OBJECTIVES

Through annual surveys, IRSN follows the opinion of the French regarding risks, including those relating to nuclear and radiological risks. The results of the surveys are presented in the IRSN Barometer on the perception of risks and security in France, created in 1990 in its current form.

AUTHORS

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METHODOLOGY

OF THE SURVEY

A significant change was made in the 2021 Barometer: a switch from a face-to-face survey to a survey conducted over the Internet. It was made for two reasons: to benefit from the advantages of online questionnaires (better geographical distribution of respondents, lower price, etc.) and to reduce the disadvantages of face-to-face questionnaires (in particular the time needed to collect 1,000 responses, or the potential impossibility of conducting the survey in case of a lockdown). This evolution entails risks of discontinuity in the data series. Indeed, the person questioned does not necessarily react in the same way when replying to an interviewer or to a computer. The effect is mostly negligible. For certain types of questions, however, a significant bias is recorded. We wanted to identify with certainty the variations attributable to the method and to distinguish them from those due to the natural evolution of the perception that the French have of a particular issue. That is why we exceptionally conducted two surveys in parallel this year: one over the Internet (the results of which are presented in the Barometer) and another, a control survey, entrusted to our partner CDA, which used the same method as in previous years (face-to-face). Both surveys were conducted at the same time with a sample that met the same criteria of representativeness.

Internet survey: conducted by Harris Interactive November 17-25, 2020 with a representative sample of 2,011 people. Average time, 22 minutes.

Face-to-face survey: conducted by CDA from November 16 to December 3, 2020 with a representative sample of 1,048 people. Average time, 39 minutes.

In both cases, the representativeness of the sample was ensured by the quota method (gender, age, socio-professional category of the interviewee) after stratification by region and size of town.

KEY

In the graphs of the IRSN 2021 Barometer:

... ... ... Means the question was withdrawn this specific year
### REPORT’S CONTENTS

<table>
<thead>
<tr>
<th>PART</th>
<th>Pages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>04 – 12</td>
<td>The current concerns of the French</td>
</tr>
<tr>
<td>2</td>
<td>13 – 35</td>
<td>The outlook of the French on science and expertise</td>
</tr>
<tr>
<td>3</td>
<td>36 – 91</td>
<td>The opinion of the French on risk situations</td>
</tr>
<tr>
<td>4</td>
<td>92 – 138</td>
<td>The opinion of the French on nuclear matters</td>
</tr>
<tr>
<td>ANNEXES</td>
<td>139 – 147</td>
<td></td>
</tr>
</tbody>
</table>
PART 1

THE CURRENT CONCERNS OF THE FRENCH

5 – 6
Main concerns of the French

7 – 8
Main environmental concerns

9 – 12
The perception of disasters
In France, which of the following current issues do you find most concerning?

- Health (26%)
- Terrorism (19%)
- Climate imbalance (15%)
- Extreme poverty and exclusion (13%)
- The lack of security (9%)
- Unemployment (9%)
- The global geopolitical instability (migrant crisis, tensions between countries, etc.) (8%)
- Nuclear risks (1%)
- Don’t know (0%)
In France, which of the following current issues do you find most concerning?

The proposed responses have changed over the years. In 2002, “the lack of security” replaced “violence in the suburbs”. In 2018, the modality “destitution and exclusion” was replaced by “extreme poverty and exclusion”. In 2019, the modality “climate change” was replaced by “climate imbalance”; the responses “environmental degradation”, “traffic accidents”, “AIDS”, “floods”, “chemical risk”, “the quality of medical care” and “substance abuse (drugs, alcohol, tobacco)” were removed. In 2020, the modality “health” was added.

* The “others” curve groups together the responses not represented this year but proposed in previous years, for example: “too high taxation” in 2000, or “influenza A (H1N1)” in 2009.

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The proposed responses have changed over the years. In 2002, “the lack of security” replaced “violence in the suburbs”. In 2018, the modality “destitution and exclusion” was replaced by “extreme poverty and exclusion”. In 2019, the modality “climate change” was replaced by “climate imbalance”; the responses “environmental degradation”, “traffic accidents”, “AIDS”, “floods”, “chemical risk”, “the quality of medical care” and “substance abuse (drugs, alcohol, tobacco)” were removed. In 2020, the modality “health” was added.

* The “others” curve groups together the responses not represented this year but proposed in previous years, for example: “too high taxation” in 2000, or “influenza A (H1N1)” in 2009.
QUESTION No. 2

Here are a number of environmental issues. Which one do you find most concerning?

NOVEMBER 2020

CLIMATE IMBALANCE 39%
THE DISAPPEARANCE OF ANIMAL SPECIES 14%
DAMAGE FROM NATURAL DISASTERS 13%
THE DESTRUCTION OF FORESTS 9%
WATER POLLUTION 8%
AIR POLLUTION 8%
THE DEPLETION OF THE OZONE LAYER 4%
SOIL POLLUTION 4%
DON'T KNOW 1%
Here are a number of environmental issues. Which one do you find most concerning?

Some of the proposed responses have changed over the years. In 2002, "air pollution" replaced "air pollution in urban areas" and "greenhouse effect (atmospheric warming)" replaced "atmospheric warming". In 2004, "water pollution" replaced "pollution of lakes, rivers and seas". In 2014, "global warming" replaced "greenhouse effect (atmospheric warming)". In 2019, "noise pollution" and "landscape degradation" were removed. The modality "global warming" was replaced by "climate imbalance".

---

**QUESTION No. 2 CONT.**

**EVOLUTION OF THE RESULTS**

*2000 - 2020*

---

Some of the proposed responses have changed over the years. In 2002, “air pollution” replaced “air pollution in urban areas” and “greenhouse effect (atmospheric warming)” replaced “atmospheric warming”. In 2004, “water pollution” replaced “pollution of lakes, rivers and seas”. In 2014, “global warming” replaced “greenhouse effect (atmospheric warming)”. In 2019, “noise pollution” and “landscape degradation” were removed. The modality “global warming” was replaced by “climate imbalance”. 

---

**IRSN BAROMETER 2021 // ALL THE CHARTS**
Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?

- Nuclear Power Plants: 31%
- Radioactive Waste Disposals: 21%
- Chemical Facilities: 19%
- Virus Research Laboratories: 13%
- Transport of Hazardous Material: 9%
- Natural Gas Distribution: 3%
- Dams: 2%
- Air Transport: 1%
- Other: 1%
- Don’t Know: 0%
Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?

The proposed list of responses has evolved over the years. “Oil refineries”, “road freight”, “rail transport” and “military installations” were removed in 2019, followed by “fireworks factories and warehouses” in 2020.
QUESTION No. 4
Which of the following catastrophic events do you find most frightening?

EVOLUTION OF THE RESULTS
1986 - 2020

In 2020, the response “Hurricane Katrina in New Orleans in 2005” has been removed. Previously, in 2019, “Heat waves (France, Sweden, Japan in the summer of 2018)” was replaced by “The 2003 heat wave in France” and “Earthquakes (Haiti in 2010, Nepal in 2015, Philippines and Indonesia in autumn 2018)” was replaced by “The Haiti earthquake in 2010”.

*The “others” curve groups the responses not represented this year but proposed in previous years, for example: in 1989, “The earthquake in Armenia” received 20% of the replies. In 2000, “The Air France Concorde crash” received 5% of responses. In addition, the “other” curve represents the answers proposed by the respondents themselves. In 2019, 3% spontaneously answered “other: Lubrizol”, in reference to the fire at the chemical plant in Rouen on September 26th 2019.

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**QUESTION No. 5**

Here are some old catastrophic events. Can you indicate if you have personally heard about them?

**NOVEMBER 2020**

<table>
<thead>
<tr>
<th>Event</th>
<th>Yes, and I know exactly what it is</th>
<th>Yes, and I know approximately what it is</th>
<th>Yes, but only in name</th>
<th>No, I have never heard of it</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>The oil spill on the French coastline due to the sinking of the Erika in 1999</td>
<td>61</td>
<td>24</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>The storms of December 1999 in France</td>
<td>64</td>
<td>20</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>The Air France Concorde crash in Gonesse in 2000</td>
<td>54</td>
<td>25</td>
<td>13</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>The oil spill on the Brittany coast due to the sinking of the Amoco Cadiz in 1978</td>
<td>49</td>
<td>20</td>
<td>12</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>The sinking of the Russian submarine Kursk in 2000</td>
<td>28</td>
<td>27</td>
<td>21</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>The Mexico City earthquake in 1985</td>
<td>16</td>
<td>25</td>
<td>29</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>The Union Carbide chemical plant accident in Bhopal, India in 1984</td>
<td>16</td>
<td>18</td>
<td>18</td>
<td>47</td>
<td>1</td>
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</tbody>
</table>

This year, we conducted two parallel surveys: one on the Internet (the results of which are presented in the Barometer) and another, a control survey, carried out in the same way as in previous years (face-to-face). For almost all of the questions, the effect of the new method is negligible.

For this question, however, a significant bias is recorded. The difference between the two surveys is explained on page 14 of the Barometer 2021 ("The Analysis"). The results of both surveys can be found on the website: [https://barometre.irsn.fr/graphiques](https://barometre.irsn.fr/graphiques).
THE OUTLOOK OF THE FRENCH ON SCIENCE AND EXPERTISE

14 – 17
The image of science and expertise

18 – 24
Expertise, as expected by the French

24 – 31
How to share the results of expertise

32 – 35
The management of high-risk facilities
Here are a number of propositions related to science. For each one, please indicate on the following scale whether you...

NOVEMBER 2020

1. I trust scientific institutions
   - 71.0%
   - 22.0%
   - 6.0%
   - 1.0%
   - 0.0%

2. The development of science and technology generates more benefits than negative effects
   - 61.0%
   - 28.0%
   - 11.0%

3. There can be more than one correct answer to most scientific questions
   - 53.0%
   - 19.0%

The responses “strongly disagree” and “somewhat disagree” were grouped into “disagree”; the “somewhat agree” and “strongly agree” into “agree”.

1 – I trust scientific institutions

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Here are a number of propositions related to science. For each one, please indicate on the following scale whether you...

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

2 – The development of science and technology generates more benefits than negative effects

3 – There can be more than one correct answer to most scientific questions
The responses “strongly disagree” and “somewhat disagree” were grouped into “disagree”; the “somewhat agree” and “strongly agree” into “agree”. In 2019, the answer “may agree” was replaced by “neither agree nor disagree”.

Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you...

**QUESTION No. 2**

1. Understandable information on the risks of installations must be made available to everyone

<table>
<thead>
<tr>
<th>Year</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>94</td>
<td>5</td>
<td>1</td>
<td>0</td>
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<td>2005</td>
<td>88</td>
<td>6</td>
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<tr>
<td>2006</td>
<td>89</td>
<td>5</td>
<td>1</td>
<td>0</td>
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<tr>
<td>2007</td>
<td>86</td>
<td>9</td>
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<td>2008</td>
<td>88</td>
<td>4</td>
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<td>2011</td>
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<td>2013</td>
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<tr>
<td>2014</td>
<td>90</td>
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</tr>
<tr>
<td>2015</td>
<td>91</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**E V O L U T I O N O F T H E R E S U L T S**

2004 - 2020

1 – Understandable information on the risks of installations must be made available to everyone
**QUESTION No. 2 CONT.**

Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you...

---

**EVOLUTION OF THE RESULTS**

**2002 - 2020**

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree". In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

---

2 – In their positions, the scientific experts must also present their points of disagreement

![Graph showing the evolution of responses from 2002 to 2020 for question 2.](image)

3 – It is normal that not all scientific experts' positions are made public

![Graph showing the evolution of responses from 2002 to 2020 for question 3.](image)
What are, in your opinion, the two most important qualities of scientific experts? First and second.

First
- **They are technically competent** (34%)
- **They are honest in their scientific approach** (26%)
- **They are independent in their judgement** (20%)
- **They are reactive to unforeseen situations** (9%)
- **They can communicate in a way that everyone understands** (7%)
- **They pay attention to the concerns of the civil society** (4%)
- **Don’t know** (0%)

Second
- **They are honest in their scientific approach** (24%)
- **They are independent in their judgement** (24%)
- **They are technically competent** (16%)
- **They can communicate in a way that everyone understands** (15%)
- **They are reactive to unforeseen situations** (13%)
- **They pay attention to the concerns of the civil society** (7%)
- **Don’t know** (1%)
QUESTION No. 3

What are, in your opinion, the two most important qualities of scientific experts? First and second.

CUMULATIVE RESULTS
NOVEMBER 2020

- THEY ARE TECHNICALLY COMPETENT: 50%
- THEY ARE HONEST IN THEIR SCIENTIFIC APPROACH: 50%
- THEY ARE INDEPENDENT IN THEIR JUDGEMENT: 44%
- THEY ARE REACTIVE TO UNFORESEEN SITUATIONS: 22%
- THEY CAN COMMUNICATE IN A WAY THAT EVERYONE UNDERSTANDS: 22%
- THEY PAY ATTENTION TO THE CONCERNS OF THE CIVIL SOCIETY: 11%
- DON’T KNOW: 1%

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QUESTION No. 3
CONT.

What are, in your opinion, the two most important qualities of scientific experts? (two possible answers)

EVOLUTION OF THE CUMULATIVE RESULTS
2002 - 2020

In 2020, the responses “They declare their possible links with the industry” and “They are creative” were removed, and “They can communicate in a way that everyone understands” and “They pay attention to the concerns of the civil society” were added.

* In 2020, the response “They state honestly how They obtained their results” was replaced by “They are honest in their scientific approach”.

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IRSN BAROMETER 2021 // ALL THE CHARTS
QUESTION No. 4: In general, do you have a good or a bad opinion of scientific experts?

EVOLUTION OF THE RESULTS
1998 - 2020
In 2019, the answer “may agree” was replaced by “neither agree nor disagree”. The responses “strongly disagree” and “somewhat disagree” were grouped into “disagree”; the “somewhat agree” and “strongly agree” into “agree”.

Here are three sentences regarding experts and decision-makers. For each one, please indicate whether you...

**NOVEMBER 2020**

<table>
<thead>
<tr>
<th></th>
<th>STRONGLY AGREE</th>
<th>SOMEWHAT AGREE</th>
<th>NEITHER AGREE NOR DISAGREE</th>
<th>SOMEWHAT DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When it comes to risk, it is normal to take every precaution even when the scientists only have doubts</td>
<td>34,0</td>
<td>43,0</td>
<td>15,0</td>
<td>5,0</td>
<td>3,0</td>
<td></td>
</tr>
<tr>
<td>2. We must be certain of the scientific experts’ positions before informing the public</td>
<td>38,0</td>
<td>41,0</td>
<td>15,0</td>
<td>4,0</td>
<td>2,0</td>
<td></td>
</tr>
<tr>
<td>3. Policy makers don’t take enough into account the positions of scientific experts</td>
<td>26,0</td>
<td>31,0</td>
<td>27,0</td>
<td>12,0</td>
<td>4,0</td>
<td></td>
</tr>
</tbody>
</table>

**EVOLUTION OF THE RESULTS 1997 - 2020**

In 2019, the answer “may agree” was replaced by “neither agree nor disagree”. The responses “strongly disagree” and “somewhat disagree” were grouped into “disagree”; the “somewhat agree” and “strongly agree” into “agree”.

1. When it comes to risk, it is normal to take every precaution even when the scientists only have doubts

![Graph showing the evolution of the results from 1997 to 2020.](chart)
In 2019, the answer "may agree" was replaced by "neither agree nor disagree". The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

**QUESTION No. 5 CONT.**

Here are three sentences regarding experts and decision-makers. For each one, please indicate whether you...

### EVOLUTION OF THE RESULTS 1998 - 2020

In 2019, the answer "may agree" was replaced by "neither agree nor disagree". The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".

2 – We must be certain of the scientific experts’ positions before informing the public

3 – Policy makers don’t take enough into account the positions of scientific experts
QUESTION No. 6
Since the start of the 2020 coronavirus epidemic, the government has relied on input from a scientific council to make decisions. In your opinion, is this a good thing?

NOVEMBER 2020

<table>
<thead>
<tr>
<th>Option</th>
<th>Yes Subtotal</th>
<th>No Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES, QUITE</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>YES, SOMEWHAT</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>NO, NOT REALLY</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>NO, NOT AT ALL</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>DON'T KNOW</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

QUESTION No. 7
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

NOVEMBER 2020

<table>
<thead>
<tr>
<th>Action</th>
<th>Priority</th>
<th>Secondary</th>
<th>Useless</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAKE PUBLIC ITS EXPERTISE REPORTS</td>
<td>71,0</td>
<td>24,0</td>
<td>4,0</td>
<td>1,0</td>
</tr>
<tr>
<td>ANSWER ALL THE QUESTIONS RAISED BY NGOS AND CITIZENS</td>
<td>69,0</td>
<td>25,0</td>
<td>5,0</td>
<td>1,0</td>
</tr>
<tr>
<td>ORGANISE PUBLIC MEETINGS TO DISCUSS ITS WORK</td>
<td>45,0</td>
<td>44,0</td>
<td>10,0</td>
<td>1,0</td>
</tr>
<tr>
<td>MAKE AVAILABLE TO ALL THE LIST OF ALL ITS CURRENT WORK</td>
<td>45,0</td>
<td>45,0</td>
<td>9,0</td>
<td>1,0</td>
</tr>
<tr>
<td>MAKE AVAILABLE TO ALL THE LIST OF REQUESTS FOR EXPERTISE</td>
<td>44,0</td>
<td>42,0</td>
<td>12,0</td>
<td>2,0</td>
</tr>
</tbody>
</table>
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

**1 – Make public its expertise reports**

**2 – Answer all the questions raised by NGOs and citizens**
In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

**EVOLUTION OF THE RESULTS 2006 - 2020**

In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

### QUESTION No. 7 CONT.

**3 - Organise public meetings to discuss its work**

<table>
<thead>
<tr>
<th>Year</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
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<td>15</td>
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<td>2007</td>
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### 4 - Make available to all the list of all its current work

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Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

QUESTION No. 7 CONT.

EVOLUTION OF THE RESULTS 2006 - 2020

In 2019, the modality "important but not a priority" has been removed and the modality "useless" has been added.

5 – Make available to all the list of requests for expertise

© IRSN
Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

NOVEMBER 2020

THE LACK OF SCIENTIFIC CERTAINTY

THE FIGHT AGAINST TERRORISM

THE FACT THAT THE DECISION RELATED TO THE RESULT OF THE EXPERTISE HAS NOT YET BEEN TAKEN

THE "TOP SECRET" CLASSIFICATION

INDUSTRIAL SECRECY

THE IMPOSSIBILITY TO EXPRESS THE RESULTS IN TERMS UNDERSTANDABLE BY THE PUBLIC

© IRSN
**QUESTION No. 8 CONT.**

Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

### EVOLUTION OF THE RESULTS 2006 - 2020

**1 – The fight against terrorism**

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not really" and "no, not at all" as "no".

**2 – The lack of scientific certainty**

* In 2019, the proposal "the scientific uncertainty of the results obtained" was replaced by "the lack of scientific certainty".
The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not really" and "no, not at all" as "no".

Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

**EVOLUTION OF THE RESULTS**

2006 - 2020

**QUESTION No. 8 CONT.**

3 – The "Top secret" classification

4 – The fact that the decision related to the result of the expertise has not yet been taken*

*In 2019, the proposal "the wait for the decision to be taken following the results of the expertise" was replaced by "the fact that the decision related to the result of the expertise has not yet been taken".
Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

5 – Industrial secrecy*

6 – The impossibility to express the results in terms understandable by the public

* In 2020, the proposal "Industrial property" was replaced by "Industrial secrecy".
In 2020, the responses "public authorities at national and local levels" was replaced by "public regulatory authorities".

Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation?

- A committee of scientific experts: 34%
- Public regulatory authorities: 27%
- Non-governmental organisations and associations: 14%
- Local elected representatives (regional council, general council, municipality): 12%
- The operator of the facility: 7%
- A local citizens' committee: 6%
- Don't know: 0%

© IRSN
Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation? (one answer only)*

In 2019, the way the question was asked was different: the French answered about each actor independently of the others. The specific results for that year can be downloaded free of charge on http://barometre.irsn.fr.

* Before 2020, the wording of the question was: “For an installation that poses risks to the environment and neighbouring populations, who do you think should control what happens outside the installation?” In addition, the response “public authorities at national and local levels” was replaced by “public regulatory authorities”.

© IRSN
QUESTION No. 10
Would you be willing to spend time participating to information and consultation meetings on the management of a high-risk installation near your home?*

EVOLUTION OF THE RESULTS
2004 - 2020

* A significant break was noted in 2020. It is due to the new survey methodology: the switch from a face-to-face survey to an Internet survey (see methodological note on page 2). For this question, the difference between the two surveys are explained on page 22 of “The Analysis”. The results of both surveys can be consulted on the website: https://barometre.irsn.fr/graphiques.
A structure bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be in your opinion...

QUESTION No. 11

EVOLUTION OF THE RESULTS
2004 - 2020

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PART 3

THE OPINION OF THE FRENCH ON RISK SITUATIONS

37 – 57
The risks the French feel most exposed to

58 – 78
The level of trust in the authorities to protect them

79
Overview of at-risk situations

80 – 88
Acceptability of facilities

89 – 91
The representations of the coronavirus
### QUESTION No. 1

In each of the following areas, do you consider that the risks for the French population in general are...?

#### NOVEMBER 2020

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© IRSN
### QUESTION No. 1 CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

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<th>Area</th>
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QUESTION No. 1
CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS
2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking and transport of hazardous material.

1 – Home and leisure accidents

2 – Radiation therapy accidents

“Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low”.

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QUESTION No. 1
CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

3 – Traffic accidents

4 – Alcohol*

* In 2020, “Alcohol” replaced “Alcoholism”.

“Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low”.

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**QUESTION No. 1 CONT.**

In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS 2002 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

5 - Mobile phone relay antennas*

6 - Cancer

*The wording was "Mobile phones" in 2002, then "Mobile phone network antennas" from 2004 to 2018 and finally "Mobile phone relay antennas" in 2020.

"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".
**QUESTION No. 1 CONT.**
In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS 1997 - 2020**
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

7 – Heat waves

8 – Nuclear power plants

“Very high” and “high” responses were grouped into “high”, “near-zero” and “low” responses into “low”.

© IRSN
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".
QUESTION No. 1
CONT.

In each of the following areas, do you consider that
the risks for the French population in general are...?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every
other year. To help readers, we still reproduce all historical series below.
Therefore, six graphs do not present data for the year 2020.

11 – Drugs

12 – Forest fires

“Very high” and “high” responses were grouped into “high”, “near-zero” and “low” responses into “low”.

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IRSN BAROMETER 2021 // ALL THE CHARTS
In each of the following areas, do you consider that the risks for the French population in general are...?

**13 – Household waste incinerators**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

**14 – Floods**

*Very high* and *high* responses were grouped into "high"; *near-zero* and *low* responses into "low".

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**EVOLUTION OF THE RESULTS 1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

---

**15 – Chemical facilities**

---

**16 – High-voltage power lines**

"Very high" and "high" responses were grouped into "high", "near-zero" and "low" responses into "low". 

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**QUESTION No. 1 CONT.**

In each of the following areas, do you consider that the risks for the French population in general are...?
**QUESTION No. 1 CONT.**

In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS 2004 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

17 – Occupational diseases

18 – Nanoparticles

"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".

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QUESTION No. 1
CONT.
In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS
1999 - 2020
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

19 – Obesity*

20 – GMOs (Genetically Modified Organisms)

* In 2020, “Obesity” replaced “Child obesity”.

“Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low”.

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QUESTION No. 1
CONT.
In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 2014 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

21 – Pandemics (global epidemics)

22 – Endocrine disruptors

"Very high" and "high" responses were grouped into "high"; "near-zero" and "low" responses into "low".
PART 3 // THE OPINION OF THE FRENCH ON RISK SITUATIONS

QUESTION No. 1
CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

23 – Pesticides*

24 – Air pollution*

* The title was “atmospheric pollution” until 2018.

* The title was “Nitrates and pesticides” until 2011.

“Very high” and “high” responses were grouped into “high”, “near-zero” and “low” responses into “low”.

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In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS 1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

25 – Water pollution*

26 – Soil pollution

* The title was *Lake, river and sea pollution* until 2018.

*Very high* and *high* responses were grouped into "high"; *near-zero* and *low* responses into "low".
QUESTION No. 1 CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 1998 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

27 – Noise pollution*

28 – Food products

* The title was "Noise" until 2018.

"Very high" and "high" responses were grouped into "high", "near-zero" and "low" responses into "low".
In each of the following areas, do you consider that the risks for the French population in general are...?

**QUESTION No. 1**

**CONT.**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

**EVOLUTION OF THE RESULTS 1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

**29 – Medical X-rays**

**30 – Indoor radon**
**QUESTION No. 1**

In each of the following areas, do you consider that the risks for the French population in general are...?

---

**EVOLUTION OF THE RESULTS 1999 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

---

### 31 – Radioactive fallout in France from the Chernobyl accident

---

### 32 – Medical risks

---

“Very high” and “high” responses were grouped into “high”, “near-zero” and “low” responses into “low”.

---

© IRSN
In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS**

**1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

**QUESTION No. 1**

**CONT.**

33 – AIDS

![Graph showing the evolution of AIDS from 1997 to 2020. The graph displays data in percentage charts for each year, with categories for high, medium, low, and don't know responses.]

34 – Marine flooding (temporary flooding caused by the sea)

![Graph showing the evolution of marine flooding from 1997 to 2020. The graph displays data in percentage charts for each year, with categories for high, medium, low, and don't know responses.]

“Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low.”
QUESTION No. 1 CONT.

In each of the following areas, do you consider that the risks for the French population in general are...?

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

35 – Smoking*

* The title was “Teenage smoking” until 2018.

36 – Terrorism

*Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low”.

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**QUESTION No. 1 CONT.**

In each of the following areas, do you consider that the risks for the French population in general are...?

**EVOLUTION OF THE RESULTS 1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all historical series below. Therefore, six graphs do not present data for the year 2020.

37 – Transport of hazardous materials

“Very high” and “high” responses were grouped into “high”; “near-zero” and “low” responses into “low”.

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## QUESTION No. 2

Do you trust the French authorities to protect people against the following risks?

### NOVEMBER 2020

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Yes, Definitely</th>
<th>Yes, Somewhat</th>
<th>Neither Trust Nor Doesn’t Trust</th>
<th>Don’t Know</th>
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</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>7</td>
<td>34</td>
<td>31</td>
<td>13</td>
</tr>
<tr>
<td>Medical X-rays</td>
<td>9</td>
<td>30</td>
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<td>13</td>
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<tr>
<td>Forest fires</td>
<td>5</td>
<td>32</td>
<td>30</td>
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<tr>
<td>Cancer</td>
<td>6</td>
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<td>Radiation therapy accidents</td>
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<td>15</td>
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<td>Food products</td>
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<tr>
<td>Home and leisure accidents</td>
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<td>Household waste incinerators</td>
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<td>Nuclear power plants</td>
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<td>25</td>
<td>24</td>
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<td>Heat waves</td>
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<td>20</td>
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<td>Occupational diseases</td>
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<td>24</td>
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<td>23</td>
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<td>Obesity</td>
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<td>36</td>
<td>22</td>
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<tr>
<td>Floods</td>
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<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Water pollution</td>
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<td>21</td>
<td>26</td>
<td>28</td>
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</table>

© IRSN
<table>
<thead>
<tr>
<th>Risk</th>
<th>YES, DEFINITELY</th>
<th>YES, SOMEWHAT</th>
<th>NEITHER TRUST NOR DOESN'T TRUST</th>
<th>NO, NOT REALLY</th>
<th>NO, NOT AT ALL</th>
<th>DONT KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine flooding (temporary flooding caused by the sea)</td>
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<td>21</td>
<td>36</td>
<td>21</td>
<td>18</td>
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<td>Mobile phone relay antennas</td>
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<td>Pandemics (global epidemics)</td>
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<td>Chemical facilities</td>
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<td>Radioactive waste</td>
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<td>26</td>
<td>28</td>
<td>23</td>
<td>1</td>
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<tr>
<td>GMOs (genetically modified organisms)</td>
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<td>27</td>
<td>29</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Noise pollution</td>
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</tr>
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<td>Indoor radon</td>
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<td>45</td>
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<td>17</td>
<td>27</td>
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<td>Air pollution</td>
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<td>28</td>
<td>31</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Radioactive fallout in France from the Chernobyl accident</td>
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<td>15</td>
<td>30</td>
<td>25</td>
<td>25</td>
<td>1</td>
</tr>
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<td>Soil pollution</td>
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<td>Nanoparticles</td>
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<tr>
<td>Endocrine disruptors</td>
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<td>33</td>
<td>27</td>
<td>23</td>
<td>1</td>
</tr>
</tbody>
</table>
Do you trust the French authorities to protect people against the following risks?

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

**1 – Home and leisure accidents**

**2 – Radiation therapy accidents**
EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

3 – Traffic accidents

4 – Alcohol*

* In 2020, “Alcohol” replaced “Alcoholism”.

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”. 
**QUESTION No. 2**

Do you trust the French authorities to protect people against the following risks?

**EVOLUTION OF THE RESULTS 2002 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

5 – Mobile phone relay antennas*  

* The title was "Mobile phones" in 2002, then "Mobile phone network antennas" from 2004 to 2018 and finally "Mobile phone masts" in 2020.

6 – Cancer

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".
Do you trust the French authorities to protect people against the following risks?

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

7 – Heat waves

8 – Nuclear power plants

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

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QUESTION No. 2

Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

9 – Chemical waste

10 – Radioactive waste

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

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QUESTION No. 2
Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

11 – Drugs

12 – Forest fires

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

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QUESTION No. 2  
CONT.
Do you trust the French authorities to protect people 
against the following risks?

EVOLUTION OF THE RESULTS  
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every 
other year. To help readers, we still reproduce all the historical series 
below. Consequently, six graphs do not present data for the year 2020. 
These are: traffic accidents, drugs, high-voltage power lines, medical 
risks, smoking, and transport of hazardous material.

13 – Household waste incinerators

14 – Floods

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

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Do you trust the French authorities to protect people against the following risks?

**EVOLUTION OF THE RESULTS 1997 - 2020**

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

**15 – Chemical facilities**

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

**16 – High-voltage power lines**

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QUESTION No. 2

Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS
2004 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

17 – Occupational diseases

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

18 – Nanoparticles

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IRSN BAROMETER 2021 // ALL THE CHARTS
Do you trust the French authorities to protect people against the following risks?

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

* In 2020, "Obesity" replaced "Child obesity".

* Until 2002, the title was "genetic manipulations".

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".

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QUESTION No. 2 CONT.

Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS
2014 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

21 – Pandemics (global epidemics)

22 – Endocrine disruptors

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”. 
QUESTION No. 2
CONT.
Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS 1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

23 – Pesticides*

* The title was "Nitrates and pesticides" until 2011.

24 – Air pollution

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

The answers "yes, definitely" and "yes, somewhat" were grouped together as "yes"; the answers "no, not at all" and "no, not really" as "no".
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

**27 – Noise pollution***

* The title was “Noise” until 2018.

**28 – Food products**

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

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QUESTION No. 2
CONT.

Do you trust the French authorities to protect people against the following risks?

EVOLUTION OF THE RESULTS
1997 - 2020

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

29 – Medical X-rays

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

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Do you trust the French authorities to protect people against the following risks?

Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

31 – Radioactive fallout in France from the Chernobyl accident

32 – Medical risks

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no”.

© IRSN
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

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Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

35 – Smoking*

* The title was "Teenage smoking" until 2018.

36 – Terrorism

The answers “yes, definitely” and “yes, somewhat” were grouped together as “yes”; the answers “no, not at all” and “no, not really” as “no.”
Since 2019, twelve at-risk situations are only offered to the French every other year. To help readers, we still reproduce all the historical series below. Consequently, six graphs do not present data for the year 2020. These are: traffic accidents, drugs, high-voltage power lines, medical risks, smoking, and transport of hazardous material.

Do you trust the French authorities to protect people against the following risks?

**37 – Transport of hazardous materials**
Representation of the 31 at-risk situations according to the 2 dimensions: high risk level and trust.
Would you be willing to live near...?

**QUESTION No. 3**

Would you be willing to live near...

- A WIND FARM
- A MOBILE PHONE RELAY ANTENNA
- A HIGH-VOLTAGE POWER LINE
- A NUCLEAR RESEARCH CENTER
- A SEISMIC ZONE
- A NUCLEAR POWER PLANT
- AN AIRPORT
- A HOUSEHOLD WASTE INCINERATOR
- A MARINE FLOODING ZONE (TEMPORARY FLOODING CAUSED BY THE SEA)
- A FLOOD ZONE
- A RADIOACTIVE WASTE DISPOSAL
- A LANDFILL
- A MAJOR CHEMICAL FACILITY
- A CHEMICAL WASTE DISPOSAL

**NOVEMBER 2020**

- **A WIND FARM**
  - Yes: 41
  - No: 58
  - Don’t Know: 9

- **A MOBILE PHONE RELAY ANTENNA**
  - Yes: 36
  - No: 63
  - Don’t Know: 9

- **A HIGH-VOLTAGE POWER LINE**
  - Yes: 22
  - No: 77
  - Don’t Know: 7

- **A NUCLEAR RESEARCH CENTER**
  - Yes: 18
  - No: 81
  - Don’t Know: 9

- **A SEISMIC ZONE**
  - Yes: 17
  - No: 82
  - Don’t Know: 9

- **A NUCLEAR POWER PLANT**
  - Yes: 16
  - No: 83
  - Don’t Know: 10

- **AN AIRPORT**
  - Yes: 11
  - No: 88
  - Don’t Know: 9

- **A HOUSEHOLD WASTE INCINERATOR**
  - Yes: 10
  - No: 89
  - Don’t Know: 10

- **A MARINE FLOODING ZONE (TEMPORARY FLOODING CAUSED BY THE SEA)**
  - Yes: 9
  - No: 90
  - Don’t Know: 12

- **A FLOOD ZONE**
  - Yes: 9
  - No: 90
  - Don’t Know: 12

- **A RADIOACTIVE WASTE DISPOSAL**
  - Yes: 7
  - No: 92
  - Don’t Know: 10

- **A LANDFILL**
  - Yes: 7
  - No: 92
  - Don’t Know: 10

- **A MAJOR CHEMICAL FACILITY**
  - Yes: 6
  - No: 93
  - Don’t Know: 11

- **A CHEMICAL WASTE DISPOSAL**
  - Yes: 5
  - No: 94
  - Don’t Know: 11

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Would you be willing to live near...?

**QUESTION No. 3 CONT.**

**EVOLUTION OF “YES” RESPONSES 1982 - 2020**

- A NUCLEAR POWER PLANT
- A MAJOR CHEMICAL FACILITY
- A CHEMICAL WASTE DISPOSAL
- A RADIOACTIVE WASTE DISPOSAL

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PART 3 // THE OPINION OF THE FRENCH ON RISK SITUATIONS

QUESTION No. 3
CONT.

Would you be willing to live near...

EVOLUTION
2000 - 2020

1 – an airport

2 – a mobile phone relay antenna

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QUESTION No. 3
Would you be willing to live near...?

EVOLUTION
1990 - 2020

3 – a nuclear power plant

4 – a nuclear research center

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PART 3 // THE OPINION OF THE FRENCH ON RISK SITUATIONS

QUESTION No. 3 :: Would you be willing to live near...?

CONT.

EVOLUTION 1990 - 2020

5 – a household waste incinerator

6 – a landfill

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IRSN BAROMETER 2021 // ALL THE CHARTS
QUESTION No. 3 CONT.
Would you be willing to live near...?

EVOLUTION 1990 - 2020

7 – a major chemical facility

8 – a high-voltage power line
QUESTION No. 3
Would you be willing to live near...?

EVOLUTION
1990 - 2020

9 – a wind farm

10 – a chemical waste disposal
QUESTION No. 3

Would you be willing to live near...?

EVOLUTION

1990 - 2020

11 – a radioactive waste disposal

12 – a flood zone
QUESTION No. 3
Would you be willing to live near...

CONT.

13 – a seismic zone

14 – a marine flooding zone (temporary flooding caused by the sea)
QUESTION No. 4

What is the first thing that comes to mind when you hear the word “coronavirus”? Please list the first five words that come to mind.

1 – First word

The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.

2 – Second word
What is the first thing that comes to mind when you hear the word “coronavirus”? Please list the first five words that come to mind.

The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.
What is the first thing that comes to mind when you hear the word “coronavirus”? Please list the first five words that come to mind.

The word clouds in the French version featured all the words collected. Here, words with the same radical have been grouped and only the words with a frequency above 0.5% are displayed.
THE OPINION OF THE FRENCH ON NUCLEAR MATTERS

93 – 101
French expectations regarding nuclear safety

102 – 107
French people’s views on nuclear energy

108 – 112
Perception and representations of nuclear accidents

113 – 114
The perception of nuclear waste and its management

115 – 138
Competence and credibility of nuclear stakeholders
QUESTION No. 1

Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

NOVEMBER 2020

NUCLEAR SITE OPERATORS MUST PROTECT THEIR FACILITIES FROM ALL RISKS, EVEN THOSE CONSIDERED VERY UNLIKELY

NUCLEAR SITES CAN CAUSE GROUNDWATER CONTAMINATION

EVERY PRECAUTION IS BEING TAKEN TO ENSURE A VERY HIGH LEVEL OF SAFETY IN FRENCH NUCLEAR POWER PLANTS

RADIOACTIVITY FROM NUCLEAR POWER PLANTS WILL CAUSE CANCERS

AROUND NUCLEAR FACILITIES, PEOPLE ARE AS HEALTHY AS ELSEWHERE

TODAY, IT IS POSSIBLE TO SAFELY STORE NUCLEAR WASTE

© IRSN
QUESTION No.1
CONT.

Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

EVOLUTION
2008 - 2020

In 2019, the answer “may agree” was replaced by “neither agree nor disagree”.

1 – Nuclear site operators* must protect their facilities from all risks, even those considered very unlikely

2 – Nuclear sites can cause groundwater contamination

* In 2019, the name “Nuclear site managers” became “Nuclear site operators”
QUESTION No. 1 CONT.

Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

3 – Every precaution is being taken to ensure a very high level of safety in French nuclear power plants

4 – Around nuclear facilities, people are as healthy as elsewhere
Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

In 2019, the answer “may agree” was replaced by “neither agree nor disagree”.

5 – Today, it is possible to safely store nuclear waste

* The “undecided” modality combines the responses “maybe agree” (from 1983 to 1992) and “neither agree nor disagree” (in 2020) with the “don’t know” responses.
QUESTION No. 1
CONT.

Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

In 2019, the answer "may agree" was replaced by "neither agree nor disagree".

Radioactivity from nuclear power plants will cause cancers*

* In 2019 and for this year only, the proposal became “Radioactivity from nuclear power plants can cause cancer”.

© IRSN
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

**NOVEMBER 2020**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Priority</th>
<th>Secondary</th>
<th>Useless</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthen inspections by competent authorities in the facilities</td>
<td>77</td>
<td>18</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Develop research on the safety of existing nuclear reactors</td>
<td>75</td>
<td>19</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Improve the capacity of France to handle a possible nuclear emergency</td>
<td>67</td>
<td>26</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Better take into account the human factor and work organization</td>
<td>59</td>
<td>33</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Develop research to design a new generation of nuclear reactors</td>
<td>56</td>
<td>28</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Strengthen the ability of citizens to exercise vigilance over the safety of facilities</td>
<td>43</td>
<td>40</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>

*© IRSN*
QUESTION No. 2 CONT.

Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

EVOLUTION 2011 - 2020

In 2019, the modality “important but not a priority” has been removed and the modality “useless” has been added.

1 – Strengthen inspections by competent authorities in the facilities*

* Up to and including 2018, the proposal was “strengthening inspections in nuclear facilities by the oversight units”.

2 – Develop research on the safety of existing nuclear reactors
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

**EVOLUTION**

2011 - 2020

In 2019, the modality “important but not a priority” has been removed and the modality “useless” has been added.

3 – Improve the capacity of France to handle a possible nuclear emergency

4 – Better take into account the human factor and work organization*

* Up to and including 2018, the proposal was “improve the safety of installations by taking greater account of the human factor and work organization”.

© IRSN
Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

**QUESTION No. 2 CONT.**

**EVOLUTION 2011 - 2020**

In 2019, the modality “important but not a priority” has been removed and the modality “useless” has been added.

5 – Develop research to design a new generation of nuclear reactors

6 – Strengthen the ability of citizens to exercise vigilance over the safety of facilities*

*Up to and including 2018, the proposal was “Strengthen the means for citizens’ vigilance and participation”.

© IRSN
What do you think is the strongest argument for nuclear power today?

In 2019, the question was asked in a different way: the French expressed themselves on each actor independently from the others. The specific results for that year can be downloaded on [http://barometre.irsn.fr](http://barometre.irsn.fr).

© IRSN 2020

**ENERGY INDEPENDENCE**

**THE LOW COST OF ELECTRICITY**

**THE LOW EMISSIONS OF GREENHOUSE GAS**

**THE SAFETY OF NUCLEAR FACILITIES**

**THE CREATION OR PRESERVATION OF JOBS IN FRANCE**

**OTHER**

**DON'T KNOW**
What do you think is the strongest argument against nuclear power today?

In 2019, the question was asked in a different way: the French expressed themselves on each actor independently from the others. The specific results for that year can be downloaded on http://barometre.irsn.fr

In recent years, the list of proposals has changed. In 2018, "the risk of an accident" replaced "the Chernobyl and Fukushima accidents". In 2020, "vulnerability of nuclear facilities" was removed, "nuclear waste" was replaced by "nuclear waste production", and "the cost of nuclear power (construction, decommissioning, waste)"; "competition to investments in renewable energy" and "the emission of greenhouse gas" were added.
Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale...

**NOVEMBER 2020**

**BUILDING NUCLEAR POWER PLANTS WAS A GOOD THING**

<table>
<thead>
<tr>
<th>STRONGLY AGREE</th>
<th>SOMEWHAT AGREE</th>
<th>NEITHER AGREE NOR DISAGREE</th>
<th>SOMEWHAT DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>31</td>
<td>29</td>
<td>10</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**NUCLEAR POWER PLANTS MUST BE SHUT DOWN**

<table>
<thead>
<tr>
<th>STRONGLY AGREE</th>
<th>SOMEWHAT AGREE</th>
<th>NEITHER AGREE NOR DISAGREE</th>
<th>SOMEWHAT DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>22</td>
<td>30</td>
<td>17</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**NEW NUCLEAR POWER PLANTS MUST BE BUILT**

<table>
<thead>
<tr>
<th>STRONGLY AGREE</th>
<th>SOMEWHAT AGREE</th>
<th>NEITHER AGREE NOR DISAGREE</th>
<th>SOMEWHAT DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>18</td>
<td>26</td>
<td>23</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

**EVOLUTION 1977 - 2020**

In 2020, the list “fully agree, rather agree, maybe agree, not so much agree, not at all agree” was replaced by “strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree”.

1 – Building nuclear power plants was a good thing

The responses “strongly disagree” and “somewhat disagree” were grouped into “disagree”, the “somewhat agree” and “strongly agree” into “agree”.

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© IRSN BAROMETER 2021 // ALL THE CHARTS
Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale...

In 2020, the list "fully agree, rather agree, maybe agree, not so much agree, not at all agree" was replaced by "strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree".

2 – Nuclear power plants must be shut down

3 – New nuclear power plants must be built

The responses "strongly disagree" and "somewhat disagree" were grouped into "disagree"; the "somewhat agree" and "strongly agree" into "agree".
Now and with hindsight, do you think that the choice of nuclear power was …?

<table>
<thead>
<tr>
<th>A REALISTIC CHOICE</th>
<th>A GOOD CHOICE</th>
<th>A BAD CHOICE</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>29</td>
<td>23</td>
<td>0</td>
</tr>
</tbody>
</table>

© IRSN
**QUESTION No. 6 CONT.**

Now and with hindsight, do you think that the choice of nuclear power was …?

---

**EVOLUTION OF THE RESULTS 1988-2020**

A GOOD CHOICE  A BAD CHOICE  A REALISTIC CHOICE  DON’T KNOW

© IRSN
QUESTION No. 7

In your opinion, can an accident of the same magnitude as the one in Fukushima occur in a French nuclear power plant?

Before 2018, the wording of the question was: "In your opinion, can an accident in a nuclear power plant of the same magnitude as the one in Fukushima occur in France?".

QUESTION No. 8

How likely do you think such an accident is?

© IRSN
Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

### NOVEMBER 2020

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Strongly Disagree</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>The French are not told the truth about the consequences of the Chernobyl accident</td>
<td>39</td>
<td>34</td>
<td>16</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>The French are not told the truth about the consequences of the Fukushima accident</td>
<td>24</td>
<td>28</td>
<td>29</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>When the Fukushima accident happened, the French authorities gave the public complete and correct information</td>
<td>6</td>
<td>23</td>
<td>39</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>After the Chernobyl accident, radioactivity in France remained very low</td>
<td>6</td>
<td>16</td>
<td>27</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>When the Chernobyl accident happened, the French authorities gave the public complete and correct information</td>
<td>4</td>
<td>9</td>
<td>20</td>
<td>26</td>
<td>40</td>
</tr>
</tbody>
</table>

© IRSN
Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

1 – The French are not told the truth about the consequences of the Chernobyl accident

The median response modality was changed several times: "maybe agree" became "more or less agree" in 1996, then "neither agree nor disagree" in 2020.

2 – The French are not told the truth about the consequences of the Fukushima accident
Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

3 - When the Fukushima accident happened, the French authorities gave the public complete and correct information

4 - When the Chernobyl accident happened, the French authorities gave the public complete and correct information
Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale...

The median response modality was changed several times: “maybe agree” became “more or less agree” in 1996, then “neither agree nor disagree” in 2020.

5 – After the Chernobyl accident, radioactivity in France remained very low
In your opinion, what is currently being done with the slightly radioactive waste produced in France, called “very low-level waste”?

### NOVEMBER 2020

- **This waste is placed permanently in a surface disposal**: 49%
- **This waste is sent to other countries**: 27%
- **This waste is reused as backfill in nuclear construction sites**: 13%
- **This waste is placed permanently on the bottom of the ocean**: 10%
- **Don’t know**: 1%

In your opinion, are the following events likely to occur in or near a French “high-level” radioactive waste disposal site?

### NOVEMBER 2020

- **Contamination of agricultural products in the vicinity of the site**: 26%
- **Air pollution by radioactive elements**: 25%
- **Irradiation of the population living nearby**: 21%
- **An underground explosion**: 15%

**Very believable** | **Somewhat believable** | **Neither believable nor not believable** | **Not really believable** | **Not at all believable** | **Don’t know**
---|---|---|---|---|---
26% | 37% | 22% | 10% | 4% | 1%
25% | 35% | 23% | 13% | 4% |
21% | 34% | 26% | 14% | 4% |
15% | 24% | 33% | 19% | 8% | 1%
Today, in France, the most radioactive waste is mixed with molten glass in sealed stainless steel containers. It will be stored in tunnels dug into the clay 500 m deep and sealed with concrete. Thus, in your opinion, are the following events likely to occur in or near a French “high-level” radioactive waste disposal site?

**NOVEMBER 2020**

**CONTAMINATION OF AGRICULTURAL PRODUCTS IN THE VICINITY OF THE SITE**

- Very Believable: 19
- Somewhat Believable: 29
- Neither Believable nor Not Believable: 26
- Not Really Believable: 18
- Not at All Believable: 8
- Don’t Know: 1

**AIR POLLUTION BY RADIOACTIVE SUBSTANCES**

- Very Believable: 17
- Somewhat Believable: 24
- Neither Believable nor Not Believable: 27
- Not Really Believable: 22
- Not at All Believable: 9
- Don’t Know: 1

**IRRADIATION OF THE POPULATION LIVING NEARBY**

- Very Believable: 16
- Somewhat Believable: 25
- Neither Believable nor Not Believable: 28
- Not Really Believable: 21
- Not at All Believable: 9
- Don’t Know: 1

**AN UNDERGROUND EXPLOSION**

- Very Believable: 15
- Somewhat Believable: 25
- Neither Believable nor Not Believable: 30
- Not Really Believable: 18
- Not at All Believable: 11
- Don’t Know: 1
This year, we conducted two parallel surveys: one on the Internet (the results of which are presented in the Barometer) and another, a control survey, carried out in the same way as in previous years (face-to-face). For almost all of the questions, the effect of the new method is negligible. For these two questions, however, a significant bias is recorded. This is particularly true for the question on trust. As you can see on the following pages, not all actors are affected in the same way. The results of both surveys can be found on the website: https://barometre.irsn.fr/graphiques.
### QUESTION No. 13
In the field of nuclear industry and energy, do you think the following actors and organizations are technically competent?

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>70% or more</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The CNRS (National center for scientific research)</td>
<td>85</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>IRSN (Institute for radiological protection and nuclear safety)</td>
<td>82</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>ASN (Nuclear safety authority)</td>
<td>82</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>CEA (Atomic energy commission)</td>
<td>79</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>ANDRA (National agency for radioactive waste management)</td>
<td>78</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>The HCTISN (High committee for transparency and information on nuclear security)</td>
<td>77</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 70%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Academy of Sciences</td>
<td>68</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>EDF (Électricité de France)</td>
<td>67</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Physicians</td>
<td>63</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>International agencies (IAEA, NEA, etc.)</td>
<td>62</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>OPECST (Parliamentary office for the evaluation of scientific and technological choices)</td>
<td>62</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>Orano (formerly AREVA)</td>
<td>54</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 50%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental NGOs</td>
<td>43</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>Consumer protection NGOs</td>
<td>43</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>The CLI (Local Information Commissions)</td>
<td>40</td>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 40%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The government</td>
<td>34</td>
<td>65</td>
<td>1</td>
</tr>
<tr>
<td>Local elected officials</td>
<td>31</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>Labor Unions</td>
<td>23</td>
<td>76</td>
<td>1</td>
</tr>
<tr>
<td>Journalists</td>
<td>21</td>
<td>78</td>
<td>1</td>
</tr>
<tr>
<td>Politicians</td>
<td>17</td>
<td>82</td>
<td>1</td>
</tr>
</tbody>
</table>

### QUESTION No. 14
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>70% or more</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The CNRS (National center for scientific research)</td>
<td>78</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>IRSN (Institute for radiological protection and nuclear safety)</td>
<td>73</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>ASN (Nuclear safety authority)</td>
<td>73</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>The HCTISN (High committee for transparency and information on nuclear security)</td>
<td>72</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>CEA (Atomic energy commission)</td>
<td>71</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 70%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANDRA (National agency for radioactive waste management)</td>
<td>67</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>The Academy of Sciences</td>
<td>66</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Physicians</td>
<td>66</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>OPECST (Parliamentary office for the evaluation of scientific and technological choices)</td>
<td>61</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>International agencies (IAEA, NEA, etc.)</td>
<td>58</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>EDF (Électricité de France)</td>
<td>52</td>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td>Consumer protection NGOs</td>
<td>52</td>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 50%</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The CLI (Local Information Commissions)</td>
<td>47</td>
<td>52</td>
<td>1</td>
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<tr>
<td>Orano (formerly AREVA)</td>
<td>45</td>
<td>54</td>
<td>1</td>
</tr>
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<td>Environmental NGOs</td>
<td>44</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td><strong>Less than 40%</strong></td>
<td></td>
<td></td>
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<tr>
<td>Local elected officials</td>
<td>35</td>
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<td>The government</td>
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<tr>
<td>Journalists</td>
<td>28</td>
<td>71</td>
<td>1</td>
</tr>
<tr>
<td>Labor Unions</td>
<td>27</td>
<td>72</td>
<td>1</td>
</tr>
<tr>
<td>Politicians</td>
<td>17</td>
<td>82</td>
<td>1</td>
</tr>
</tbody>
</table>
In the field of nuclear industry and energy, do you think the following actors and organizations are technically competent?

**NOVEMBER 2020**

<table>
<thead>
<tr>
<th>Actor/Institution</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Don't Know (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE CNRS (NATIONAL CENTER FOR SCIENTIFIC RESEARCH)</td>
<td>85</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>IRSN (INSTITUTE FOR RADIOLOGICAL PROTECTION AND NUCLEAR SAFETY)</td>
<td>82</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>ASN (NUCLEAR SAFETY AUTHORITY)</td>
<td>82</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>CEA (ATOMIC ENERGY COMMISSION)</td>
<td>79</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>ANDRA (NATIONAL AGENCY FOR RADIOACTIVE WASTE MANAGEMENT)</td>
<td>78</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>THE HCTISN (HIGH COMMITTEE FOR TRANSPARENCY AND INFORMATION ON NUCLEAR SECURITY)</td>
<td>77</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>THE ACADEMY OF SCIENCES</td>
<td>68</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>EDF (ÉLECTRICITÉ DE FRANCE)</td>
<td>67</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICIANS</td>
<td>63</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>INTERNATIONAL AGENCIES (IAEA, NEA, ETC.)</td>
<td>62</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>OPECST (PARLIAMENTARY OFFICE FOR THE EVALUATION OF SCIENTIFIC AND TECHNOLOGICAL CHOICES)</td>
<td>62</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>ORANO (FORMERLY AREVA)</td>
<td>54</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>ENVIRONMENTAL NGOS</td>
<td>43</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>CONSUMER PROTECTION NGOS</td>
<td>43</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>THE CLI (LOCAL INFORMATION COMMISSIONS)</td>
<td>40</td>
<td>59</td>
<td>1</td>
</tr>
<tr>
<td>THE GOVERNMENT</td>
<td>34</td>
<td>65</td>
<td>1</td>
</tr>
<tr>
<td>LOCAL ELECTED OFFICIALS</td>
<td>31</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>LABOR UNIONS</td>
<td>23</td>
<td>76</td>
<td>1</td>
</tr>
<tr>
<td>JOURNALISTS</td>
<td>21</td>
<td>78</td>
<td>1</td>
</tr>
<tr>
<td>POLITICIANS</td>
<td>17</td>
<td>82</td>
<td>1</td>
</tr>
</tbody>
</table>
QUESTION No. 13
CONT.

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

EVOLUTION OF THE RESULTS
1990 - 2020

1 – The Academy of Sciences

2 – International agencies (IAEA, NEA, etc.)*

* In 1999 (and that year only), the wording "International expert bodies" was replaced by "International bodies". Then, in 2019, it was replaced by "International agencies (IAEA, NEA, etc.)."
QUESTION No. 13 CONT.
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

EVOLUTION OF THE RESULTS 1990 - 2020

3 – ANDRA (National agency for radioactive waste management)

4 – Consumer protection NGOs
QUESTION No. 13 CONT.

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

5 – Environmental NGOs*

* In 1998, the wording “The environmentalists” was replaced by “Environmental NGOs”.

6 – ASN (Nuclear safety authority)*

* In 1999, the wording “Control bodies” was replaced by “Control bodies (Directorate for the safety of nuclear installations, etc.)”. In 2002, it was replaced by “The control bodies (Directorate General of Nuclear Safety and Radiation Protection)”; in 2006, by “The control bodies (Nuclear Safety Authority, etc.)”; in 2019 by “The Nuclear Safety Authority”.

© IRSN
In the field of nuclear industry and energy
do you think the following actors and organizations
are technically competent?

7 – CEA (Atomic energy commission)

8 – The CLI (Local information commissions)
In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

9 – The CNRS (National center for scientific research)

10 – EDF (Électricité de France)
EVOLUTION OF THE RESULTS
1990 - 2020

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

QUESTION No. 13
CONT.

11 – Local elected officials

12 – The government
QUESTION No. 13
CONT.

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

13 – The HCTISN (High committee for transparency and information on nuclear security)

14 – Politicians
QUESTION No. 13  
CONT.

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

EVOLUTION OF THE RESULTS  
1990 - 2020

15 – IRSN (Institute for radiological protection and nuclear safety)*

* In 2002, the wording "IPSN, Protection and Nuclear Safety Institute" was replaced by "IRSN, Institute for radiological protection and nuclear safety".

16 – Journalists

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In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

17 – Physicians

18 – OPECST (Parliamentary office for the evaluation of scientific and technological choices)
QUESTION No. 13
CONT.

In the field of nuclear industry and energy do you think the following actors and organizations are technically competent?

EVOLUTION OF THE RESULTS
1990 - 2020

19 – Orano (formerly AREVA)

20 – Labor Unions
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

<table>
<thead>
<tr>
<th>Organization</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE CNRS (National Center for Scientific Research)</td>
<td>78</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>ASN (Nuclear Safety Authority)</td>
<td>73</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>IRSN (Institute for Radiological Protection and Nuclear Safety)</td>
<td>73</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>THE HCTISN (High Committee for Transparency and Information on Nuclear Security)</td>
<td>72</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>CEA (Atomic Energy Commission)</td>
<td>71</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>ANDRA (National Agency for Radioactive Waste Management)</td>
<td>67</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>THE ACADEMY OF SCIENCES</td>
<td>66</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>PHYSICIANS</td>
<td>66</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>OPECST (Parliamentary Office for the Evaluation of Scientific and Technological Choices)</td>
<td>61</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL AGENCIES (IAEA, NEA, ETC.)</td>
<td>58</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>EDF (Électricité de France)</td>
<td>52</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>CONSUMER PROTECTION NGOS</td>
<td>52</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>THE CLI (Local Information Commissions)</td>
<td>47</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>ORANO (Formerly AREVA)</td>
<td>45</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL NGOS</td>
<td>44</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>LOCAL ELECTED OFFICIALS</td>
<td>35</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>THE GOVERNMENT</td>
<td>29</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>JOURNALISTS</td>
<td>28</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>LABOR UNIONS</td>
<td>27</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>POLITICIANS</td>
<td>17</td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>
In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

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4 – Consumer protection NGOs
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

**QUESTION No. 14 CONT.**

**EVOLUTION OF THE RESULTS 1990 - 2020**

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

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* In 1998, the wording "The environmentalists" was replaced by "Environmental NGOs".

6 – ASN (Nuclear safety authority)*

* In 1999, the wording "Control bodies" was replaced by "Control bodies (Directorate for the safety of nuclear installations, etc.)". In 2002, it was replaced by "The control bodies (Directorate General of Nuclear Safety and Radiation Protection)"; in 2006, by "The control bodies (Nuclear Safety Authority, etc.)"; in 2019 by "The Nuclear Safety Authority".

© IRSN
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

7 – CEA (Atomic energy commission)

8 – The CLI (Local information commissions)
In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

9 – The CNRS (National center for scientific research)

10 – EDF (Électricité de France)
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In 2019, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

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16 – Journalists
EVOLUTION OF THE RESULTS
1990 - 2020

In 2019, the title of the question was changed from “Do the following information sources tell you the truth about nuclear power in France?” to “In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?”.

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In 1990, the title of the question was changed from "Do the following information sources tell you the truth about nuclear power in France?" to "In the field of industry and nuclear energy, do you think the following actors and organizations are trustworthy sources of information?".

19 – Orano (formerly AREVA)

20 – Labor Unions
ANNEXES

140 – 141
Description of the sample

142 – 146
Questionnaire

147
Surveys
## Description of the sample

### GEOGRAPHICAL DISTRIBUTION

<table>
<thead>
<tr>
<th>Region</th>
<th>2018 (%)</th>
<th>2018 national census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Île-de-France</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>East Paris Basin</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>West Paris Basin</td>
<td>9.7</td>
<td>9.7</td>
</tr>
<tr>
<td>North</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>East</td>
<td>8.6</td>
<td>8.6</td>
</tr>
<tr>
<td>West</td>
<td>14.2</td>
<td>14.2</td>
</tr>
<tr>
<td>South West</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Central East</td>
<td>12.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Mediterranean area</td>
<td>12.2</td>
<td>12.2</td>
</tr>
</tbody>
</table>

### SIZE OF AGGLOMERATION

<table>
<thead>
<tr>
<th>Size</th>
<th>2018 (%)</th>
<th>2018 national census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>22.3</td>
<td>22.3</td>
</tr>
<tr>
<td>Less than 20 000 hab.</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Between 20 000 and 100 000 hab.</td>
<td>12.1</td>
<td>12.1</td>
</tr>
<tr>
<td>More than 100 000 hab.</td>
<td>28.1</td>
<td>28.1</td>
</tr>
<tr>
<td>Paris metropolitan area</td>
<td>15.5</td>
<td>15.5</td>
</tr>
</tbody>
</table>

### GENDER

<table>
<thead>
<tr>
<th>Gender</th>
<th>2018 (%)</th>
<th>2018 national census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>47.7</td>
<td>47.7</td>
</tr>
<tr>
<td>Woman</td>
<td>52.3</td>
<td>52.3</td>
</tr>
</tbody>
</table>

### AGE

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2018 (%)</th>
<th>2018 national census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24 years</td>
<td>10.6</td>
<td>10.6</td>
</tr>
<tr>
<td>25-34 years</td>
<td>15.8</td>
<td>15.8</td>
</tr>
<tr>
<td>35-49 years</td>
<td>24.8</td>
<td>24.8</td>
</tr>
<tr>
<td>50-64 years</td>
<td>24.5</td>
<td>24.5</td>
</tr>
<tr>
<td>65 years and more</td>
<td>24.3</td>
<td>24.3</td>
</tr>
</tbody>
</table>

### SOCIO-PROFESSIONAL CATEGORY

<table>
<thead>
<tr>
<th>Category</th>
<th>2018 (%)</th>
<th>2018 national census (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer, craftsperson, shopkeeper, entrepreneur</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Professional (incl. intellectual professions, lawyers, physicians...)</td>
<td>10.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Intermediate-skill worker</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Employee</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Worker</td>
<td>12.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Retired, other inactive</td>
<td>39.8</td>
<td>39.8</td>
</tr>
</tbody>
</table>

### STATUS OF THE INTERVIEWEE

<table>
<thead>
<tr>
<th>Status</th>
<th>2018 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector employee</td>
<td>12</td>
</tr>
<tr>
<td>Private sector employee</td>
<td>39</td>
</tr>
<tr>
<td>Subtotal employees</td>
<td>51</td>
</tr>
<tr>
<td>Self-employed</td>
<td>4</td>
</tr>
<tr>
<td>Unemployed</td>
<td>5</td>
</tr>
<tr>
<td>Inactive</td>
<td>40</td>
</tr>
</tbody>
</table>

### DIPLOMA

What is the highest degree you have obtained?

<table>
<thead>
<tr>
<th>Diploma</th>
<th>2018 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No diploma</td>
<td>3</td>
</tr>
<tr>
<td>CEP, CAP</td>
<td>11</td>
</tr>
<tr>
<td>Brevet (BEPC, BEP)</td>
<td>11</td>
</tr>
<tr>
<td>Subtotal below Baccalaureat</td>
<td>25</td>
</tr>
<tr>
<td>Baccalaureat</td>
<td>25</td>
</tr>
<tr>
<td>BTS, DUT</td>
<td>20</td>
</tr>
<tr>
<td>Other higher education diplomas</td>
<td>30</td>
</tr>
<tr>
<td>Subtotal Baccalaureat and more</td>
<td>75</td>
</tr>
</tbody>
</table>

### EDUCATION

Your training is mostly:

<table>
<thead>
<tr>
<th>Field</th>
<th>2018 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific (physics, mathematics, chemistry, technology, computer science)</td>
<td>24</td>
</tr>
<tr>
<td>Economic and legal sciences (law, management, business)</td>
<td>26</td>
</tr>
<tr>
<td>Life sciences, health (medicine, paramedics, pharmacy, biology)</td>
<td>11</td>
</tr>
<tr>
<td>Humanities and social sciences (literature, psychology, sociology, arts)</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
</tbody>
</table>

Thanks to the statistical adjustment, the sample corresponds exactly to the targeted quotas. It is fully comparable to the samples of previous years and does not contain any under- or over-representation of a socio-demographic parameter that could lead to an inaccurate representation of the French population.
### ANNEXES

**Description of the sample**

#### POLITICAL PROXIMITY

Of the following political parties, can you tell me which one you feel closest to or let's say the least distant?

<table>
<thead>
<tr>
<th>Party</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtotal Left</td>
<td></td>
</tr>
<tr>
<td>Lutte Ouvrière</td>
<td>1</td>
</tr>
<tr>
<td>The NPA (New Anti-Capitalist Party)</td>
<td>1</td>
</tr>
<tr>
<td>The Communist Party</td>
<td>1</td>
</tr>
<tr>
<td>La France Insoumise</td>
<td>5</td>
</tr>
<tr>
<td>The Socialist Party</td>
<td>8</td>
</tr>
<tr>
<td>Europe Écologie Les Verts (Green Party)</td>
<td>8</td>
</tr>
<tr>
<td>Subtotal Centre</td>
<td>17</td>
</tr>
<tr>
<td>La République en Marche</td>
<td>13</td>
</tr>
<tr>
<td>Modem</td>
<td>3</td>
</tr>
<tr>
<td>UDI</td>
<td>1</td>
</tr>
<tr>
<td>Subtotal Right</td>
<td>24</td>
</tr>
<tr>
<td>Les Républicains</td>
<td>10</td>
</tr>
<tr>
<td>Le Rassemblement National</td>
<td>14</td>
</tr>
<tr>
<td>Another party</td>
<td>4</td>
</tr>
<tr>
<td>No party</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
</tr>
</tbody>
</table>

#### INCOME LEVEL

<table>
<thead>
<tr>
<th>Income Level</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1,000 euros</td>
<td>9</td>
</tr>
<tr>
<td>1,000 to 1,499 euros</td>
<td>11</td>
</tr>
<tr>
<td>1,500 to 1,999 euros</td>
<td>15</td>
</tr>
<tr>
<td>2,000 to 2,999 euros</td>
<td>25</td>
</tr>
<tr>
<td>3,000 to 3,999 euros</td>
<td>17</td>
</tr>
<tr>
<td>4,000 to 5,999 euros</td>
<td>9</td>
</tr>
<tr>
<td>5,000 to 6,999 euros</td>
<td>4</td>
</tr>
<tr>
<td>6,000 or more euros</td>
<td>3</td>
</tr>
<tr>
<td>Don't know</td>
<td>7</td>
</tr>
</tbody>
</table>

#### SCIENTIFIC JOURNALS READING

Do you read scientific newspapers, journals or magazines, such as *Science & Vie*, *Science et Avenir*, *Ça m'intéresse*, *La Recherche*...?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td>10</td>
</tr>
<tr>
<td>Sometimes</td>
<td>34</td>
</tr>
<tr>
<td>Rarely</td>
<td>33</td>
</tr>
<tr>
<td>Subtotal Yes</td>
<td>77</td>
</tr>
<tr>
<td>Never</td>
<td>23</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
</tr>
</tbody>
</table>

#### POLITICAL STANCE

Can you tell me where you stand politically?

<table>
<thead>
<tr>
<th>Stance</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radical left</td>
<td>3</td>
</tr>
<tr>
<td>Left</td>
<td>12</td>
</tr>
<tr>
<td>Center-left</td>
<td>14</td>
</tr>
<tr>
<td>Subtotal left</td>
<td>29</td>
</tr>
<tr>
<td>Neither left nor right</td>
<td>40</td>
</tr>
<tr>
<td>Subtotal right</td>
<td>31</td>
</tr>
<tr>
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<td>Far-right</td>
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#### RELIGION

Do you regularly practice a religion?

<table>
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#### DO YOU LIVE WITHIN 20 KM...

of a nuclear power plant?

<table>
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of another nuclear facility?

<table>
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of a major chemical facility?

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**Questionnaire**

### GEOGRAPHICAL DISTRIBUTION
1. Île-de-France
2. North
3. East
4. East Paris Basin
5. West Paris Basin
6. West
7. South-West
8. Central East
9. Mediterranean area

### SIZE OF AGGLOMERATION
1. < 2 000 hab.
2. 2 000 - 20 000 hab.
3. 20 000 - 100 000 hab.
4. > 100 000 hab.
5. Paris metropolitan area

### Gender
- Man
- Woman

### Record age of the interviewee
- Automatically recode age
  1. 18-24 years
  2. 25-34 years
  3. 35-49 years
  4. 50-64 years
  5. 65 years and more

### What is your current occupation? (if unemployed having previously worked, code former occupation)
1. Farmer, craftsperson, shopkeeper, entrepreneur
2. Professional (incl. intellectual professions, lawyers, physicians...)
3. Intermediate-skill worker
4. Employee
5. Worker
6. Retired, other inactive

### What is your employment status?
1. Public sector employee
2. Private sector employee
3. Subtotal employees
4. Self-employed
5. Unemployed
6. Inactive

### In France, which of the following current issues do you find most concerning?
1. The lack of security
2. Nuclear risks
3. Unemployment
4. Extreme poverty and exclusion
5. Terrorism
6. Health
7. Climate imbalance
8. The global geopolitical instability (migrant crisis, tensions between countries, etc.)
9. (Don't know)

### Here are a number of environmental issues. Which one do you find most concerning?
1. The disappearance of animal species
2. The destruction of forests
3. Climate imbalance
4. Water pollution
5. The depletion of the ozone layer
6. Air pollution
7. Soil pollution
8. Damage from natural disasters
9. (Don't know)

### In each of the following areas, do you consider that the risks for the French population in general are...?
1. Very high
2. High
3. Medium
4. Low
5. Near zero
6. (Don't know)

### Do you trust the French authorities to protect people against the following risks?
1. Yes, definitely
2. Yes, somewhat
3. Neither trust nor doesn't trust
4. No, not really
5. No, not at all
6. (Don't know)

### What is the first thing that comes to mind when you hear the word “coronavirus”?
(Answer written in plain text)
Questionnaire

Here are a number of proposals regarding scientific expertise. For each one, please indicate on the following scale whether you agree or not.

1  Strongly agree
2  Somewhat agree
3  Neither agree nor disagree
4  Somewhat disagree
5  Strongly disagree
6  (Don’t know)

1  Understandable information on the risks of installations must be made available to everyone
2  In their positions, the scientific experts must also present their points of disagreement
3  It is normal that not all scientific experts' positions are made public

What are, in your opinion, the two most important qualities of scientific experts? First?
Second?

1  They are technically competent
2  They are honest in their scientific approach
3  They are independent in their judgement
4  They are reactive to unforeseen situations
5  They can communicate in a way that everyone understands
6  They pay attention to the concerns of the civil society
7  (Don’t know)

In general, do you have a good or a bad opinion of scientific experts?

1  Very good
2  Good
3  Neither good nor bad
4  Poor
5  Very bad
6  (Don’t know)

Here are three sentences regarding experts and decision-makers. For each one, please indicate whether you agree or not.

1  Strongly agree
2  Somewhat agree
3  Neither agree nor disagree
4  Somewhat disagree
5  Strongly disagree
6  (Don’t know)

1  When it comes to risk, it is normal to take every precaution even when the scientists only have doubts
2  We must be certain of the scientific experts' positions before informing the public
3  Policy makers don’t take enough into account the positions of scientific experts

Here are a number of propositions related to science. For each one, please indicate on the following scale whether you agree or not.

1  Strongly agree
2  Somewhat agree
3  Neither agree nor disagree
4  Somewhat disagree
5  Strongly disagree
6  (Don’t know)

1  I trust scientific institutions
2  The development of science and technology generates more benefits than negative effects
3  There can be more than one correct answer to most scientific questions

Since the start of the 2020 coronavirus epidemic, the government has relied on input from a scientific council to make decisions. In your opinion, is this a good thing?

1  Yes, quite
2  Yes, somewhat
3  No, not really
4  No, not at all
5  (Don’t know)

Regarding the oversight of the impact of an installation that poses risks to the environment and neighboring populations, who do you think should control the environmental and health impact outside the installation?

(one answer only)

1  A committee of scientific experts
2  Public regulatory authorities
3  Non-governmental organisations and associations
4  Local elected representatives (regional council, general council, municipality)
5  The operator of the facility
6  A local citizens’ committee
7  (Don’t know)

Would you be willing to live near...

1  Yes
2  No
3  (Don’t know)

1  a wind farm
2  a mobile phone relay antenna
3  a high-voltage power line
4  a nuclear research center
5  a seismic zone
6  a nuclear power plant
7  an airport
8  a household waste incinerator
9  a marine flooding zone (temporary flooding caused by the sea)
10  a flood zone
11  a radioactive waste disposal
12  a landfill
13  a major chemical facility
14  a chemical waste disposal

Would you be willing to spend time participating to information and consultation meetings on the management of a high-risk installation near your home?

1  Yes, once a year
2  Yes, two or three times a year
3  Yes, four or more times a year
4  No
5  (Don’t know)

A structure bringing together scientific experts, elected representatives, operators, NGOs, citizens and whose aim would be to deal with at-risk situations would be in your opinion...

1  Very useful
2  Somewhat useful
3  Not very useful
4  Not at all useful
5  (Don’t know)

Which of the following industrial or technological activities do you think is most likely to cause a serious accident or a disaster in France?

1  Chemical facilities
2  Transport of hazardous material
3  Natural gas distribution
4  Nuclear power plants
5  Dams
6  Radioactive waste disposals
7  Air transport
8  Virus research laboratories
9  Other, please specify: ...
10  (Don’t know)
Here are actions that an expertise body could take to better report on the results of its expertise. For each one, please indicate whether it is a priority, secondary or useless.

1. Make public its expertise reports
2. Answer all the questions raised by NGOs and citizens
3. Organise public meetings to discuss its work
4. Make available to all the list of all its current work
5. Make available to all the list of requests for expertise

Here are a number of reasons why the results of a scientific expertise might not be made public. For each one, please indicate on the following scale whether this is a good reason.

1. Yes, definitely
2. Yes, somewhat
3. No, not really
4. No, not at all
5. (Don't know)

In the field of nuclear industry and energy, do you think the following actors and organizations are technically competent?

1. Yes
2. No
3. (Don't know)

In the field of nuclear industry and energy, do you think the following actors and organizations are trustworthy sources of information?

1. Yes
2. No
3. (Don't know)

What do you think is the strongest argument against nuclear power today?

1. The risk of an accident
2. The production of radioactive waste
3. The lack of transparency in the nuclear industry
4. The cost of nuclear power (construction, decommissioning, waste)
5. The competition with investments in renewable energies
6. The emission of greenhouse gas
7. Other
8. (Don't know)

What do you think is the strongest argument for nuclear power today?

1. Energy independence
2. The low cost of electricity
3. The low emissions of greenhouse gas
4. The safety of nuclear facilities
5. The creation or preservation of jobs in France
6. Other
7. (Don't know)

Here are various proposals relating to nuclear energy. For each one, please indicate your opinion according to the following scale if you agree or not.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. (Don't know)

Now and with hindsight, do you think that the choice of nuclear power was …?

1. A good choice
2. A bad choice
3. A realistic choice
4. (Don't know)
Here are a number of proposals relating to nuclear facilities. Please indicate on the following scale whether you agree or disagree.

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree
6. (Don't know)

1. Nuclear site operators must protect their facilities from all risks, even those considered very unlikely
2. Nuclear sites can cause groundwater contamination
3. Every precaution is being taken to ensure a very high level of safety in French nuclear power plants
4. Radioactivity from nuclear power plants will cause cancers
5. Around nuclear facilities, people are as healthy as elsewhere
6. Today, it is possible to safely store nuclear waste

Here are various measures to strengthen the safety of nuclear sites. For each one, please indicate whether you consider it to be a priority, secondary or useless to strengthen the safety of nuclear sites.

1. A priority
2. Secondary
3. Useless
4. (Don't know)

1. Strengthen inspections by competent authorities in the facilities
2. Develop research on the safety of existing nuclear reactors
3. Improve the capacity of France to handle a possible nuclear emergency
4. Better take into account the human factor and work organization
5. Develop research to design a new generation of nuclear reactors
6. Strengthen the ability of citizens to exercise vigilance over the safety of facilities

In your opinion, what is currently being done with the very low-level waste produced in France, known as "very low-level waste"?

1. This waste is placed permanently in a surface disposal facility
2. This waste is sent to other countries
3. This waste is reused as backfill in nuclear construction sites
4. This waste is placed permanently on the bottom of the ocean
5. (Don't know)

In your opinion, the following events likely to occur in or near a French "high-level" waste disposal site?

1. Very believable
2. Somewhat believable
3. Neither believable nor not believable
4. Not really believable
5. Not at all believable
6. (Don't know)

1. Contamination of agricultural products in the vicinity of the site
2. Air pollution by radioactive elements
3. Irradiation of the population living nearby
4. An underground explosion

Today, in France, the most radioactive waste is mixed with molten glass in sealed stainless steel containers. It will be stored in tunnels dug into the clay 500 m deep and sealed with concrete. Thus, in your opinion, are the following events likely to occur in or near a French "high-level" waste disposal site?

1. Very believable
2. Somewhat believable
3. Neither believable nor not believable
4. Not really believable
5. Not at all believable
6. (Don't know)

1. Contamination of agricultural products in the vicinity of the site
2. Air pollution by radioactive substances
3. Irradiation of the population living nearby
4. An underground explosion

Do you live within 20 km...

1. of a nuclear power plant?
2. of another nuclear facility?
3. of a major chemical facility?

Which of the following catastrophic events do you find most frightening?

1. The explosion of the AZF factory in Toulouse in 2001
2. The Haiti earthquake in 2010
3. The accident at the Chernobyl nuclear power plant
4. The Xynthia storm of February 2010 in western France
5. The Indian Ocean tsunami of December 26th 2004
6. The accident at the Fukushima nuclear power plant
7. The 2003 heat wave in France
8. Other, please specify: ...
9. (Don't know)

Here are some old catastrophic events. Can you indicate if you have personally heard about them?

1. Yes, and I know exactly what it is
2. Yes, and I know approximately what it is
3. Yes, but only in name
4. No, I have never heard of it
5. (Don't know)

1. The oil spill on the Brittany coast due to the sinking of the Amoco Cadiz in 1978
2. The oil spill on the French coastline due to the sinking of the Erika in 1999
3. The Union Carbide chemical plant accident in Bhopal, India in 1984
4. The Mexico City earthquake in 1985
5. The sinking of the Russian submarine Kursk in 2000
6. The storms of December 1999 in France
7. The Air France Concorde crash in Gonesse in 2000

In your opinion, can an accident of the same magnitude as the one in Fukushima occur in a French nuclear power plant?

1. Yes
2. No
3. (Don't know)
How likely do you think such an accident is?
1 Very likely
2 Somewhat likely
3 Somewhat not likely
4 Not at all likely
5 (Don’t know)

Almost 10 years have passed since the Fukushima accident. Here are a number of proposals relating to the Chernobyl and Fukushima nuclear accidents. For each proposal, please indicate your opinion according to the following scale if you agree or not.
1 Strongly agree
2 Somewhat agree
3 Neither agree nor disagree
4 Somewhat disagree
5 Strongly disagree
6 (Don’t know)

1 The French are not told the truth about the consequences of the Chernobyl accident
2 The French are not told the truth about the consequences of the Fukushima accident
3 When the Fukushima accident happened, the French authorities gave the public complete and correct information
4 When the Chernobyl accident happened, the French authorities gave the public complete and correct information
5 After the Chernobyl accident, radioactivity in France remained very low

Finally, here are some final questions:
What is the highest degree you have been graduated?
1 No diploma / Primary education
2 BEPC
3 CAP
4 BEP
5 Baccalaureate
6 Bac +2
7 Bac +3
8 Bac +4
9 Bac +5
10 Business schools, grandes écoles
11 Higher than Bac +5
12 (Don’t know)

Your training is rather:
1 Scientific (physics, maths, chemistry, technology, IT)
2 Economic and legal sciences (law, management, business)
3 Life sciences, health (medicine, paramedics, pharmacy, biology)
4 Humanities and social sciences (literature, psychology, sociology, arts)
5 Other, please specify: ...
6 (Don’t know)

Do you read scientific newspapers, journals or magazines magazines, such as Science & Vie, Science et Avenir, Ça m’intéresse, La Recherche…?
1 Often
2 Sometimes
3 Rarely
4 Never
5 (Don’t know)

Without thinking only about the elections, which political party or movement do you feel closest to?
1 Lutte Ouvrière
2 The NPA (New Anti-Capitalist Party)
3 The Communist Party
4 La France Insoumise
5 The Socialist Party
6 Generation.s
7 Le Parti radical
8 Europe Écologie Les Verts (Green Party)
9 La République en Marche
10 Modern
11 UDI
12 Les Républicains
13 Debout la France
14 Le Rassemblement national
15 Another party
16 No party
17 Do not answer

Can you tell me where you stand politically?
1 Radical left
2 Left
3 Center-left
4 Neither left nor right
5 Center-right
6 Right
7 Radical right

What is your monthly net income of your household?
1 Less than 1,000 euros
2 1,000 to 1,499 euros
3 1,500 to 1,999 euros
4 2,000 to 2,999 euros
5 3,000 to 3,999 euros
6 4,000 to 5,999 euros
7 5,000 to 6,999 euros
8 6,000 or more euros
9 (Don’t know)

Do you regularly practice a religion?
1 Yes
2 No
3 (Don’t know)

Finally, do you have any comments on this questionnaire?
## ANNEXES

### Surveys

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For further information

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Previous editions of the barometer are available on the Internet at the following address:
http://barometre.irsn.fr

ISSN: 2116-9179
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May 2021
Graphic design: BRIEF
Created in 2001, IRSN is a public institution with industrial and commercial activities (EPIC). IRSN’s missions have been consolidated by the Act No. 2015-992 of 17 August 2015 concerning Energy Transition and Green Growth (TECV). IRSN is the national public expert on nuclear and radiological risks. IRSN contributes to public policies in the fields of nuclear safety and ionizing radiation protection for public health and environment. As a research and scientific institution it acts in consultation with all stakeholders concerned by these policies, while preserving its independence of judgment.

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