by the project owners, on a project by project basis, and is very unpredictable for the Ae. Some decision-making authorities and project owners give the Ae an opinion well upstream of its referral, in particular for larger projects. In particular, it is worth noting that the SNCF Réseau sends a three-month provisional timetable once a month covering cases submitted for opinions and decisions on a «case-by-case» basis. By the same token, the Ae and the Commissariat-General for Investment keep each other informed of the cases they have been referred to on projects likely to commit substantial public funds.

<sup>16</sup> \ In 2016, the Ae issued seven evocation decisions. The 7th evocation decision, taken in 2016, will result in an opinion in 2017.

<sup>17</sup> \ Corresponding to 77 cases: two cases fell within the jurisdiction of the Regional Prefect, one project was subject to a systematic environmental impact assessment, one case did not fall under the «case-by-case» review procedure, one case was withdrawn by the petitioner and three cases had to be linked to a more comprehensive project.

<sup>18</sup> \ As a result of one of these decisions, the Ae was referred to a new case in light of which a decision of non-submission was finally made.









## 2016 HIGHLIGHTS



An aerial photograph of a dense, green forest. A narrow, light-colored road or path winds through the center of the forest, creating a vertical line that divides the image. The trees are closely packed, and the overall color is a vibrant green. The lighting suggests a bright day, with some areas of the forest appearing slightly brighter than others.

## 2016 HIGHLIGHTS

In a context where awareness of environmental issues is spreading slowly but surely through society, while such topics are still hardly present in political debates, the Ae regularly issues opinions on various projects, plans or programmes. This sample makes it possible to look cross-sectionally at both the quality of the environmental impact assessments and the way in which these issues are taken into account.

To recall, since their introduction, these opinions *«do not focus on the appropriateness [of projects, plans, programmes] but on the quality of their environmental assessment and the consideration of the environment [...]». They are therefore neither favourable nor unfavourable. Their aim is to improve their design and public participation in the [corresponding] decision-making processes».* During its deliberations, Ae members regularly discuss this positioning and how to express it.

The Ae aims to answer the following questions: in complex decision-making processes, how can it be ensured that the environment has been studied correctly and taken into account in a relevant and proportionate way to the issues at stake, and that it constitutes, at best, an engine of individual and collective progress? As regards this consideration of the environment, how can the Ae be of use to the project owners and everyone involved in the design and authorisation of a project or the development of a policy? How can it be ensured that the public is properly informed, without there being a deadlock on important information?





## The challenges vary little from year to year:

- ***the time frame of the projects and the decision-making process schedule:*** the environmental assessment process requires the Ae to be fully involved from the early phases of the project design, in sometimes lengthy decision-making processes. Time management can depend on the project's success, or even simply its creation, regardless of its environmental quality. Although many project owners understand the sense of including this «environmental layer» at an early stage of the project as an integral part of the project construction process, some project owners still see it as a required stage a posteriori, or even a luxury from which it would be possible to make savings (although fortunately this applies to increasingly fewer project owners). The publication of Ae opinions at the end of the design process but before public consultation sometimes appears to be too late a contribution, especially since the Ae is forbidden from participating in project design, so as to guarantee the independence of its opinions;



- ***The letter of the law rather than the spirit of environmental law:*** on several occasions in 2016, the Ae has noticed that project owners want to have the first parts of the necessary authorisations required for the preparation of their project quickly, which could lead to State departments processing some procedures independently of other related procedures, without always checking with the project owner on the overall consistency of the cases submitted to the public. Public consultation is then reduced to one formality among others. Since environmental issues can be very technical, and involve many different fields, one cannot claim to master them all: everyone does his best in the field he knows but, as in many other disciplines, the accumulation of procedures cannot replace collective intelligence and a cross-sectoral approach;

- ***how to turn speech into action ?*** There is an abundance of environmental texts and doctrines. This is certainly due to the progressive construction of environmental law as well as the multitude of environmental threats. This abundance is not always free of inconsistencies. In formulating recommendations, at least as much in terms of methods and information as to the substance, the Ae refrains from asserting what should be done. It most often relies on the legislative and regulatory corpus or draws on the knowledge and know-how in the environmental field, or even common sense and the spirit of the texts in an attempt to maintain the link between environmental guidelines and the reality of the projects.

In this part of its annual report, the Ae wishes to provide some insights into the particular themes on which it is inclined to highlight regularly, especially one of these three impediments.



## THE «PROJECTS» AT THE HEART OF ENVIRONMENTAL ASSESSMENTS



Several working groups on the modernisation of environmental law, launched in the second half of 2015, became interested in the notion of «project». A first group, chaired by Jacques Vernier, sought to transform the French regulatory approach, which was organised a priori on a non-hierarchical set of procedures, with a view to bringing it closer to European law, by putting the project at the heart of the environmental assessment process, from design to public consultation. A second group, chaired by Jean-Pierre Dupont, proposed to merge most of the unofficial environmental authorisations into a single environmental authorisation for one project.

The conclusions of these two working groups were translated into two orders, significantly modifying the Environmental Code. The Environmental Code now defines a «project» in the same way as the European «Projects» Directive revised in 2014. At the same time, it abandoned the notion of a «work programme», the terminology commonly used in France in the field of planning and infrastructure, appropriately used in the initial transposition of the «Projects» Directive of 1985, but which raises delicate questions of interpretation which do not correspond perfectly to the concept of a project, in particular as gradually drafted by several case laws of the Court of Justice of the European Union<sup>19</sup>.

The Ministry for the Environment is preparing a guide on how to interpret this concept of project. The Ae has also had to decide on this issue from 2016 in several exemplary and complex cases.

Pursuant to the wording of the new article L.122-1 of the Environmental Code, which will enter into force on 17 May 2017, a project is now «*the carrying out of construction, installations or works, or other interventions in the natural environment or landscape, including those intended for the exploitation of the soil resources; where a project consists of several actions, installations, works or other interventions in the natural environment or landscape, it must be understood in its entirety, including in the case of a division of time and location and in the case of more than one project owner, so that its effects on the environment are assessed in their entirety*». For example, in 2014 and 2015, the Ae had already been asked to issue opinions on several energy installations, carried out by different project owners but forming a functional unit, according to the definition of «work programme» in force at the time<sup>20</sup>.

### The functionality of a project

This question was seen as a key point in many important cases in 2016, each time raising new questions:

- The Ae successively issued two opinions concerning line 17 of the Grand Paris Express and the mixed development zone (ZAC) of the Triangle de Gonesse<sup>21</sup>. The second case made the decision to include the Europa City project, whose public debate had not yet been held. The first case largely anticipated the development directions that were an integral part of the second case. Moreover, the master plan for the Île-de-France region made the completion of the second project conditional to the authorisation of the first.

In its opinion on the Triangle de Gonesse mixed development zone, the Ae considered that this approach was not conducive to ensuring optimal compliance with the principle of public participation, since several consultations were conducted in parallel on closely related projects based on incomplete information, suggesting that they could be authorised independently of one another.

- For the case regarding the Nîmes – Manduel station<sup>22</sup>, the Ae had the opportunity to point out that a train station could not be functional independently of the



railway line which crosses it, even if previously authorised and carried out. It also cannot be functional without an intermodal transportation hub, a road network and parking areas, or other networks (electrical, sanitation) necessary for its operation (see line 17). The impacts of all of the above must be fully taken into account.

## The precise and up-to-date description of a project

The Charles-de-Gaulle Express case is a good example of an original and unprecedented case. The environmental impact assessment provided was the one submitted to the public inquiry conducted in 2007, prior to the initial declaration of public utility (*déclaration d'utilité publique* – DUP). This assessment did not thoroughly describe the project and the work entailed, including the work that would affect the existing railway network. It therefore considered the project in its 2007 environment, whereas significant developments had taken place since then. In addition to these changes in context, the Ae had identified all the substantial modifications made to the project itself at that time, which had led the project owner to take over the socio-economic evaluation of the project, the cost of which had increased by 80% compared to its previous version.



## Updating the environmental impact assessment

The Environmental Code already provides for the principle of updating an environmental impact assessment. This principle is now included in the legislative part of the Environmental Code, reflecting the spirit of an iterative approach, in which the environmental impact assessment is connected to a project and is designed to «live» with it<sup>23</sup>. Updating can be justified either by modifying the scope of the project or by the need to refine the environmental impact assessment with a view to getting a subsequent authorisation following the first authorisation decisions. In 2016, the Ae was referred to many cases that contained updated environmental impact assessments, which lead to the Ae updating its own opinions<sup>24</sup>. The Ae systematically reviewed the extent to which its first recommendations had been taken into account. As a general rule, complementary studies make it possible to provide precise answers on several important aspects (water, in particular). The other aspects, which are less directly related to the subject-matter of the request, are not always included (such as noise, air pollution or greenhouse gas emissions in particular).

## The projects that are granted

A recurring difficulty involves major projects that are granted (or are the subject of public-private partnerships (PPP)), whose request for recognition of public convenience, whatever its form, occurs upstream of the choice of company that will be in charge of its implementation at a later stage, and will thus be responsible for defining the contract that binds it to the public authorities. In 2016, this involved several motorway projects involving new sections (the Rouen East bypass<sup>25</sup>, the Castres – Toulouse motorway link<sup>26</sup>), or concessions to existing road sections to improve safety (RCEA<sup>27</sup>) or finance the most expensive sections (RN 154 / RN 12<sup>28</sup>). Since the concession or the granting of the PPP is based on projects partly defined by a declaration of public utility but still to be specified in the private partner's offer, the system does not allow the environmental impact assessment to elaborate on the «reasons for the choice of project and alternatives considered», and thus does not guarantee the proper implementation of the «avoidance sequence» under the «avoid – reduce – compensate» approach.

19 \ For example, C-43/10 (11 September 2012), CJEU C-142/07 (of 25 July 2008), C 300/13 (of 27 March 2014).

20 \ Installation of an electricity production plant by combined gas cycle at Landvisiau and its connections (Ae Opinion Nos. 2014-29, -30, - 51 of 25 June 2014); offshore wind projects at Courseulles, Saint-Nazaire and Fécamp (Ae Opinion No. 2015-03 of 25 March 2015, No. 2015-11 of 6 May 2015, No. 2015-24 of 24 June 2015); Raz Blanchard hydroelectric projects (Ae Opinion No. 2016-004 and -004 bis of 6 April 2016).

21 \ Ae Opinion No. 2015-78 of 2 December 2015 and No. 2015-103 of 2 March 2016.

22 \ Ae Opinion No. 2015-25 of 10 June 2015 and No. 2016-106 of 21 December 2016.

23 \ «Where the environmental impact of the project has not been fully identified or assessed prior to the granting of this authorisation, the project owner shall update the environmental impact assessment by conducting an assessment of these impacts, within the scope of the operation for which authorisation was sought and assessing their consequences at the global scale of the project. If there is any doubt as to whether the impact assessment is significant and if it is necessary to update the environmental impact assessment, it may consult the environmental authority for an opinion.» Article L. 122-1-1 III of the Environmental Code, which enters into force on 17 May 2017.

24 \ 17 cases, including applications for authorisation of the «Waters Act» for railway or road projects, completion of a mixed development zone a few years after their creation, definitive closure of Stocamine, etc.

25 \ Ae Opinion No. 2015-98 of 03 February 2016.

26 \ Ae Opinion No. 2016-62 of 05 October 2016.

27 \ Ae Opinion No. 2015-97 of 03 February 2016.

28 \ Ae Opinion No. 2016-52 of 21 September 2016.



For the major railway projects carried out by the Grand Paris company and some of those carried by SNCF Réseau (Eole, in particular), the Ae has regularly noted that the first environmental impact assessments were not at the usual level of accuracy for public inquiry cases prior to a declaration of public utility (DUP) submitted for an Ae opinion, in particular as regards defining evasive actions and impact reduction measures and, where appropriate, compensation measures. However, due to the continuity of project owners before and after the DUP, the Ae found that this weakness was partially compensated when the environmental impact assessments were updated, especially for important issues (water and subsoil).

The Ae believes that decoupling from the contracting authority, before and after concession, should lead to a more rigorous management of cases and procedures, notably so that project owner commitments are defined as precisely as possible upstream of the DUP, particularly as regards avoidance, reduction and compensation measures. It should also lead to the systematic updating of cases on often complex projects, for which subsequent environmental authorisations often require a higher level of detail. In particular, the Ae is surprised that there are very few referrals for authorisation applications on the «Waters Act» for projects of this type, for DUPs that are sometimes old.

While it is understandable that not all options can be defined at the DUP stage, since the main purpose of the call for applications is to leave a number of options open and study various offers, the environmental impact assessment should be based on the clear assumptions necessary for assessing the public utility of the project for issues that are likely to have significant environmental impacts, or even to take into account different scenarios for other questions that are not likely to dispute it (particularly the most unfavourable in the event of strong uncertainty about the techniques used<sup>29</sup>).

## Development operations

The link between the Environmental Code and the Urban Planning Code sometimes makes the concept of a complex project difficult to define: mixed development zones (ZACs) are legally considered as projects, as are the many more temporary developments within them. The Ae's opinions converge towards the interpretation that the ZAC's environmental impact assessment is intended to take all of these developments into account, to go as far as considering that their environmental impact assessment is the same and should lead to significant in-depth studies as appropriate (authorisation of the Waters Act, regulated environment protection facility (ICPE)), even if the procedures to which they are subject can vary.



Plane trees along the Canal du Midi



As early as 2013, the Ae had issued an opinion on the construction of the Saint-Jean Belcier mixed development zone (ZAC)<sup>30</sup> in Bordeaux. It was then led to believe that all the requests for a «case-by-case» examination of dossiers in this ZAC were already covered by this environmental impact assessment. It is this logic that will gradually be necessary for most of the equivalent cases (Île de Nantes South-West ZAC<sup>31</sup> and Part-Dieu West ZAC in Lyon<sup>32</sup>, in particular), where appropriate, using the concept of work programme (Montpellier logistics Aeropole, Thalium project and road link<sup>33</sup>, construction of the Flaubert ZAC and access to the Flaubert bridge in Rouen<sup>34</sup>).

The Ae nevertheless examines the consequences of such an interpretation in each individual case, as the completion of some ZACs may take several decades and the environmental impact assessment cannot anticipate every situation. Although the Triangle de Gonesse ZAC includes the EuropaCity project, the Ae's opinion nevertheless recommended that the line 17 station and Baron de Gonesse bus line should also be included in the project. In the absence of a public debate on the whole case, it also recommended indicating how the draft ZAC would be amended depending on the possible conclusions of the public debate on EuropaCity. It also recommended completing the remainder of the environmental impact assessment, in line with different scenarios considered. It was also this scenario approach which led it to recommend «making it clear that line 17 is a prerequisite for the creation of the ZAC and to draw all the consequences for the various aspects of the case and for the various scenarios envisaged, in particular in the event of a delay in completing line 17». This recommendation still seems to be relevant. As a result, the cases on the developments associated with the ZAC are systematically examined by the Ae with regard to whether or not it is necessary to update its environmental impact assessment.

## The connection between environmental procedures

These connection difficulties sometimes occur with other environmental procedures: regulated environment protection facilities (ICPE), installations, works, projects or schemes (IOTA) under the Waters Act. The order on environmental authorisation must progressively lead to a convergence between these environmental authorisations, which until now have required an environmental impact assessment for each one. The classification of projects<sup>35</sup> that are subject to environmental impact assessments is now separate from the classification of environmental procedures: while all projects subject to authorisation under the ICPE and IOTA were subject to an environmental impact assessment within the meaning of the «Projects»



Construction of a siding at the Robinson (RER B) terminus.

Directive, only the most important projects will now be the subject of a systematic environmental impact assessment. Many projects submitted to one of the various environmental authorities will be examined on a «case-by-case» basis by the competent environmental authority, which then decides whether or not an environmental impact assessment should be carried out.

The Ae deliberated on several opinions in which it had found that the simultaneous implementation of several procedures could produce cases that were too focused on the subject of authorisation, whereas the environmental impact assessment is intended to address environmental issues in a comprehensive and cross-cutting manner. The Ae has already pointed this out in connection with the extension of line 12 of the Paris metro<sup>36</sup>.

Similarly, the transfer of the Nantes wholesale market (*marché d'intérêt national*)<sup>37</sup> illustrates the many questions and pitfalls in the concept of «project». With the project being presented as a transition, this ought to have led to considering it as two components: (departure from an old site, arrival at a new site). The Ae noted that the first issue was not addressed. The new site was already a ZAC and it also noted that this arrival could hardly be treated independently of the development of this ZAC, the transition being intended in particular to revitalise it and certain improvements have already been made. As regards the need to ensure full information to the public, the environmental impact assessment only included part of the necessary information, some of which is only included in the case prepared for the ICPE procedure, which was begun in parallel. The Ae was able to note that this connection had, overall, been correctly understood for the cases regarding line 15 of the Greater Paris Express, although a more explicit link could have been made between them

29 \ Manuel – Exeter Interconnection FAB project (Ae Opinion No. 2016-54 of 21 September 2016).

30 \ Ae Opinion No. 2013-89 of 09 October 2013.

31 \ Ae Opinion No. 2016-27 of 06 July 2016.

32 \ Ae Opinion No. 2016-99 of 21 December 2016.

33 \ Ae Opinion No. 2016-78 of 09 November 2016.

34 \ Ae Opinion No. 2016-03 of 20 April 2016 and No. 2016-89 of 07 December 2016.

35 \ Decree No. 2016-1110 of 11 August 2016 on the modification of the rules applicable to the environmental assessment of projects, plans and programmes.

36 \ Ae Opinion No. 2014-34 of 25 June 2014.

37 \ Ae Opinion No. 2016-48 of 07 September 2016.



authorisations for this line (declaration of public utility, Waters Act, exception from the prohibition of destroying «protected species») and the application for its maintenance and storage site in Champigny-sur-Marne (ICPE)<sup>38</sup>.

The Ae also issued an opinion on the application for a single multi-annual water withdrawal permit for irrigation-purposes for the benefit of the Marais Poitevin public body<sup>39</sup>, which was submitted as such to an environmental impact assessment, while the «project» seems difficult to distinguish from all the arrangements and provisions (including substitute deductions) intended to meet irrigation needs.

## Coordination with certain plans/programmes

The environment is intended to be integrated as upstream as possible in project design, particularly in national and regional planning documents or at some more targeted levels. Some are subject to environmental assessment and opinions from the French Environmental Authority. For the first time, the Ae has issued opinions on multi-annual energy programmes and on the National Plan for the Management of Radioactive Materials and Waste (see below). It has not yet been referred to the ten-year development plan for the electricity transmission network, which is updated every year<sup>40</sup>.

The main interest of these plans and their environmental assessment is to clarify an overall strategy that enables the projects to be coherent with a programme, all of which are transcribed by the environmental impact assessment. Thus, the Ae is regularly referred to projects taken on by major maritime ports (GPMs), whose motivation is easier to present and understand<sup>41</sup> since the Ae and the public are familiar with their strategic projects in advance.

The justification of the projects and their impacts is more difficult to identify when a project is part of a complex group of projects, when the cases do not expand on how they interact with each other. This is particularly the case for electrical interconnections with foreign countries, for which local impacts are most often controlled, while the effects of the electricity trade have never been taken into account at this stage<sup>42</sup>.

Safety embankments against floods (in particular for coastal floods) experience similar problems. Projects submitted are often part of an Action Programme on Flood Protection (PAPI). To date, these programmes are not subject to an environmental assessment. However, it seems difficult to apprehend the positive effects of a seawall independently of the other works that together build upon a strategy and in terms of protection of a territory. Where adverse effects are potentially signifi-

cant, they are even more difficult to justify by the project owner. This is clearly the case for the seawall planned for in the Yves Marais National Nature Reserve in Nouvelle-Aquitaine, with work also being undertaken on an adjacent structure<sup>43</sup>.

Finally, in many cases of land-use and agricultural planning and forest management related to transport infrastructure, the environmental impact assessments do not necessarily take into account situations where the infrastructure causing the disturbance of agricultural holdings would not be carried out or, if necessary, would be delayed. This raises questions on the relevance of certain related works, or even on the coherence of fragmented restructuring and certain related works with an infrastructure whose precise characteristics are not yet known<sup>44</sup>.

Decree 2016-1110 of 11 August 2016 now provides for the possibility of common and coordinated environmental assessment procedures for a project and plan whose objectives are linked, provided that the plan or programme's environmental impact report contains all the elements required for the project's environmental impact assessment and that the consultation rules are the same.

## Project objectives

In the most complex situations, to understand the outlines of projects, the Ae's analysis systematically attempts to build on their stated goals and advertised functionality. The cases submitted to the Ae are not always explicit on these points. In some cases, the environmental impact assessment does not ensure that the project that is finally chosen meets the stated objectives. It would be useful if the part of the case which analyses the various alternatives studied is constructed in such a way as to demonstrate it<sup>45</sup>.



Removal of PN 33 and phase 2 of the Baillargues multi-modal interchange station (PEM)



The Ae is then led to deepen this analysis, prior to the definition of the project outline, in order to remove any ambiguities for the public. However, the response falls to the project owner. This question would in fact have to be clarified at the time of the public inquiry, especially to provide the case with legal certainty. In particular, the question arose for the dismantling of the Séchilienne dam after securing it<sup>46</sup>, while the two operations contributed to restoring the ecological continuity of the Romanche. The removal of crossing 33 and the second phase of the Baillargues<sup>47</sup> multi-modal interchange station (PEM) meets several objectives: railway objectives are explicitly mentioned, water systems are also discussed. Nevertheless, both the absence of certain road sections in the project covered by the environmental impact assessment and the choice of certain variants shows that the project's main objective is to streamline the north-south service before there are potentially large urban developments on either side of the railway. This led the Ae to recommend taking these other sections into account within the scope of the project.

## Avoid, reduce, compensate

Underlying the environmental assessment process, the implementation of the «avoid, reduce, compensate» sequence is based on a number of prerequisites and the application of a rigorous method, which rarely occurs when analysing reasonable alternatives and, surprisingly, also rarely occurs when analysing the main impacts of a project.

In the first place, this doctrine can be applied only if the environment is taken into account from the beginning of the design of a project. For some of them, it is obvious that the environmental impact assessment was initiated only after most of the policy options had already been adopted. The avoidance sequence presented is then limited to a few technical options.

This is *a fortiori* the case for some regularisations submitted to the Ae, and in particular for four heliports (Île d'Yeu, Reunion), in the context of a formal opinion to France by the European Commission<sup>49</sup>. However, even in this situation, it would be useful to examine the advantages and disadvantages of the selected sites in terms of population safety, noise impact or health impact.

## AT THE HEART OF ENVIRONMENTAL IMPACT ASSESSMENTS

Once the outline of the project has been clarified, the Ae methodically analyses the content of the environmental impact assessments according to the structure provided for in Article R.122-5 of the Environmental Code<sup>48</sup>. While the Ae has welcomed the visible gain in quality in a large number of cases to which it has been referred on may occasions, it expands on the main weaknesses below, which it has had to point out repeatedly and which should be improved as a matter of priority.



La Possession Heliport in Reunion

38 \ Ae Opinion No. 2016-13 of 04 May 2016.

39 \ Ae Opinion No. 2015-92 of 20 January 2016.

40 \ What Ae had incidentally highlighted for the first time in its 2014 Annual Report (page 26).

41 \ Dredging of the Rouen GPM (Ae Opinion No. 2016-25 of 22 June 2016); development of the Carnet site (Ae Opinion No. 2016-30 of 06 July 2016); sediment treatment centre in La Repentie (Ae Opinion No. 2016-34 of 20 July 2016).

42 \ IFA 2 projects (Ae Opinion No. 2015-102 of 16 March 2016) and FAB (France – Great Britain via Aurigny), (Ae Opinion No. 2016-54 of 21 September 2016). The ElecLink project does not appear to have been the subject of an environmental impact assessment (see Ae's informal appeal to decision No. F-031-13-C-0107).

43 \ Ae Opinion No. 2016-61 of 05 October 2016.

44 \ In particular, land-use and agricultural planning and forest management (AFAF) relating to the eastern branch of the Rhine-Rhone high-speed line Ae Opinion No. 2015-90 of 16 December 2015, Ae Opinion No. 2016-11 of 04 May 2016, No. 2016-37 of 20 July 2016, Nos. 2016-95 and -96 of 21 December 2016), but also relating to certain road projects (Ae Opinion No. 2014-54 in Bouvron, Blain and Fay-de-Bretagne (44) and Ae Opinion No. 2015-33 in Saint-Christophe de Dolaizon (43)).

45 \ Development of the RD 914 between Banyuls and Cerberus (Ae Opinion No. 2016-16 of 20 April 2016); Renaturation of the Ru de Gally (Ae Opinion No. 2015-85 of 16 December 2015).

46 \ Ae Opinion No. 2016-21 of 08 June 2016.

47 \ Ae Opinion No. 2016-33 of 22 June 2016.

48 \ It should be noted that Order No. 2016-1058 of 03 August 2016 and Decree 2016-1110 of 11 August 2016 have changed their content. In this annual report, the Ae relies on its previous practice.

49 \ Decision 2013/2128, motivated by the absence of an environmental impact assessment.





Camopi Airfield in French Guiana

The Ae raised the same question in other situations, in which the initial state was modified by human activities. Returning to an initial «natural» state could be one of the possible scenarios but it is difficult to implement. Since the case does not consider this option, it does not show that the proposed scenario is systematically more favourable, even in situations where it is likely<sup>50</sup>.

In addition to early implementation, several cases struggle to comply with the normal course of the Environmental Code of presenting the gross impacts of the project before setting out the avoidance and reduction processes and, where appropriate, compensation for significant residual impacts. In particular, the Ae has emphasised that, for the development of the Carnet site<sup>51</sup> by the Nantes-Saint-Nazaire major maritime port, the development of new areas on sensitive environmental sites must a priori justify the absence of an alternative to the project as presented. This argument is all the more difficult to construct if it does not relate to an overall logic, proving at a higher level that the best option has been sought from an environmental point of view<sup>52</sup>.

The other frequent situation concerns the execution of the last projects of a work programme, leading some project owners to consider that no alternatives need to be re-examined for the end of the programme. Completing the widening of some routes to 2x2 lanes is the most common example. Landscape schemes were often approved in the mid-90s at the beginning of environmental assessments, without a recent decision confirming the desirability of such a landscape. However, the Ae has often observed that the traffic projections calculated several years ago are not necessarily confirmed by the observed traffic. This is also the case of the Saint-Nazaire multi-modal interchange station<sup>53</sup>, where the Ae recommended better justifying the reason behind maintaining the location and size of its car park, given the reconsideration of part of the programme.

In light of these various examples, the approaches that have fully implemented the avoidance principle should be recognised, such as the dredging of the Rouen major maritime port (GPM). The Ae noted the quality of this approach despite some second-order issues. However, a good avoidance approach alone does not justify the absence of reduction or compensation measures, as recalled in the same opinion<sup>54</sup>.



## Themes to be explored

### Greenhouse gas emissions and air quality

Despite the major challenges GHG emissions and air quality present, reflecting their national and international relevance, the Ae has systematically noted the weakness or even lack of treatment of these themes, including for projects where these issues are central, particularly for a significant number of road and motorway projects. These themes are often better dealt with in several ZAC projects<sup>55</sup>:

- Some motorway projects did not include any analyses on greenhouse gas emissions and therefore did not contain any inventory or reduction or compensation measures;
- these assessments are not always based on explicit displacement scenarios. Some cases even postulate an improvement in the situation due to the fluidity of traffic, without taking into account the possible or even likely indirect effect in terms of increased traffic infrastructure;
- air quality is not always correctly characterised in the initial state. In particular, the agglomerations that are subject to a formal opinion from the European Commission concerning concentrations of nitrogen oxides in the air are never recalled. The same applies to the agglomerations also affected by PM10<sup>56</sup> concentrations, by requests from the European Commission to France;
- the modelling of the effects of the project is based on an obsolete circular<sup>57</sup>, which it would be particularly useful to update: it is systematically misinterpreted as:
  - it does not take into account a set of chemical substances, which ANSES (the French Agency for Food, Environmental and Occupational Health and Safety)<sup>58</sup> recommended adding, although some project owners now do;
  - the models used to calculate impacts have undergone several recent changes. However, environmental impact assessments often use older models;
  - in particular, while the circular's note on methodology requires such a model to be established with different time frames throughout the life of the project, assessments are only produced in the initial state and at around 2030 or even 2040, without any relevant intermediate deadline, particularly immediately after the project is commissioned. The project's own effects are often of a secondary nature compared with gains due to the expected technological advances in vehicles. This approach



The Kaw River in French Guiana

therefore does not make it possible to assess a worst-case scenario immediately after the new infrastructure is put into operation, *a fortiori* when pollution presents known health risks in the initial state.

In addition, environmental impact assessments rarely take these impacts into account beyond infrastructure, even when it is likely to generate significant traffic and pollution in more polluted adjacent areas (see the Toulouse ring road, for the Castres – Toulouse motorway link).

The Ae has also identified similar issues for some mixed development zones (ZACs) and some regulated environment protection facilities (ICPEs). In particular, regulated environment protection facilities that estimate increases in energy consumption and greenhouse gas emissions and propose measures to reduce them are scarce<sup>59</sup>. Some ZAC cases do not analyse the potential for producing renewable energies or offer guidelines that take them into account<sup>60</sup>.

Finally, this is an area where cases contain virtually no reduction or compensation measures. Even if such measures do not appear very numerous *a priori*,

50 \ Maintenance of the Kaw River (Ae Opinion No. 2016-60 of 05 October 2016) and the Camopi Aerodrome (Ae Opinion No. 2016-101 of 07 December 2016).

51 \ Ae Opinion No. 2016-30 of 06 July 2016.

52 \ Seawall in the Yves national nature reserve (Ae Opinion No. 2016-61 of 05 October 2016).

53 \ Ae Opinion No. 2016-15 of 04 May 2016.

54 \ Ae Opinion No. 2016-25 of 22 June 2016.

55 \ Part-Dieu West ZAC, Lyon, in particular (Ae Opinion No. 2016-99 of 21 December 2016).

56 \ «Particulate Matter». Particulates suspended in air with a diameter of less than 10 micrometers; so-called «breathable»

particulates include fine, very fine and ultra-fine particles and can penetrate the bronchi.

57 \ Interdepartmental Circular DGS/SD7B/2005/273 of 25 February 2005 on taking into account the health effects of air pollution in road infrastructure environmental impact assessments.

58 \ The French Agency for Food, Environmental and Occupational Health and Safety

59 \ Nantes SNCF Atelier (Ae Opinion No. 2015-91 of 16 December 2015); maintenance and storage site (SMR) from line 15 south to Champigny-sur-Marne (Ae Opinion No. 2016-13 of 4 May 2016); transfer of the Nantes wholesale market (Ae Opinion No. 2016-48 of 7 September 2016).

60 \ Article L. 300-1 of the Urban Planning Code.  
«Any development action or operation subject to an environmental assessment must be the subject of a feasibility study on the development potential of renewable energy in the area». See in particular the Montpellier logistics Aeropole (Ae Opinion No. 2016-78 of 09 November 2016).  
This potential was nevertheless analysed for the Triangle de Gonesse and Bercy-Charenton: the Ae then raised the question of the credibility of certain assumptions.



speed reductions are very rarely discussed in road and railway infrastructure projects<sup>61</sup>. Active transportation modes (walking, cycling) are sometimes forgotten<sup>62</sup>. Moreover, the Ae has regularly recalled that, although the practice of CO<sub>2</sub> compensation is now common in many fields, it is never considered in these cases. Examination of compatibility with regional climate, air quality and energy plans (SRCAs) are usually addressed in a formal, if not inaccurate way. Given that the Energy Transition for Green Growth Act has been promulgated and the Ae has just analysed the multi-annual energy programme for mainland France, it recommended in the opinion on the Castres – Toulouse motorway link (LACT) that the orientations and the lines of action of this multi-annual energy programme on mobility be taken into account, particularly in terms of modal shift.

### Noise

In 2015, the Ae published an administrative communication on transport infrastructure noise<sup>63</sup>. This administrative communication recalled the various applicable regulations and identified a number of good practices. This theme is generally treated in a more appropriate manner than that of air: many environmental impact assessments include measures and modelling on the noise in the initial state, for each floor of houses or buildings. The existence of noise black spots in the study area or in its periphery potentially influenced by the project is not always reported and treated.

On the other hand, most of the cases struggle to address overall noise pollution of a different nature in the same region:

- this is often the case for multi-modal interchange stations, around which the noise from trains, the train station and access road overlaps, which are subject to different regulations;
- the cumulation of terrestrial and Aerial noise pollution is never treated, as there is currently no appropriate method. The Ae has noted this in cases where this is potentially an important issue (the Triangle de Gonesse ZAC, Montpellier Aeropole in particular). On this point, the Ae suggests that scientific and methodological work can contribute to the advancement of knowledge in this field, to consider appropriate measures, if possible.

For certain infrastructure projects forming part of work programmes to be carried out over time, the Ae has been able to recall that the regulation (Article R.571-45 of the Environmental Code) states that «the modification or transformation of an existing infrastructure resulting from an intervention or successive works [...] shall be considered significant».

This article applies in particular to the widening of some routes to 2x2 lanes in several successive sections, within the framework of the landscape scheme of trunk roads<sup>64</sup>. The question has also been raised about the modernisation of the Aix – Marseilles railway line, despite the completion gap (10 years) between the two phases of this modernisation project<sup>65</sup>.



Creation of the fourth rail track between Strasbourg and Vendenheim





## Socio-economic assessments

Among the cases submitted for an Ae opinion, transport infrastructure projects and power lines are mainly the subject of socio-economic assessments. These assessments are part of the case, separate from the environmental impact assessment. If the investment handled by the State and its public institutions exceeds €100 million, they are subject to a second opinion and an opinion by the Commissariat-General for Investment (CGI). The Ae examines their consistency with the environmental impact assessment and ensures that the public can understand them and appreciate the assumptions upon which they are based.

In the field of transport, the presentation of socio-economic assessments is often obscure, not only for a non-specialist public, to whom the principles and limits of the method are not explained; but also sometimes for the discerning reader, when the cases only display results, without sufficiently specifying the assumptions and calculation choices used. This difficulty has been reinforced, in the context of the evolution of the general evaluation framework for transport projects, which is more elaborate than the previous one<sup>66</sup>. Thus socio-economic assessments often turn into «black boxes»<sup>67</sup>. Explaining these assessments more transparently would probably be their most urgent improvement. The effort required to explain them certainly makes one wonder about the relevance and credibility of the calculations.

Indeed, the Ae has often been brought in to identify inconsistencies between the environmental impact assessment and socio-economic assessment<sup>68</sup>, or even obviously false assumptions<sup>69</sup>.

When environmental issues are taken into account in socio-economic assessments, they are valued at levels that never significantly alter the result of the calculation. The reference method therefore reflects a vision of the transport system, according to which environmental issues are not likely to alter the hierarchy of projects to be carried out.

In particular, time savings are the main advantage traditionally taken into account by socio-economic assessments. In the course of the opinions issued in 2016, two main questions were raised:

- in the case of road projects (i.e. the vast majority of them), the question of the resulting traffic is often not taken into account<sup>70</sup>. This question applies at least to the environmental impacts of this resulting traffic, but also raises questions about the assessment's ability to describe the future created by the project. It is widely acknowledged<sup>71</sup> that transport users operate much more on a «time-budget» constant rather than a distance constant: they do not use speed increases to save time but to move more. Insofar as they highlight the time saved, socio-economic assessments are not coherent, at least in appearance, with this observation;
- among the railway projects, those which aim to increase the capacity of the infrastructure, and therefore the frequency and regularity of the traffic it receives, form an increasing part of the projects submitted to the Ae for opinions. Moreover, this is consistent with the recommendations of the Mobility 21 Committee relating to railroad junctions. It has to be noted, however, that the cases are struggling to provide monetarisations for the benefits targeted by this type of project. In most cases, the project owner waives all<sup>72</sup> or part<sup>73</sup> of these benefits, explaining that the evaluation methods are not developed. More exceptionally<sup>74</sup>, figures are presented on the basis of equivalences with time gains. Given the recommendations of the Mobility 21 Committee, work on maximising the benefits of this type of project seems indispensable.

As far as the Ae can judge from the cases submitted to it, these various shortcomings prevent the socio-economic assessment from contributing transparently and coherently with the environmental impact assessment to project development and verifying the projects' adequacy with respect to their objectives. For example, the Ae examined an urban road project<sup>75</sup>, the socio-economic assessment of which showed that it benefits mainly journeys made by private car, even though it was drawn up following extensive consultation and built around a consensus that all modes of transport should be promoted, except for private cars. This evaluation result appeared explicitly in the case, without the project owner explaining the opposition between the intention expressed publicly and the result obtained.

61 \ See also Ae Opinion No. 2016-100 and 2016-109 on the construction of the RER B sidings.

62 \ In particular, Article L. 228-2 of the Environmental Code.  
«Upon construction or renovation of urban roads, with the exception of motorways and express ways, cycling routes with adequate tracks, ground markings or independent lanes must be developed, depending on traffic needs and constraints.»

63 \ Ae Administrative Communication No. 2015-02.

64 \ Opinion relating to the concession of the RN 154 / RN 12 (Ae Opinion No. 2016-52 of 21 September 2016).

65 \ Ae Opinion No. 2016-45 of 07 September 2016.

66 \ Government instruction of 16 June 2014.

67 \ Equivalent assessments are set out in Opinions Nos. 2015-93, 2016-06, 2016-23, 2016-29, 2016-49, 2016-52, 2016-106, without this list being exhaustive.

68 \ Line 15 East (Ae Opinion No. 2015-93), CDG Express (Ae Opinion No. 2016-06); RN 164 to Merdrignac (Ae Opinion No. 2016-94).

69 \ Balata-PROGT development (Ae Opinion No. 2016-20); Castres – Toulouse motorway link (Ae Opinion No. 2016-62).

70 \ CDG Express (Ae Opinion No. 2016-06); RD 1330 in Senlis (Ae Opinion No. 2016-09); J.J. Bosc bridge in Bordeaux (Ae Opinion No. 2016-40).

71 \ Since the founding works of Yacov Zahavi.  
See in particular <https://halshs.archives-ouvertes.fr/halshs-00088507/document>.

72 \ Eole project (Ae Opinion No. 2016-84/88).

73 \ Facilities for the RER A in Marne-la-Vallée Chessy (Ae Opinion No. 2016-07); 4th rail track between Strasbourg and Vendenheim (Ae Opinion No. 2016-29); modernisation of the Mulhouse railroad junction (Ae Opinion No. 2016-49).

74 \ Creation of the L track at the Part-Dieu station (Ae Opinion No. 2015-99).

75 \ J.J. Bosc bridge in Bordeaux (Ae Opinion No. 2016-40).



The power line cases examined by the Ae in 2016 confirmed that the technical and economic justifications (JTEs) for these projects are generally much better constructed, perhaps indicating further assessments within the actual process of project development. These JTEs have a certain kinship with the «Avoid, Reduce, Compensate» (ERC) approach of environmental impact assessments, in that they generally carry out a «funnel» reasoning, from the broadly expressed sought-after functionality, to the solution adopted. However, it remains to integrate these JTEs into the cases presented to the public<sup>76</sup>. As such, the Ae came across cases where the explanations provided in the environmental impact assessments were not entirely consistent with the JTE<sup>77</sup>.

### The destruction of natural, agricultural and forest soils

With a few exceptions (such as the South-West Major Projects (GPSO)<sup>78</sup>), the Ae has not been confronted with projects consuming very large natural, agricultural or forest areas in recent years. The Ae had to deal with this issue in depth during several deliberations, in particular those relating to the Rouen East bypass, the Triangle de Gonesse ZAC and the RN 154 / RN 12 and Castres – Toulouse motorway projects.

Consistent with the recently approved provisions of the Law for the Recovery of Biodiversity<sup>79</sup>, the Ae considered it appropriate to make a decision on this issue, depending on the soil and agronomic values of the soils and on the ecological functionality of the habitats that live there. This is one of the important data that must be included in the analysis of the initial state. The Ae also felt it appropriate to consider that the use of natural or agricultural areas irreversibly leads to the destruction of soils. For most of the activities envisaged, the subsequent reconstitution of soils with similar properties

appears highly unlikely. This soil is therefore a non-renewable resource.

Thus, the Ae notes the area likely to be destroyed by the project in its opinions. In many cases, the direct effects are significant<sup>80</sup>. Indirect effects can be even more so, without being totally taken into account, such as fragmentation of the territory (especially when two infrastructures are parallel) and resulting urban developments. Regarding the latter, the projects with the greatest impacts are not necessarily those with direct impacts<sup>81</sup>. For example, the surface area of the Nîmes station and its access road should use 15 ha of land, while it should result in the development of 280 ha of a designated development zone (ZAD). It is also useful to include the total area of the infrastructure right-of-way and that of the land-use and agricultural planning and forest management (AFAF), which together constitute a single work programme. This is especially useful in AFAF cases related to transport infrastructure, in order to be able to comprehend all the agricultural and natural areas affected.

A sufficiently early avoidance approach makes sense in this issue. Several environmental impact assessments report on consultations had with the agricultural community to reduce such destruction. This concern partly coincides with that which led to the creation of departmental commissions for the use of agricultural areas. It is also now taken into account in the Rural and Maritime Fishing Code (Articles L.112-1-3 and D.112-1-19)<sup>82</sup>. In the cases it analysed, the Ae found little competition between agricultural areas on the one hand and natural and forest areas on the other.



CAen nursery sites





Pine trees along the Canal du Midi

## The state of knowledge, uncertainties

Even for fairly common projects<sup>83</sup>, the Ae has been led to recall that the description of the initial state should not be conceived as a monograph on the perimeter of study but as a census of the interfaces between environmental sensitivities and the project. This will thus allow it to identify the anticipated direct and indirect risks and impacts.

However, some project owners are incapable of presenting complete and reliable data for certain environmental issues and environments. In particular, this issue arises regularly for projects in the marine environment (see 2015 Ae annual report – offshore wind projects).

For the first time, the Ae had to decide on pilot tidal energy farm projects at Raz Blanchard<sup>84</sup>. The Ae's opinion again noted the significantly lower level of sea-based knowledge and methodologies (compared to land-based) available to assist a project owner in establishing an initial state of the environment, to identify the effects and vulnerabilities of species to such effects, and to draw conclusions on the impacts, as part of the «avoid, then reduce and, where appropriate, compensate for harmful impacts» (ERC) approach. It stressed, inter alia, that the «Projects» Directive specifies that the environmental impact assessment report includes information that may reasonably be required to reach a reasoned conclusion on the significant environmental effects of the project, taking into account existing knowledge and evaluation methods.

In these situations, the Ae considers that the significance of the uncertainties should not lead to the privileged consideration that the impacts will be negligible or weak, without mentioning the uncertainties surrounding the conclusion. In these situations, the Ae recommends first taking into account the knowledge gained through other projects, or even using guides on the same types of projects (when they exist) after analysing what differs between the projects. It also recommends making cautious and conservative assumptions when assessing the impacts – and not necessarily the most favourable ones<sup>85</sup> – especially if the technologies used have not yet been stopped or if their effects are not yet fully known<sup>86</sup>.

In all cases, while recalling the need to better support the demonstration that the impacts remain acceptable, the Ae recommended, in accordance with the precautionary principle, to strengthen studies and research to acquire the missing knowledge for the potentially most serious issues that are still not well understood. In the same spirit, the Ae recommended pooling the monitoring system of the two Raz Blanchard tidal energy farms and capitalising on the data collected, in particular for subsequent projects, taking into account in particular the importance of public aid which can justify such a request.

Similarly, for dredging operations at the Port of Rouen, it recommended designing a monitoring system so as to demonstrate the absence of impact during the authorisation period or to take appropriate measures if this monitoring highlighted any unforeseen developments.

76 \ In general, they are not included.

77 \ Manuel – Exeter Interconnection FAB project (Ae Opinion No. 2016-54).

78 \ Ae Opinion Nos. 2013-121, -122 and -123 of 22 January 2014.

79 \ Article L. 110-1 of the Environmental Code. «Marine and terrestrial natural spaces, resources and environments, sites, daytime and night-time landscapes, air quality, living things and biodiversity are part of the nation's common heritage. This heritage generates ecosystem services and values in use. Biological processes, soils and geodiversity contribute to the creation of this heritage.»

80 \ More than 500 ha for the Rouen East bypass, 210 ha for the Triangle de Gonesse, 462 ha for the RN154/RN 12, 316 ha for the Castres – Toulouse motorway link (LACT).

81 \ RER A Chessy (Ae Opinion No. 2016-07 of 20 April 2016); PROGT Balata section (Ae Opinion No. 2016-20 of 08 June 2016); Boulevard des Pépinières in CAen (Ae Opinion No. 2016-23 of 08 June 2016).

82 \ «Projects for works, installations or public and private developments which, by their nature, size or location, are likely to have significant negative consequences on the agricultural economy, are the subject of a preliminary study including at least a description of the project, an analysis of the initial state of the agricultural economy of the territory concerned, a study of the effects of the project on the territory, the measures envisaged to avoid and reduce the project's significant adverse effects, as well as collective compensation measures aimed at securing the agricultural economy of the territory».

83 \ Line 15 east of the Grand Paris Express (Ae Opinion No. 2015-93 of 20 January 2016) and development of the Saint-Rémy-lès-Chevreuse and the Robinson RER B terminals – Ae Opinion No. 2016-100 & 109 of 21 December 2016).

84 \ Ae Opinion No. 2016-04 and No. 2016-04-bis of 06 April 2016.

85 \ In particular, in the large-scale extrapolation of the results of an experiment (dredging from the Rouen GPM – Ae Opinion No. 2016-25 of 22 June 2016).

86 \ FAB project (Ae Opinion No. 2016-54 of 21 September 2016).





Railway infrastructure in Strasbourg

## Analysis of the cumulative impacts of several projects

**The Environmental Code<sup>87</sup> has provided several complementary approaches for analysing cumulative impacts, as provided for in the «Projects» directive:**

- Article R.122-5 4 of the Environmental Code requires that the environmental impact assessment include an analysis of cumulative effects with those of other known projects. For the Ae, this analysis is of a level of detail comparable to that of the analysis of the project impacts;
- when a project is part of a work programme, the same article also requires that the environmental impact assessment includes an assessment of the impacts of the whole programme. As a general rule, this assessment is more general and qualitative;
- on several occasions, the Ae has also encountered the configuration of indirect impacts, linked to effects as a result of a project. This is most often a case of effects resulting from urbanisation through transport infrastructure: lines of the Greater Paris Express<sup>88</sup>, Rouen East bypass<sup>89</sup>, Nîmes – Manduel train station<sup>90</sup>.

The Ae considers that these analyses must be all the more developed and precise, that the effects are proven or very probable, especially when the realisation of the resulting developments is directly linked to the realisation of the project. For example, in the case of the Grand

Paris Express, it is Law No. 2010-597 of 03 June 2010 on Greater Paris which coherently integrates the development of a transport network with regional development contracts of the territories served, which are subject to environmental assessments. In its opinions on line 18 and line 17, the Ae recommended that the evaluation of the project be coordinated and coherent with the results of the environmental assessments of regional development contracts (CDT) of the affected territory. The Ae then focuses on the issues that appear to be the most significant in each case<sup>91</sup>.

The depth and completeness of such an analysis seems even more imperative to the Ae when the implementation of the project influences a future urbanisation through urban planning documents, decrees creating designated development zones (ZADs) or mixed development zones (ZACs), or financing protocols. When the cases submitted to the Ae did not provide for it, the Ae in particular recommended treating the impacts of urbanisation in the Triangle de Gonesse as indirect effects of the proposed line 17 or even the impacts of the Manduel and Redessan ZADs as indirect effects of the Nîmes – Manduel station. In the latter case, to clarify its expectations, the Ae mentioned the issues to be addressed (destruction of natural habitats, water systems, impacts related to additional traffic).

For the DUP of the Rouen East bypass project, taking into account in particular the subsequent concession, the Ae also wished to specify measures to avoid, reduce and compensate for the negative environmental effects of the additional suburbanisation of the eastern plateaus served by the project, particularly with regard to land use risks and the main negative effects resulting from traffic (air pollution, noise pollution, greenhouse gases).

In all cases, rather than a qualitative approach, which reviews all environmental issues indiscriminately, Ae recommends a targeted analysis of environmental issues for which a cumulative impact is likely and potentially significant. In particular, this led the Ae to reiterate in its preliminary framing opinion for the dredging of the Rouen GPM, and then to recommend in its opinion on the application for authorisation of the project<sup>92</sup>, that the focus be on the most important issues for this analysis (such as sediment hydrodynamics, Natura 2000, chemical and biological contamination, fishing activities) and on the issues for which the most important uncertainties remain. The Ae had, *mutatis mutandis*, considered that this approach should be adopted in the environmental impact assessments of other projects, which could be authorised over the period during which dredging would be permitted.



# NATIONAL PLANS AND PROGRAMMES

The Environmental Code provides that environmental plans, schemes, programmes and other planning documents which may have an impact on the environment are subject to an environmental assessment<sup>93</sup>. Within this framework, in 2016, the Ae was referred to important national «plans/programmes»: multi-annual energy programmes (PPEs) for mainland France and several overseas departments<sup>94</sup>, the National Plan for the Management of Radioactive Materials and Waste (2016-2018)<sup>95</sup>, the National Forest and Timber Programme (2016-2026)<sup>96</sup> and the National Nitrates Action Programme (NAP)<sup>97</sup>.

These documents all carry at least one ambition that the country sets and makes public, and whose scope is potentially major: to have a management channel for all radioactive waste, to quarter the country's greenhouse gas emissions by 2050, to reduce the share of nuclear energy in electricity generation to 50% by 2025, to adapt French forests to climate change, to reduce water pollution by nitrates and combat eutrophication.

The adequacy of the means to the objective is obviously a prerequisite for success, but also a factor determining the impacts of the plan/programme. This point is generally addressed insufficiently. This was systematically the case when it came to highlighting the need to adjust resources and levers, in order to achieve the objectives at the different levels of action: local, regional and national.

In the often encountered difficulties, the question of the ease of public understanding of strategic programming documents has been brought up regularly, as well as the question of defining, justifying and evaluating the various scenarios on which the plans/programmes are based.

Finally, even though plans/programmes involve the implementation of projects, some of which are themselves subject to environmental impact assessments, the environmental assessment of such a document should help to establish the framework and criteria for environmental performance that are useful for preparing the environmental impact assessments of the projects they result in, which was not the case in the documents examined.

These general remarks are illustrated in more detail below.

## Multi-annual energy programmes (PPEs)

### Achieving the objectives

The question of the adequacy of the means to the objectives led to numerous Ae recommendations on all the multi-annual energy programmes (PPEs) examined, including clarification of the trajectory and deadlines for achieving the objectives set by law, monitoring indicators and the corrective measures that would be put in place in case of deviation from these objectives.

In addition to their consistency with the objectives set by the law, the Ae raised the issue of the structuring of the means and objectives set in the PPEs with other regional or national plans/programmes. In all cases, the Ae recommended improving the presentation of balance sheets and other figures to make them comprehensible, comparable and consolidated within the PPE as well as within a region or France and for several island regions. It also recommended explaining the choices made by explaining their contribution to regional and national objectives (Corsica, Reunion).

For mainland France, the Ae recommended only proposing scenarios in line with the ambitions set by the law, since this was not the case. Some of the scenarios envisaged did not meet the legal targets for reducing greenhouse gas emissions. The case did not make it clear how some of the scenarios will meet the objectives of reducing the share of nuclear power in electricity production. The same was true for the evaluation of the levers set up to achieve energy independence in overseas departments.

### Electricity's leading role in the PPEs to the detriment of other components

While transport is one of the main consumers of energy and greenhouse gas emissions, the transport component of all PPEs appears to be significantly in decline, more markedly in the non-interconnected territories (ZNIs), bringing together Corsica and the overseas departments. To a lesser extent, this is also the case for the construction component.

87 \ References are cited according to the terminology of the articles in force in 2016.

88 \ In particular line 18 (Ae Opinion No. 2015-63 of 21 October 2015), line 17 (Ae Opinion No. 2015-78 of 02 December 2015), line 15 is (Ae Opinion No. 2015-93 of 20 January 2016).

89 \ Ae Opinion No. 2015-98 of 03 February 2016.

90 \ Ae Opinion No. 2016-106 of 21 December 2016.

91 \ Risk of flooding for the Grandes Ardoines ZAC (opinion concerning line 15 south), destruction of agricultural soils for the Saclay plateau and the Triangle de Gonesse (opinions relating to line 18 and line 17 respectively).

92 \ Ae Opinion No. 2015-43 of 22 July 2015 and No. 2016-25 of 22 June 2016.

93 \ Article L. 122-4 of the Environmental Code. «... Shall be the subject of an environmental assessment in light of the criteria set out in Annex II to Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment ...»

94 \ Ae Opinion No. 2016-57 of 24 August 2016 for metropolitan France, Ae Opinion No. 2016-74 of 19 October 2016 for Guadeloupe, Ae Opinion No. 2016-75 of 19 October 2016 for French Guiana (2016-2018 and 2019-2023), Ae Opinion No. 2016-76 of 19 October 2016 for Mayotte (2016-2018 and 2019-2023), it being specified that the opinions on the PPEs of Corsica and Reunion were issued in 2015, and that of Martinique has not yet been solicited by the petitioners.

95 \ Ae Opinion No. 2016-36 of 20 July 2016.

96 \ Ae Opinion No. 2016-31 of 06 July 2016.

97 \ Ae Opinion No. 2015-101 of 16 March 2016 on a referral received in 2015.



In the non-interconnected territories (ZNIs), this has resulted in multi-annual energy programmes (PPEs), that are mainly developed on the electricity component. This reveals the information asymmetry between EDF (Electricity of France) (which still maintains, either directly or through its subsidiaries, the quasi-monopoly of the transmission, distribution and balance functions of the network, while being the main producer) and the communities or State departments.

**The Ae issued recommendations that it felt seemed necessary for a more balanced approach:**

- conduct an independent counter-evaluation on the disconnection threshold<sup>98</sup> imposed on intermittent renewable energy producers (Reunion, Guadeloupe, Mayotte) and better support its justification and value, or undertake studies to optimise the organisation and effectiveness of systems services (French Guiana);
- better justify the additional thermal generation needs as a result of the PPE (Reunion, Guadeloupe, Mayotte).

It should also be stressed that the specificity of the ZNI leads to questions related to the balance of the electricity network, which is dealt with under conditions that are significantly different to those of mainland France. In this particular context, the Ae has made recommendations concerning the organisation of the systems services that contribute to this balance. Since the development of PPEs could have provided an opportunity to question some of the often overlooked evidence (such as the need for a disconnection threshold for renewable energies) or to develop new solutions for such services, the Ae has made recommendations for studies to be undertaken on these issues (French Guiana, mainland France PPE).





## Points of weakness found in PPEs

There are some «blind spots» or weaknesses that reoccur in all of the PPEs examined by the Ae.



PPE French Guiana (biomass plant)

Thus, it could be expected that State-sponsored planning documents, together with the local authority in each ZNI, would examine the appropriateness of using the tax tool, or even using it widely to change certain behaviours in line with the approach taken, before taking a position<sup>99</sup>. This was not the case, which led the Ae to issue recommendations on the taxation of fuels for transport (Mayotte, Guadeloupe).

As regards mainland France, the Ae recommended increasing:

- the consideration given to the change in the portion of taxation on energy in the taxation system;
- the analysis of a transition from non-environmental taxes (e.g. on labour) to energy taxes;
- the possibility of providing a tax tool, in particular in the event that the intended trajectory is disregarded.

In addition to the transport services already mentioned, certain aspects remain clearly behind, such as the control of energy expenditure (MDE) in the zones, wind energy in the French overseas departments, self-consumption (French Guiana), and more generally, renewable energy sources.

## Recurring difficulties encountered in the environmental assessment of PPEs

None of the strategic environmental assessments of PPEs have attempted to assess the energy consumption and greenhouse gas emissions associated with imports of manufactured goods or their evolution. However, it has been demonstrated that de-industrialisation leads to a shift of consumption and emission sources, often outside the borders, which appears as declines in the balance sheets presented, while the corresponding consumption and emissions have indeed occurred. Symmetrically, energy dependence requires imports of energy resources, the overall environmental effects



PPE French Guiana

of which, including those related to their production and transport, should be compared in order to identify the best alternative for local production. Without ignoring the difficulty of assessing the carbon content of goods produced abroad, the Ae has made recommendations to assess these elements.

Finally, as for all national programmes, the PPEs provide for or allow the implementation of a number of projects (such as power stations, gas pipelines, dams). The environmental assessment should provide a framework and elements to be taken up and developed by the environmental impact assessments of these projects when they are in the process of being carried out. This was not the case, thus missing the opportunity to prepare and allow an evaluation of each project consistent with that of the PPEs. The Ae has made recommendations in this regard, and has also called for the assessment of the PPE to be completed by assessing their impacts on water, air and

98 \ Renewable electricity production rate beyond which access to the production network is no longer guaranteed in order to maintain the functionality of the network

99 \ Consistent with OECD recommendations on the place of environmental taxation in France (Environmental Performance Review of France 2016, OECD: <http://www.oecd.org/fr/france/examens-environnementaux-de-l-ocde-france-2016-9789264252592-fr.htm>.)



health through an assessment of the foreseeable impacts of the resulting projects. More generally, the cases are struggling to understand the issue of avoidance, reduction and compensation (ERC) measures in the strategic planning process.

This «ERC» approach, which is traditional for projects, is more complex for plans/programmes, in particular when their purpose is inherently to improve the way the environment is taken into account. This in itself cannot justify the absence of ERC measures since the improvement of the environment may necessitate work or cause impacts which may themselves have an effect on the environment.



Villefermoy forest

## Other national plans/programmes examined in 2016

The National Plan for the Management of Radioactive Materials and Waste (PNGMDR), which is revised every three years, is a tool for «putting under control» the management of radioactive materials and waste. In particular, it aims at leaving no waste without a suitable management channel. It is therefore a plan which is inherently an improvement process for the environment.

The National Plan for Forest and Timber (PNFB) brings the forest policy outlook from 2016 to 2026 and sets out its broad guidelines into actions.

The National Nitrates Action Programme is established by the Ministers for Agriculture and the Environment for the implementation of Directive No. 91/676/EEC of 12 December 1991, known as the Nitrates Directive, which aims to reduce and prevent water pollution by nitrogen of agricultural origin (chemical fertilisers, livestock waste and livestock manure). The national action programme is supplemented in each region by a regional action programme.

Specific recommendations were issued for each of these documents. On the other hand, it appears that a number of them make it possible to draw common lessons between all these plans/ programmes, which are also shared with the PPEs.

### Facilitating public understanding

The Ae tries its best so that the public has all the elements that allow for a good understanding despite the technical nature of the contents of these documents. As with PPEs, the Ae has made recommendations on each of these other plans/programmes to facilitate this understanding and standardise the data and balance sheets presented.

For the PNGMDR, for example, defining and taking into account the harmfulness of waste and the evolution of their radioactivity, including in the very long term, seemed to be important prerequisites for the public's understanding of the concerns of this waste.





### **Ensuring the consistency of the plan/programme with local, regional or even international planning**

As with PPEs, questions have arisen about the structuring and consistency of other plans/programmes with local, regional or even international planning tools, as well as with other regulations. Thus, the documents submitted generally did not contain sufficient elements to verify this consistency, or they were presented in a way that prevents their consolidation at different levels.

The National Plan for Forest and Timber (PNFB) provides for its implementation at the regional level in regional forest and timber programmes (PRFB). As already pointed out, the structuring and consistency of the objectives and actions planned at different levels is an important issue in the plans and programmes.

The Ae thus recommended specifying the framework given to the PRFB on several points. This applies in particular to measures to promote biodiversity and the case for targeting forests for extra harvesting of timber, as well as the environmental impact of softwood and poplar plantations and accompanying measures of these plantations in favour of biodiversity. Finally, the Ae also recommended identifying territories that share similar environmental issues and for which the PRFB measures should be coordinated in particular.

The National Nitrates Action Programme presented was the third one the Ae had been referred to. As for the PNFB, the Ae recalled the recommendations of its previous opinions to which no reply had been given. Nor did it address the question of how this document relates to regional nitrates programmes. The Ae recommended indicating the consequences of the national plan at the regional level and explaining how they will achieve the objectives set by the Directive. The Ae also recommended clarifying their contribution to the achievement of the objectives of the Water Planning and Management Scheme (SDAGE), in accordance with the other relevant Directive (Water Framework Directive) as well as with the OSPAR Convention and action plans for the marine environment to better show their consistency with these other documents. In all cases, it is indeed water quality (particularly water in eutrophied sectors) that is at stake, which should have been at the heart of the environmental assessment, and the Ae was not persuaded that the Nitrates Action Plan (PAN) included elements to restore the ecological quality of the expected environments.



### The key issue for the scenarios

CAs with PPEs, the scenarios selected may raise issues of compliance with the objectives set out elsewhere. This notably concerns the PNGMDR, in connection with the PPE of mainland France.

The choice of the scenarios selected in the PNGMDR with regard to the evolution of nuclear power production and the associated fleet is a critical factor in the nature and quantity of emissions and waste produced. Thus, the consistency between the PNGMDR and PPE of mainland France should be highlighted more explicitly in the document, since the PPE and PNGMDR are based on nuclear power generation scenarios that should be identical.

Consideration of the long term in the analysis of scenarios is also a key question. The assumptions for the renewal of the nuclear fleet and the dismantling of certain facilities now provided for by law, such as taking into account the entire projected life cycle of the new generation of reactors appear particularly important for this plan, whose facilities are expected to last for over a century.

Finally, certain hazards may modify the balances of the PNGMDR scenarios, for example, the hazards of the Cigéo deep geological storage project or the long-term stability of deposits of a large volume of radioactive mining waste. The Ae recommended developing its analysis and assessing the consequences in order to be able to anticipate the issues and impacts that may result.

As regards the National Forest and Timber Programme (PNFB), similar problems have been encountered. To carry out the strategic environmental assessment of the PNFB (as well as with any plan/programme), it is necessary to compare the effects of the application of the plan with what would happen in the absence of a plan (baseline scenario). Since the future outlook of the territory without the PNFB has not been presented, the Ae recommended that it be considered, as with the Nitrates Action Plan, for which a more complete and objective presentation of the changes to the water quality of the continental aquatic environments over the last twenty years would have been useful, in particular in order to present the territory's outlook in the absence of a plan, in a way that is more consistent with the observed trends.

Finally, for several plans (PNFB, PAN), no alternative to the presented choices seems to have been considered. The reasons for these choices are often not justified. In particular, the PAN appeared to the Ae to be paying more attention to the legal objective of ending a specific European dispute than to the objective of restoring water quality in connection with the EU Water Framework Directive (WFD). For the Ae, this low ambition opens up prospects for future disputes on the implementation of the WFD, which regrettably are not anticipated and prevented.



Storage cells at the CSFMA  
(Low and Intermediate Radioactive Waste Storage Centre)



Storage of big bags at the bottom of an alveolus





## Links between plans/programmes and projects

As in the case of PPEs, the same issues of linking the strategic environmental assessment of plans/programmes and project environmental impact assessments were encountered.

The PNFB includes actions in «operational breakdowns» that are not well described. One of the first challenges is that such actions should be better explained and their potential effects better understood. Another issue is that the plan should provide an appropriate framework for avoidance, reduction and compensation (ERC) measures for regional plans. More specifically, the Ae recommended that the work programme for structuring the links between professionals in the sector should include the obligation to draw up environmental specifications for the main economic intervention measures.

Conversely, the Nitrates Action Plan (PAN) contains several very precise regulatory measures, leaving little room for manoeuvre at the regional level (such as application in mountain areas, field storage or spreadable nitrogen ceilings for grassland farms). For the Ae, the environmental assessment of such measures can only be carried out on a global scale, by means of an investment in studies and research, which it has only been able to encourage in its opinion.

The case of the National Plan for the Management of Radioactive Materials and Waste (PNGMDR) was particularly interesting, as the Ae, again in 2016, deliberated on several opinions concerning projects related to regulated nuclear facilities (INBs) or their dismantling<sup>100</sup>. The analysis of these projects raised new questions, which were very similar to those of the PNGMDR.

For example, the Ae stressed the need for a global approach to the environmental impacts of waste and discharges, in particular by treatment sector but also for each project, since the discharges are allowed without considering them as waste, and the same principles do not apply to them. The question of the waste generated during the dismantling phases (although they may require a length of time that are comparable to, or even longer than, the operation of the facilities) has made it possible to recall the need to make waste production chronicles consistent with their management and sector capacities. This illustrates the ongoing need to ensure that each of the projects that depend on it are included in the plan/programme. In response, this led the Ae to raise the question of the conditions for licensing new nuclear facilities, in the absence of treatment facilities for some of their waste or in case of saturation of the existing warehousing and storage facilities.

100 \ Ae opinions concerning regulated nuclear facilities (INBs) in 2016: Ae Opinion No. 2015-95 of 20 January 2016 on the modification of the regulated nuclear facility No. 138 operated by the Socatri at the Tricastin site (84), Ae Opinion No. 2016-18 of 06 April 2016 on the ANDRA subterranean laboratory in Bure (55), Ae Opinion No.

2016-56 of 21 September 2016 on the decommissioning of regulated nuclear facility 105 – AREVA NC in Pierrelatte (26), Ae Opinion No. 2016-83 of 23 November 2016 on the dismantling of INB 94 in Chinon (37), Ae Opinion No. 2016-86 of 23 November 2016 on the dismantling of the Georges Besse I plant at Eurodif production (26), Ae Opinion No.

2016-90 of 07 December 2016 on the further dismantling of INB 52 (enriched uranium processing workshops) with a view to its final shutdown, on the French Alternative Energies and Atomic Energy Commission (CEA) site in Cadarache (13).



## NEW TYPES OF PLANS AND PROGRAMMES SUBMITTED TO THE Ae IN 2016

The extension of the Ae's scope to new plans and programmes by successive amendments of Article R.122-17, made 2016 a year of «experimentation» for several reasons.

Firstly, it is necessary to take into consideration the small number of cases that the Ae has thus recently mobilised, namely five cases concerning three nomenclature headings of the 20 or so in question: charters of the regional natural parks (PNR) of the Sainte-Baume and Oise – Pays-de-France<sup>101</sup>, the Authion Water Planning and Management Scheme<sup>102</sup>, departmental quarry plans (SDC) of Sarthe and Mayotte<sup>103</sup>. To this total are added the opinions given on two urban planning cases, the Regional Territorial Coherence Plan (SCOT) of Nantes-Saint-Nazaire and the compatibility of the Paris land use plan (PLU) linked to the creation of the Paris-Bercy ZAC<sup>104</sup>, mentioned by the Ae because of their complexity and the importance of the environmental issues involved, in accordance with the provisions of Article R.104-21 of the Urban Planning Code.

This is not the time to take stock, but first to analyse the new questions that are being asked, or a working method to adapt them.

Through observations and recommendations on the environmental report, the French Environmental Authority opinions aim to make the project owner more clearly involved in a quality, integrated and iterative evaluation process that is useful for the development of the plan or programme. The Ae is thus often called upon to decide on questions concerning the report's methods or compliance of all the items provided for by the

regulations. These assessments will be able to have an immediate purpose by improving the quality of the case presented to the public, but also a longer-term objective by providing useful advice when revising the plan or programme under consideration. In particular, the opinion on the Sarthe departmental quarry plan (SDC) was deliberately placed in the perspective of the ambition necessary for the upcoming establishment of the regional quarry plan which should succeed it within three years. In the same spirit, the Ae addresses the regional natural parks (PNR), which are revising their charter by raising a few points that could have been developed in the environmental reports that have already been submitted.

The introduction of an environmental assessment, accompanied by an Ae opinion before a public inquiry, is a new and specific step in the process of creating or renewing a PNR. As is the case with all the plans and programmes submitted to it, the Ae particularly calls for the attention of the project owners on its recommendations to extend the analyses of the environmental assessment and to make a commitment to take them into account.

It notes for all cases the importance of the monitoring mechanism, which should be a useful reference in the long term. The Ae urges that it be implemented rapidly and, where appropriate, to supplement it, while noting the need to differentiate between the indicators relating to the priority provisions of the plan, which are likely to constitute a steering tool and provide a warning for the risk of failing to meet the objectives. However, the Ae



Sainte-Baume regional natural park





insists on the necessary realism which must govern the choice of indicators, by clearly identifying what is the responsibility of the project owner and what falls within the context of the development of the territory subject to the plan or programme.

The plans or programmes that have been submitted to the Ae in 2016 within this framework do not mobilise thematic areas of competence different from those mobilised by the national projects or plans on which it already expresses itself. On the other hand, how a national-level authority treats cases with a territorial scope clearly raises the question of knowledge of the territory concerned in all the senses of the term: knowledge of the geographical area concerned, sensitivities of the environments and issues at stake, the framework documents produced by the State or local authorities and with which the plan or programme must be articulated, as well as knowledge of the actors and the whole governance system. The importance of the commitment of the communities/authorities in this dynamic of governance is systematically raised, if necessary with a need for clarification, as with the Authion Water Planning and Management Scheme (SAGE).

Some plans such as PNR charters and the SAGEs have a notable feature, which the Ae had already come across with national park charters: The very objective of their existence is notably to improve the preservation of the environment in relation to a “plan-less” reference situation, but still taking into account the economic dimension. The Ae does not forget that all territorial projects are established according to a logic that claims to take the environment into account, but does not necessarily and systematically prioritise it. They constitute the end of several years of exchanges, sharing of diagnoses, and consultations or even negotiations, in order to establish guidelines for achieving the widest possible consensus.

Thus, the Ae takes into consideration the groups of stakeholders involved, while taking a more distanced view of the relevance of the stated objectives, the consensus reached and ultimately the capability of the plan or programme to produce satisfactory responses to environmental issues. In its opinion on the Sarthe departmental quarry plan (SDC), the Ae took into account that the consensus had been long negotiated to establish the extraction clearance levels for the territories and chose to prioritise analysing possible reinforcements of protection to be included in the future regional scheme, which should be adopted three years down the line. In its opinion on the Authion Water Planning and Management Scheme (SAGE), for which the objectives to be achieved flow directly from the deadlines of the EU Water Framework Directive (WFD), the Ae recommends that consideration be given to revise it rapidly in order to consolidate its ambitions.

This distance is all the more an asset if, in addition to the components of the case, the rapporteurs can rely on the knowledge of the territories that have the environmental assessment services of the Regional Directorates for the Environment, Planning and Housing (DREAL). It is thus through enhanced collaboration that the Ae opinions on territorial plans and programmes will be rooted in the realities of the territories.

The opinion on the Nantes Territorial Coherence Plan (SCOT) was a very unusual case within the scope of Ae opinions. Filed on the day after the implementation of the reform, it was the first urban planning case examined by the Ae during the emergence of the Environmental Authority Regional Missions (MRAEs). Therefore, the Ae could not fully benefit from the experience of its members, in a context that made producing a written opinion by the regional prefect’s DREAL difficult. The rapporteurs were thus obliged to take cognisance both of the delicacy of the regulatory scope of a Territorial Coherence Plan (SCOT), the specificities of its environmental assessment, the terms of the ongoing European dispute over the Grand Ouest airport structuring project, and all of the territory’s stakes. Although direct and confident, oral exchanges with the DREAL environmental assessment department have only partially made it possible to overcome the lack of writing.

For all of these «new plans and programmes» now dealt with by the Ae, the Ae is confronted with the same challenges that the MRAEs must also face: keeping in line with the opinions which may have been given by the local authority on similar or former cases in the same territories, while ensuring a significant change in their content with a view to greater homogeneity of form and doctrine at the national level and guaranteeing the necessary distance, an indispensable guarantee of its independence. It will have to meet this challenge in particular by consolidating a common culture among the DREALs, the MRAEs and the Ae, aimed at a continuous improvement in project owners taking the environment into account.

101 \ Opinion No. 2016-063 of 05 October 2016, No. 2016-72 of 19 October 2016 and No. 2016-108 of 11 January 2017.

103 \ Opinion No. 2016-50 of 21 September 2016 and No. 2016-97 of 21 December 2016.

104 \ Opinion No. 2016-44 of 20 July 2016 and No. 2016-77 of 19 October 2016.

102 \ Opinion No. 2016-047 of 07 September 2016.



## FOLLOW-UP OF Ae OPINIONS

The Ae is required to issue its opinions at a specific point in the project development and authorisation process: the stage preceding the public inquiry. In the case of relatively small projects, this time is unique. In the case of larger projects, authorisations can be issued at several stages of the process, which generally requires successive updates of the environmental impact assessment and therefore updates of the Ae opinion. In 2016, there were a significant number of updated opinions.

The updated opinions examine the new elements provided by the updated environmental impact assessment. The Ae also seeks to re-examine the recommendations of its previous opinions in light of how the project developed: were the recommendations relevant? Were they convergent with issues raised during the public inquiry? How has the project owner been able to take these recommendations into account? Have they led to a change in the project or its avoidance, reduction and compensation measures? Etc.

In most cases, the Ae is no longer called upon to decide on the project after its opinion is issued. As early as 2015, the Ae wanted to define a method to stay informed of the future of the projects on which it had decided, and thus wanted to remain aware of the follow-up given to its opinions, whether at the project level or more

broadly at the level of all project owners its opinions are likely to concern<sup>105</sup>. The purpose of this is for the Ae to be able to draw consequences for its own practices.

At its request, in 2015 and 2016 Cerema<sup>106</sup> conducted a thorough analysis of the follow-up given to several opinions<sup>107</sup> in order to define a reproducible method of evaluation after the public inquiry. For each project, this method mobilises a task officer for a few days of work. It includes reading through the response submission prepared by the project owner, the public inquiry commission's report, communications from interested parties, the authorisations issued, and short interviews with various project stakeholders.

The Ae plans to continue to apply this method on a regular basis on selected opinions. The lessons learned will further refine Ae's recommendations both in terms of substance and expression, always with a view to making the best possible contribution to the consideration of the environment and the quality of the democratic process in the drafting of projects.





# Ae ADMINISTRATIVE COMMUNICATIONS

As early as 2014, the French Environmental Authority decided to produce «Ae administrative communications».

These administrative communications take the form of summaries with a commentary of its opinions and areas for further discussion and progress on a given field (for example, a type of project or an environmental theme). Each administrative communication is drawn up in light of the opinions issued by the Ae at the administrative communication's decision date, on the reflections and questions raised within it and with various stakeholders, as well as legislation and regulations in force at the time and, where appropriate, other sources such as the European Commission's interpretative notes. The administrative communication is prepared by rapporteurs appointed by the chair. They are free to consult any «resource person» they have identified and who would be in a position to contribute to its drafting. As is the case for opinions, its content is then submitted to a peer review by the Ae, before deliberation.

In 2014, the Ae produced a first administrative communication on land-use and agricultural planning and forest management (AFAF) related to major public works, followed by a new administrative communication in 2015 on the consideration of noise in road and railway infrastructure projects<sup>108</sup>. These administrative communications are available on its website. It continued this synthesis work in 2016 with two new administrative communications: administrative communication No. 2016-N-03 on the Natura 2000 impact assessments and administrative communication No. 2016-N-04 on strategic projects of major maritime ports, summarising the 11 opinions issued by the Ae. The main aim of these administrative communications, designed mainly for the use of project owners, is to provide a better understanding of the regulations and an increased visibility on how Ae wishes to analyse these environmental issues.



Rouen major maritime port

<sup>105</sup> \ Indeed, some recommendations may be difficult to take into account by a time-constrained project owner starting his project, which does not prevent different clients from taking them into account at a later stage.

<sup>106</sup> \ – The French Centre for Studies and Expertise on Hazards, the Environment, Mobility and Development (*Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement*).

<sup>107</sup> \ Five opinions deliberated by the Ae between 2011 and 2013. At SNCF's request, it has also been applied to five elimination of level crossing projects in the Rhône-Alpes – Auvergne region of the SNCF.

<sup>108</sup> \ Administrative Communication No. 2014-N-01 and No. 2015-N-02.









## APPENDICES





## APPENDICES

You can find all the opinions and case-by-case decisions taken by the Ae in 2016 at the following addresses:

### OPINIONS ISSUED IN 2016

<http://www.cgedd.developpement-durable.gouv.fr/les-avis-deliberes-de-l-autorite-environnementale-a2353.html>



# WEB

### DECISIONS ISSUED

<http://www.cgedd.developpement-durable.gouv.fr/2015-en-cours-d-examen-et-decisions-rendues-r432.html>

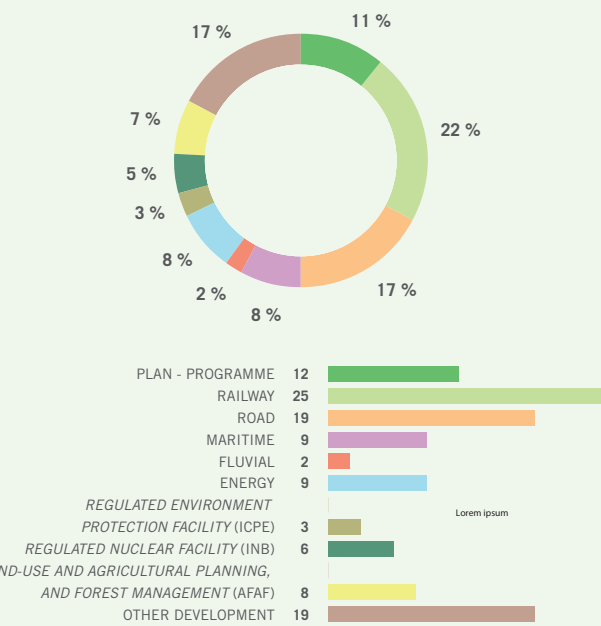


# WEB

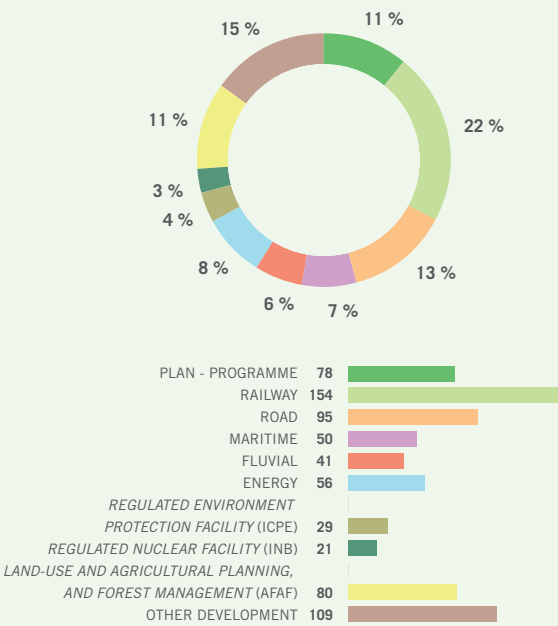


# OPINIONS

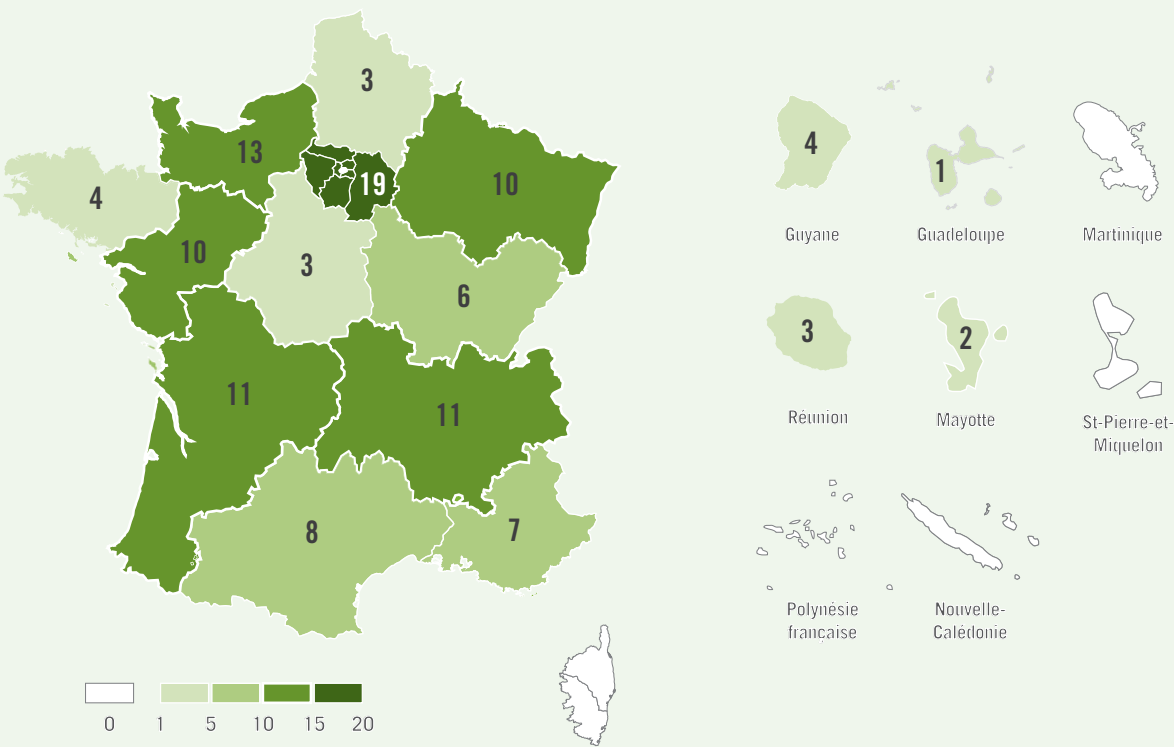
THEMATIC BREAKDOWN OF 2016 OPINIONS (in % and number)



THEMATIC BREAKDOWN OF 2009 OPINIONS (in % and number)



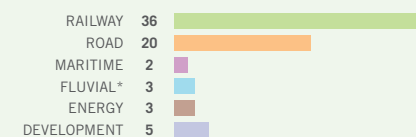
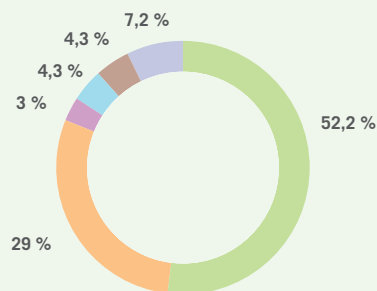
GEOGRAPHICAL DISTRIBUTION OF 2016 OPINIONS (and number)





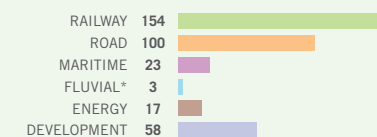
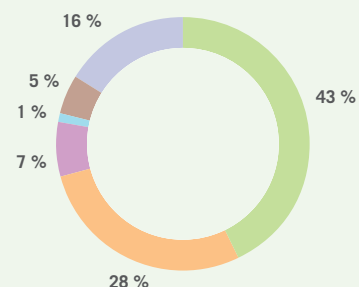
## «CASE-BY-CASE» DECISIONS ON PROJECTS

**THEMATIC BREAKDOWN OF 2016 DECISIONS** (in % and number)



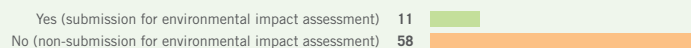
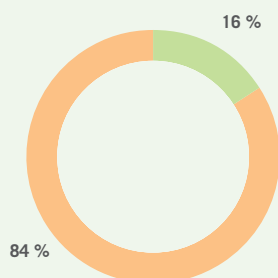
\* Category created in 2016

**THEMATIC BREAKDOWN OF DECISIONS SINCE 2012** (in % and number)

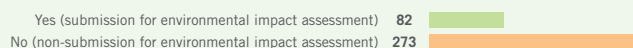
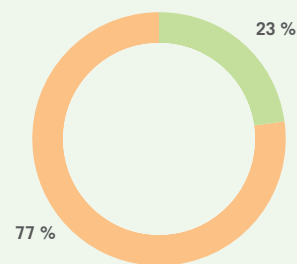


\* Category created in 2016

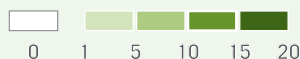
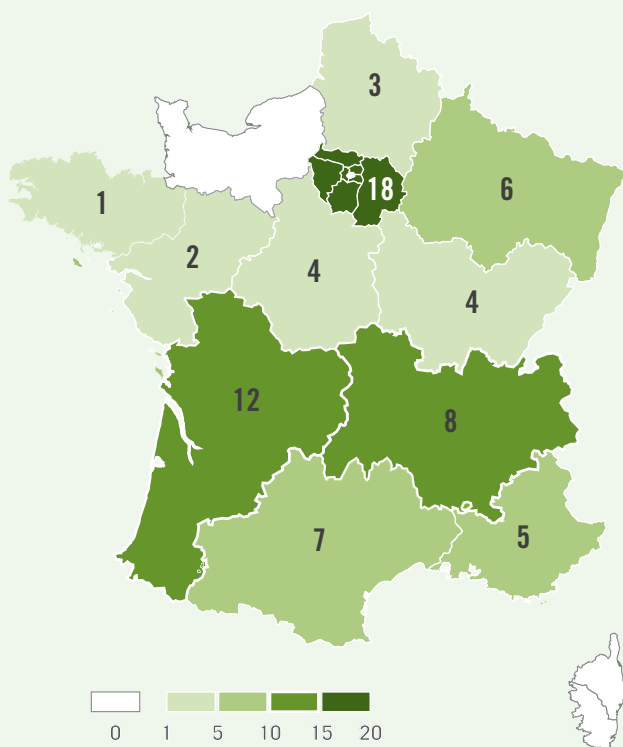
**NATURE OF DECISIONS TAKEN IN** (in % and number)



**NATURE OF DECISIONS TAKEN SINCE 2012** (in % and number)



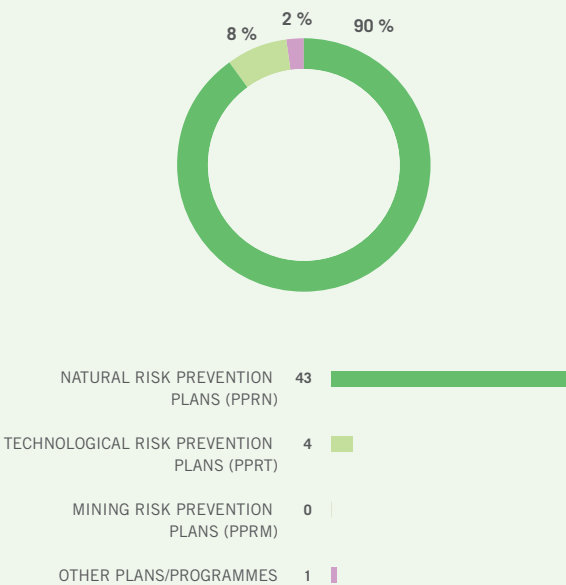
**GEOGRAPHICAL DISTRIBUTION OF 2016 DECISIONS** (in number)



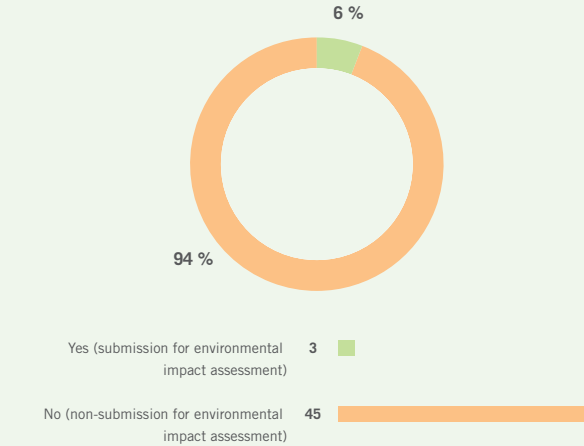


# «CASE-BY-CASE» DECISIONS ON PLANS/PROGRAMMES

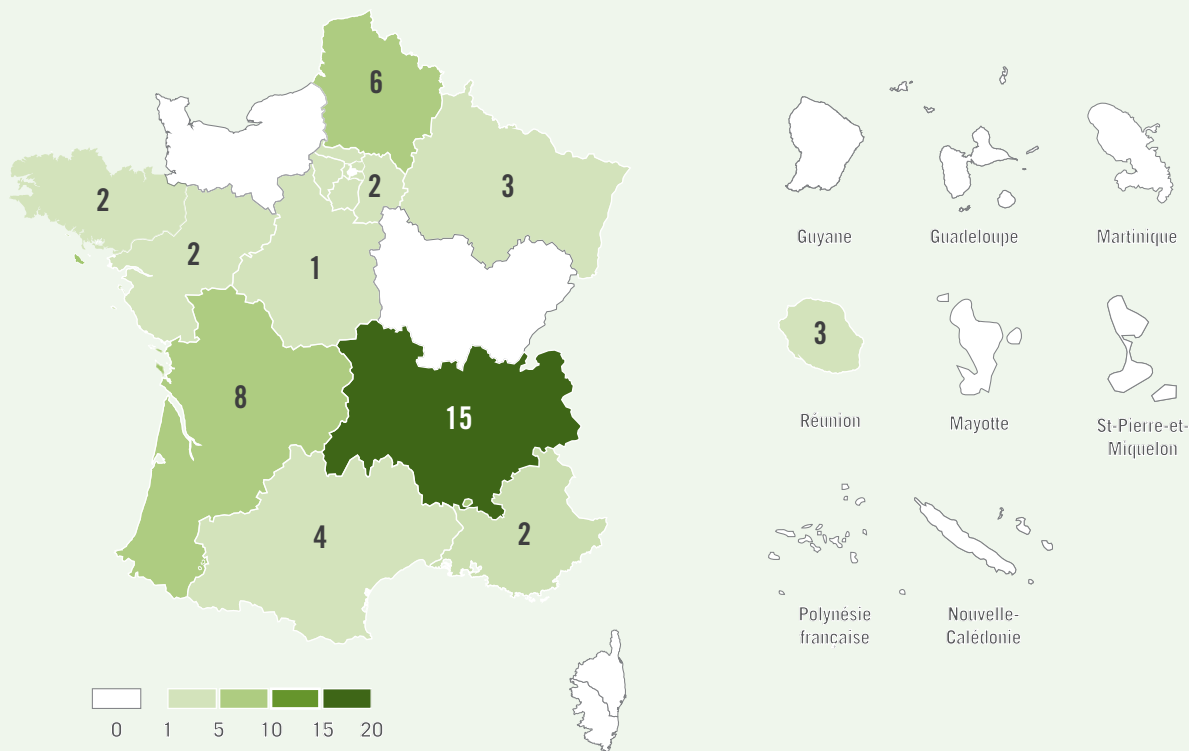
DISTRIBUTION OF DECISIONS BY TYPE OF PLANS / PROGRAMMES 2016  
(in % and number)



NATURE OF PLAN/PROGRAMME DECISIONS TAKEN IN 2016  
(in % and number)



GEOGRAPHICAL DISTRIBUTION OF 2016 DECISIONS (in number)





## ABBREVIATIONS AND ACRONYMS

Ae	Autorité environnementale du CGEDD (Environmental authority of the CGEDD)
AFAF	Aménagement foncier agricole et forestier (Agricultural and forest land development)
AFDI	Agriculteurs français et développement international (French farmers and international development)
ANDRA	Agence nationale pour la gestion des déchets radioactifs (National radioactive waste management agency)
ASN	Autorité de sûreté nucléaire (French nuclear safety authority)
CEA	Commissariat à l'énergie atomique et aux énergies alternatives (French alternative energies and atomic energy commission)
CEREMA	Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement (Scientific and technical resource centre in the fields of sustainable development)
CDT	Contrat de développement territorial (Territorial development contract)
CGAAER	Conseil général de l'alimentation, de l'agriculture et des espaces ruraux (General council for food, agriculture and rural spaces)
CGEDD	Conseil général de l'environnement et du développement durable (General council for the environment and sustainable development)
CGI	Commissariat général à l'investissement (General commissariat for investment)
CJUE	Cour de Justice de l'Union européenne (Court of Justice of the European Union)
CNDP	Commission nationale du débat public (National commission for public debate)
CNPN	Conseil national de protection de la nature (French national council for nature protection)
CSPNB	Conseil scientifique du patrimoine naturel et de la biodiversité (Scientific council for natural Heritage and Biodiversity)
DREAL	Direction régionale de l'environnement, de l'aménagement et du logement (Regional Directorate for Environment, Development and Housing)
DUP	Déclaration d'utilité publique (Declaration of public utility)
ERC	Éviter, réduire, compenser (Avoid, reduce, offset)
GES	Gaz à effet de serre (Greenhouse gas)
GPE	Grand Paris Express
GPM	Grand port maritime (Major seaport)
ICPE	Installation classée pour la protection de l'environnement (Installation classified for the protection of the environment)
INB	Installation nucléaire de base (Basic nuclear installations)
IOTA	Installations, ouvrages, travaux et aménagements (loi sur l'eau) (Plants, structures, works and activities (Water law))
JTE	Justification technico-économique (Technical and economic justification)
LGV	Ligne à grande vitesse (High speed railway line)
MEEM	Ministère de l'environnement de l'énergie et de la mer (French ministry of the environment, energy and the sea)
MLHD	Ministère du logement et de l'habitat durable (French ministry of housing and sustainable development)
MRAe	Mission régionale d'autorité environnementale (Regional environmental authority mission)
OSPAR	Convention Oslo – Paris
PAN	Programme d'actions national nitrates (National nitrates action programme)



PAPI	Programme d'actions de prévention des inondations (Flood prevention programme)
PLU	Plan local d'urbanisme (Local town plan)
PNFB	Programme national de la forêt et du bois (French national forestry and wood industry programme)
PRFB	Programme régional de la forêt et du bois (Regional forest and wood programme)
PNGMDR	Plan national de gestion des matières et déchets radioactifs (National radioactive materials and waste management plan)
PNR	Parc naturel régional (Regional nature park)
PPE	Programmation pluri-annuelle de l'énergie (Long term energy plans)
PPP	Partenariat Public Privé (Public-private partnership)
PPRN	Plan de prévention des risques naturels prévisibles (Foreseeable natural risk prevention plan)
PPRT	Plan de prévention des risques technologiques (Technological risk prevention plan)
RAPO	Recours administratif préalable obligatoire (Obligatory pre-trial administrative appeal)
RTE	Réseau de transport d'électricité (Electricity transport network)
SAGE	Schéma d'aménagement et de gestion des eaux (Water development and management plan)
SCOT	Schéma de cohérence territoriale (Territorial cohesion plan)
SDAGE	Schéma directeur d'aménagement et de gestion des eaux (Water development and management master plan)
SDC	Schéma départemental des carrières (Quarries departmental plan)
SGP	Société du Grand Paris
SRCE	Schéma régional de cohérence écologique (Regional ecological coherence plan)
SRCAE	Schéma régional climat-air-énergie (Regional climate Air and energy Plan)
IUCN	International Union for Conservation of Nature
VNF	Voies navigables de France (French inland waterways public authority)
ZAC	Zone d'aménagement concerté (Joint development zone)
ZAD	Zone d'aménagement différé (Designated development area)
ZNI	Zone non interconnectée (Non-interconnected zone)
ZNIEFF	Zone naturelle d'intérêt écologique, faunistique et floristique (Natural areas of ecological, faunistic and floristic interest)
ZPS	Zone de protection spéciale (Special protection zone)
ZSC	Zone spéciale de conservation (Special conservation zone)



Publication director Philippe Ledenvic – Editor-in-Chief: Maud de Crépy – Copy editor: Mélanie Moueza Graphic design and realisation: [www.tempsreel.info](http://www.tempsreel.info). Imprim'Vert certified printer (guarantees the management of hazardous waste in approved sectors). The printer has certified its control chain: FSC BV-COC-839867. Printed on partially recycled paper from sustainably managed forests.

Photo credits: © Fotolia – thekeoch; iStock – Givaga; MEEM – MLHD: © Arnaud Bouissou; © Laurent Mignaux; © REA / Gilles Rolle.

Acknowledgements to Ae members for their contributions to this annual report.



