

THE PARLIAMENTARY OFFICE FOR SCIENTIFIC AND TECHNOLOGICAL ASSESSMENT

- STRUCTURE, FUNCTION, COMPOSITION -

Given the ever-increasing role of science in everyday life, it could hardly fail to become a subject of political interest. It became progressively obvious that there was a need for a parliamentary assessment of technology in order to anticipate its consequences and monitor its impact.

A number of debates in the early 1980s (e.g. regarding the future of the nation's nuclear, space and cable programmes) caused the French Parliament to realize that it was unable to formulate an impartial assessment of Government decisions regarding the broad guidelines of its scientific and technological policies.

It therefore decided to establish its own assessment authority: the **Parliamentary Office for Scientific and Technological Assessment**.

Following a unanimous vote in favour of its creation, the Office was established by Law n° 83-609 of July 8, 1983. Its aims, within the terms of the law, are "to inform Parliament of the consequences of scientific and technological choices, particularly to enable it to make enlightened decisions". To this end, the Office "collects information, launches study programmes and conducts assessments".

THE OFFICE

A unique organization

The Office is an unusual organization within Parliament: its members are appointed so as to ensure proportional representation of the various political groups and come from both the National Assembly and the Senate. It consists of eighteen

members of the National Assembly and eighteen Senators.

The Office is chaired alternately for three-year periods by a member from either chamber, with internal rules stipulating that the First Vice-Chairperson shall come from the other chamber.

Power of referral reserved for parliamentary bodies

The Office can be commissioned to conduct an assessment, primarily by an internal parliamentary body i.e. by **the Bureau of either assembly** (upon its own initiative, by request of the chairperson of a political group, by request of sixty members of the National Assembly or forty Senators) or by **a special or permanent committee**.

In addition, since 1991, some laws have directly commissioned the Office to conduct a study or assessment mission.

To date, the topics covered have fallen more or less equally into four main categories: energy, the environment, new technologies and the life sciences.

Some referrals have been renewed year after year, for instance regarding the safety and security of nuclear installations. Others have required an update of a previous Office report (high-activity nuclear waste, biotechnologies, bioethics, spatial, etc.). Such renewals enable the Office to continue to monitor these topics.

The Scientific Council

The Office acts as an intermediary between the political sphere and the research community. It has a duty to keep up to date with the latest research developments and to request official



statements of opinion. To conduct its missions, the Office is assisted by a Scientific Council whose composition reflects the diversity of the scientific and technological fields. The Council consists of twenty-four leading figures, all chosen for their expertise.

STUDY PROGRAMMES

Appointing a rapporteur

Each referral entails the appointment of one or more rapporteurs, chosen exclusively among the members of the Office. Several studies have brought together a member of the National Assembly and a Senator, or a member from the political majority and a member from the opposition.

Drafting a report

The rapporteur conducts hearings to solicit the opinions of all concerned parties and organizations. The rapporteur can also conduct on-site visits, in France or abroad, to laboratories and companies linked to the subject in question.

Throughout the study, the rapporteur is assisted by a parliamentary official or a scientific adviser and, if necessary, by a study group consisting of competent figures from outside Parliament. The rapporteur may also appoint independent experts and research agencies, in France or abroad, to conduct investigations and to study specific aspects of the subject. In addition, the rapporteur may request the views and opinions of trade unions, professional bodies and organizations for environmental or consumer protection.

However, Office reports do not merely juxtapose expert opinions or establish a "state of the art" review of the subject in question. Because the reports are drafted by members of Parliament, their conclusions are more than simply informative; they also include proposals and recommendations.

If the rapporteur deems it necessary, public hearings open to the press can be organized to gather or even confront the opinions of leading figures and organizations wishing to express their views on the subject. The minutes of these public hearings can then be annexed to the report.

The powers of the rapporteur

French law provides Office rapporteurs with the same powers as budget rapporteurs: they may

therefore conduct investigations of any state agency and request any departmental documents, with the exception of those dealing with national defence or security. Moreover, if the rapporteurs encounter any difficulties in the execution of their mission, they may request to be granted, for a period of no more than six months, the same prerogatives as those granted to parliamentary enquiry committees.

Publication of reports

At the end of their study, the rapporteurs submit their draft report and conclusions to the other members of the Office. Their conclusions are presented in such a way that they may be used directly for legislative work or budgetary discussions. The members of the Office then decide whether to publish the report and all or part of the minutes of hearings and contributions made by experts. It should be pointed out in this regard that most Office decisions are reached unanimously, the Office being characterized by the consensual nature of its well argued positions.

The documents produced by the Office form a specific collection within parliamentary reports and are also available on the websites of the assemblies.

SCIENCE AND TECHNOLOGY BRIEFINGS

The Office has recently decided to develop a new working approach in order to present an informative summary of the state of the art on a scientific or technological subject being topical.

Carried out in a shorter term than the reports, the *Science and technology briefings* have the aim of describing the context of a scientific issue, the measures taken, the latest research developments, and the results already achieved.

The *Science and technology* are made to be short and efficient : 4 pages, without the endnotes. This size shall enable a wide circulation amongst the Members of the Parliament and the public opinion.

PUBLIC HEARINGS

Each year, the Office organizes several public hearings on topical scientific or technological issues.



GENERAL AND INTERNATIONAL ACTIVITIES

The Office has progressively become an acknowledged instrument of parliamentary action. Several laws make provision either for it to be informed of, or to participate in the appointment of parliamentary representatives to various bodies, or for it to be represented, by its chairperson or one of its members, on the board of directors of various organizations.

It has also built up a special relationship with the scientific community as a whole and maintains close links with it. This is illustrated by the various events associating the Parliamentary Office for Scientific and Technological Assessment with such prestigious bodies as the different Académies, CEA, INSERM, INRA, UniversSciences, CNRS, etc.

RECENT REPORTS

Health and environmental risks expertise in France and in Europe by Anne Genetet, Philippe Bolo, Members of the National Assembly, Pierre Médevielle and Pierre Ouzoulis, Senators. National Assembly report 1919 (15th legislature), Senate report 477 (2018-2019)

- **Transport: scenarios allowing the end of commercialization of internal combustion vehicles in 2040** by Huguette Tiegna, Member of the National Assembly, and Stéphane Piednoir, Senator. National Assembly report 1766 (15th legislature), Senate report 380 (2018-2019)
- **Evaluation of the law n° 2011-814 from 7 July, 2011 related to bioethics**, by Jean-François Eliaou, Member of the National Assembly, and Annie Delmont-Koropoulis, Senator. National Assembly report 1351 (15th legislature), Senate report 80 (2018-2019).
- **Technological stakes of Blockchains**, by Valéria Faure-Muntian, Claude de Ganay, Members of the National Assembly, and Ronan Le Gleut, Senator. National Assembly report 1092 (15th legislature), Senate report 584 (2017-2018).
- **The economic, environmental, health and ethical challenges of biotechnologies**, by Jean-Yves Le Déaut, Member of the National Assembly, and Catherine Procaccia, Senator. National Assembly report 4618 (14th legislature), Senate report 507 (2016-2017).
- **Toward a Controlled, Useful and Demystified Artificial Intelligence**, by Claude de Ganay, Member of the National Assembly, and Dominique Gillot, Senator. National Assembly report 4594 (14th legislature), Senate report 464 (2016-2017).

ONGOING STUDIES

- **Energetic valorization of agricultural land**, by Jean-Luc Fugit, Member of the National Assembly, and Roland Courteau, Senator
- **Scientific integrity**
- **Plastic pollution**

Finally, the Office also contributes to the development of international parliamentary relations and participates, particularly at a European level, in various conferences and events such as the European Parliamentary Technology Assessment (EPTA), consisting of the European organizations responsible for conducting scientific and technological assessments for both national parliaments and the European Parliament.

PUBLIC HEARINGS

- **Restricted access areas (ZRR) in the context of protection of national scientific and technical potential**, by Cédric Villani, Member of the National Assembly, and Gérard Longuet, Senator. National Assembly report 1796 (15th legislature), Senate report 402 (2018-2019)
- **Artificial intelligence and health data**, by Cédric Villani, Member of the National Assembly, and Gérard Longuet, Senator. National Assembly report 1795 (15th legislature), Senate report 401 (2018-2019)
- **Animal use in research and alternatives to animal experimentation: overview and perspectives**, by Cédric Villani, Member of the National Assembly, and Florence Lassarade, Senator. National Assembly report 1794 (15th legislature), Senate report 400 (2018-2019)
- **Tsunami prevention and warning on French coasts** by Roland Courteau, Senator. National Assembly report 1792 (15th legislature), Senate report 399 (2018-2019)
- **Technological opportunities offered by 5G**, by Pierre Henriet, Member of the National Assembly, and Gérard Longuet, Senator. National Assembly report 1488 (15th legislature), Senate report 188 (2018-2019)
- **Algorithms dedicated to public action : the case of the web portal for admission after baccalaureate**, by Cédric Villani, Member of the National Assembly, and Gérard Longuet, Senator. National Assembly report 671 (15th legislature), Senate report 305 (2017-2018).
- **Women and Science** - 28 June 2018, joint hearing with the delegations for women's rights of the National Assembly and the Senate
- **Latest trends in research on energy : the future of nuclear**— 24 May, 2018, by Cédric Villani, Emilie Cariou, Members of the National Assembly, and Gérard Longuet, Senator
- **Appraisal of electromagnetic hypersensitivity**, by Cédric Villani, Member of the National Assembly, and Gérard Longuet, Senator. National Assembly report 1164 (15th legislature), Senate report 664 (2017-2018)
- **Stakes of communicating meters**, by Cédric Villani and Célia de Lavergne, Members of the National Assembly, and Gérard Longuet, Senator. National Assembly report 672 rectified (15th legislature), Senate report 306 (2017-2018)

SCIENCE AND TECHNOLOGY BRIEFINGS

- **Quantum Technologies: Introduction and Challenges, no 13**, by Cédric Villani, Member of the National Assembly, First Vice-Chairman
- **Large particle accelerators, no 12**, by Cédric Villani, Member of the National Assembly, First Vice-Chairman
- **Electricity storage, no 11**, by Angèle Prévaille, Senator
- **Biodiversity: extinction or collapse?, no 10**, by Jérôme Bignon, Senator
- **Reusable Space Launchers, no 9**, by Jean-Luc Fugit, Member of the National Assembly
- **Mars: a new Frontier for Space Exploration? no 8**, by Catherine Procaccia, Senator, Vice-Chairwoman
- **Health and environmental issues of palm oil, no 7**, by Anne Genetet, Member of the National Assembly
- **The Energy Efficient Renovation of Buildings, no 6**, by Jean-Luc Fugit and Loïc Prud'homme, Members of the National Assembly
- **Hyper-Speed Vacuum Transport (Hyperloop), no 5**, by Cédric Villani, Member of the National Assembly, First Vice-Chairman
- **Understanding Blockchains, no 4**, by Valéria Faure-Muntian, Claude de Ganay, Members of the National Assembly, and Ronan Le Gleut, Senator
- **Storing more carbon in soils: a challenge for climate and food, no 3**, by Roland Courteau, Senator, Vice-Chairman
- **Additive manufacturing (3D Printing), no 2**, by Huguette Tiegna, Member of the National Assembly, Vice-Chairwoman
- **Internet of Things (connected objects), no 1**, by Didier Baichère, Member of the National Assembly, Vice-Chairman

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