

Science Advice to Parliament in the Italian Ecosystem for Science Advice

Giovanni Rizzoni*

ABSTRACT: The article examines the conditions for a potential reintroduction in Italy of a Parliamentary Technological Assessment Body. Like most democratic legislative assemblies, the Italian Chambers have established bodies and procedures dedicated to processing the knowledge necessary for political decision-making. The article examines how the establishment of a parliamentary body dedicated to technical and scientific issues might fit into this context. To be successful, the establishment of the new body would need to carefully identify an appropriate combination of political input and technical expertise, as well as a positive integration into Parliament's factfinding procedures.

KEYWORDS: Italian parliament; technological assessment; law making; factfinding procedures; parliamentary committees

SUMMARY: 1. Introduction – 2. The Parliamentary Cognitive Systems and the Form of Government – 3. The Cognitive Ecosystem of the Italian Parliament – 4. Parliamentary Committees and the Limits of Scientific Evidence in Lawmaking – 5. Hypotheses for the Establishment of a PTAB in the Italian Parliament – 6. Concluding Remarks.

1. Introduction

The parliaments of some large democracies have bodies specifically dedicated to assessing the technical and scientific aspects of political decisions (Parliamentary Technology and Scientific Assessment Bodies, PTABs).¹ PTABs vary greatly in composition: in some cases, they are composed of experts from the academic world; in others, the composition is entirely political; others still have a mixed technical and political membership. The functions and operation of these bodies also differ in many respects, but they serve a common purpose: to provide legislative assemblies with the expertise necessary to enable them to make fully informed decisions on highly complex technical issues.²

* Senior fellow at the Luiss School of Government, Rome. Mail: grizzoni@luiss.it. Questo articolo è stato prodotto nel quadro della ricerca "Decision-Making in the Age of Emergencies: New Paradigms in Recognition and Protection of Rights", finanziata dal MIUR - PRIN Bando 2020 - prot. 2020M47T9C [nota editoriale]. The article was subject to a blind peer review process.

¹ For some examples, see in France the Office parlementaire d'évaluation des choix scientifiques et technologiques (OPECST); in Germany the Büro für Technikfolgen-Abschätzung beim Deutschen Bundestag (TAB); in Spain the Oficina de Ciencia y Tecnología del Congreso de los Diputados (Oficina C); in Sweden, the Evaluation and Research Secretariat (ERS) of the Swedish Riksdag; in the United Kingdom, the Parliamentary Office of Science and Technology (POST); in the European Parliament, the Scientific and Technological Option Assessment (STOA).

² On the different models of parliamentary technological assessment, see D. CHIASSI, Technology Assessment -Valutazioni delle opzioni scientifiche e tecnologiche: analisi degli organismi parlamentari europei e prospettive in Italia,

In Italy, the Chamber of Deputies also established a Committee for the Evaluation of Technical and Scientific Choices (VAST) between 1997 and 2013. The VAST's work has been the subject of extensive studies: most scholars lament its premature termination and emphasize the need to reintroduce similar institutional tools into the Italian parliamentary system.³ These authors highlight the dearth of bodies and procedures specifically dedicated to technical-scientific evaluation in the Italian Parliament. This makes it difficult for Parliament to conduct a complete and reliable investigation of the issues that require the acquisition of technical-scientific knowledge. The need to base legislative decisions on sound scientific evidence has, however, been repeatedly reaffirmed by the Italian Constitutional Court, which has identified evidence-based lawmaking as one of the parameters for assessing the constitutionality of laws.⁴ The purpose of this article is to examine the conditions for a potential reintroduction in Italy of a PTAB. The main question I intend to address is how such a body could fit into the complex information ecosystem that currently supports the work of the Italian Parliament. I borrow the phrase "cognitive systems" from the conceptualization made by the cognitive systems research: the cognitive systems paradigm attempts to use structured representations and heuristic methods to support complex reasoning and problem

in Camera dei Deputati, *Il Parlamento della Repubblica: organi, procedure, apparati*, Roma, 1998; N.J. VIG, H. PASCHEN (eds), *Parliaments and Technology. The Development of Technology Assessment in Europe*, State of New York, 1999; R. VAN EST, J. GANZEVLES, M. NENTWICH, *Modeling Parliamentary Technology Assessment in Relational Terms in Zeitschrift für Technikfolgenabschätzung, in Theorie und Praxis* 24(1), 2015, 11-20; M. NENTWICH, *Parliamentary Technology Assessment Institutions and Practices. A Systematic Comparison of 15 Members of the EPTA Network*, Elektronisches Publikationsportal der Österreichischen Akademie der Wissenschaften, 2016; K. AKERLOF, A. ALLEGRA, T. WEBLER (et al.), *New Methods in Creating Transdisciplinary Science Policy Research Agendas: The Case of Legislative Science Advice*, in *Science and Public Policy*, 47, 4, 2020; S. PENASA, *La consulenza scientifica parlamentare: analisi comparata di uno strumento costituzionalmente necessario*, in *Rivista di Diritti Comparati*, 3, 2021, 1-29; T. AMICO DI MEANE, *La consulenza scientifica parlamentare. Riflessioni comparative sull'insostenibile eccezionalismo del caso italiano*, in *DPCE Online*, 4, 2023, online: <https://doi.org/10.57660/dpceonline.2023.2024> (last visited 3/10/2025). Parliamentary technological assessment is but one aspect of the wider practice of scientific advice in policy-making: on this topic, see A. BARKER, B.G. PETERS, *The Politics of Expert Advice*, Pittsburgh, 1993; J. SCHOT, A. RIP, *The past and future of constructive technology assessment*, in *Technological Forecasting and Social Change*, 54, 1997, 271-268; C. MIRONESCO, *Un enjeu démocratique: le Technology Assessment*, Genève, 1997; e P. DELVENNE, S. BRUNET, *La Technology Assessment en question: une analyse comparative*, in *Courrier Herbdomaine du CRISP*, 4-5-, 2003, 5-63; T. GUNDERSEN, *Trustworthy Science Advice: The Case of Policy Recommendations*, in *Res Publica*, 30, 2024, 125-143. ³A. ALLEGRA, R.G. BETTINARDI, L. CARRA, *Scienza e democrazia in Italia: una proposta concreta per portare la #ScienzaInParlamento*, in *The Future of Science and Ethics*, Rivista scientifica a cura del Comitato Etico della Fondazione Umberto Veronesi, 4, 2019; S. PENASA, *La consulenza scientifica parlamentare*, cit.; T. AMICO DI MEANE, *La consulenza scientifica parlamentare. Riflessioni comparative sull'insostenibile eccezionalismo del caso italiano*, cit.; L. DEL CORONA, *Libertà della Scienza e Politica. Riflessioni sulle valutazioni scientifiche nella prospettiva del diritto costituzionale*, Torino, 2022, 112-116; D. CACCIOPPO, *Il tentativo fallito di equiparare agricoltura biologica e biodinamica: un caso per riflettere sull'opportunità d'introdurre la consulenza scientifica in Parlamento*, in *Consulta Online*, 2/2023, online: <https://giurcost.org/contents/media/posts/22768/caccioppo.pdf> (last visited 10/10/2025).

⁴ Cfr. the rulings n. 282/2002, n. 274/2014, n. 5/2018. On the need for a "scientific reasonableness" of the laws, see S. PENASA, *Nuove dimensioni della ragionevolezza? La ragionevolezza scientifica come parametro della discrezionalità legislativa in ambito medico scientifico*, in *Forum di Quaderni costituzionali*, 16 giugno 2014; C. CASONATO, *La scienza come parametro interposto di costituzionalità*, in *Rivista AIC*, 2, 2016; G. RAGONE, *Eine empirische Wende? La Corte costituzionale e le sfide della complessità tecnico-scientifica*, Torino, 2020; A. IANNUZZI, *Istruttoria e valutazioni tecnico-scientifiche*, in *Rivista del Gruppo di Pisa*, 1, 2017, 14-17.



solving. This approach focuses on integrated systems rather than component algorithms⁵. The phrase “Parliamentary cognitive systems” (or “ecosystems”) indicates the set of interacting components (institutional actors, procedures, information platforms) that support the gathering and processing of information by the parliaments.

Like most democratic legislative assemblies, the Italian Chambers have established bodies and procedures dedicated to processing the knowledge necessary for political decision-making. When compared with other European countries, the Italian experience in this field may be considered particularly advanced in many respects. How might the establishment of a parliamentary body dedicated to technical and scientific issues fit into this context? What are the advantages and potential challenges expected from this innovation?

To answer these questions, I will divide my article into four parts. In the first, I will illustrate the relationship between knowledge and political decision-making in light of the form of government in which parliaments operate. In the second, I will specifically examine the procedures and institutional structures currently tasked with providing the Italian Parliament with the knowledge it needs. In the third, I will analyse the parameters currently used by parliamentary committees to acquire the knowledge necessary for legislative decision-making. Lastly, in the final paragraphs I will consider some hypotheses regarding the introduction of a PTAB into our parliamentary system.

2. The Parliamentary Cognitive Systems and the Form of Government

It has correctly been observed that the capacity to enhance political knowledge is central to the success of representative democracy.⁶ Parliaments can play a crucial – even if often underestimated – role in this respect. From this perspective, modern parliaments are not just political institutions: they are also “machines for thinking” since they need to process an enormous amount of information. In doing so, they not only gather information from the outside, but also generate new knowledge for the benefit of parliamentarians and citizens. They produce new knowledge because they make organized and structured data available regarding not only their own activities, but also those of other institutions. They therefore enable the transition of data to knowledge, from the “raw” to the “cooked”: “knowledge is ‘cooked’ in the sense of being processed [...] The processes include verification, criticism, measurement, comparison, and systematization”.⁷ I have attempted to analyse elsewhere what I call the ‘encyclopaedic vocation’ of parliaments as institutions capable of organizing political knowledge in a systematic framework.⁸ Here I will limit myself to observing how, in the parliamentary arena, the “cooking” of knowledge is the result of a complex interaction between various actors: the Government, the majority, the opposition, individual parliamentarians, parliamentary administrations, external stakeholders, citizens, etc.

⁵ P. LANGLEY, *Advances in Cognitive Systems*, 1, 2012, 3–13; for a general explanation, see H.I. CHRISTIANSEN, A. SLOMAN, A., G.-J. KRUIFF, and J. WYATT, *Cognitive systems*, Berlin, 2009.

⁶ J. JAEGER, W. LYONS and J. WOLAK, *Political Knowledge and Policy Representation in the States in American Politics Research*, 45, 5, 2017, 908.

⁷ P. BURKE, *A Social History of Knowledge: From the Encyclopédie to Wikipedia*, Cambridge, 2012, 5.

⁸ G. RIZZONI, *Parliamentarism and Encyclopaedism. Parliamentary Democracy in an Age of Fragmentation*, Oxford, New York, 2024.

The form of government as defined by national constitutions certainly influences the dynamics of this learning process.

In presidential systems, the principle of the separation of powers influences the ways in which representative institutions process knowledge. Legislative assemblies within these systems tend to have knowledge-gathering apparatuses which are distinct and autonomous from those of the executive branch. The paradigmatic example is, of course, the United States Congress: the US Senate and House of Representatives are supported by powerful independent agencies that are tasked with providing parliamentarians with objective and impartial assessments on various aspects of public policy. Among these are the Governmental Accounting Office (GAO) and the Congressional Budget Office. Congress can also rely on the Library of Congress, the largest library in the world, with millions of books, films and video, audio recordings, photographs, newspapers, maps and manuscripts in its collections.⁹ The Congressional Research Service operates within the Library of Congress, providing nonpartisan expertise on all matters of interest to members of Congress.¹⁰ It is no coincidence that the Office for Technological Assessment (OTA) was also established within the legislative branch with the mission of providing nonpartisan advice on issues of science and technology. The OTA was active from 1974 to 1995 and produced an impressive number of full assessments, background papers, technical memoranda, case studies, and workshop proceedings spanning a broad range of topics.¹¹

Compared to presidential regimes, parliamentary systems are based on the opposite principle of the “fusion of powers”.¹² In these systems, the executive is not external to Parliament, but is *within* Parliament and is the natural interlocutor of all parliamentary procedures. In this different institutional setting, the executive is the primary supplier of information to Parliament. Of course, the fusion of powers principle should not obliterate the autonomy of the legislature vis-à-vis the executive and the accountability of the former toward the latter. It has been observed that, in these systems, the separation of powers principle is ensured through the physiological confrontation between the executive-majority continuum and the opposition.¹³ The opposition is also the institutional actor most interested in holding the majority and the

⁹ See the Library’s website <https://www.loc.gov/about/> (last visited 10/10/2025). On the history of the Library see J.Y. COLE, and J. AIKIN, *America’s Library: a Brief History of the Library of the Congress*, in JY COLE and J AIKIN (ed.) *Encyclopaedia of the Library of the Congress*, Washington, 2004, 1-14.

¹⁰ M. A. DRAKE, *Congressional Research Service in Encyclopedia of Library and Information Science: Lib-Pub*. Vol. 3 (2 ed.), New York, 2003 .

¹¹ The defunding of the OTA in 1995 was decided by the Congress maintaining “that some of OTA’s reports exhibited bias and that the agency was responsive only to a narrow constituency in Congress, that reports were costly and not timely, that there were insufficient mechanisms for public input, and that the agency was inconsistent in its identification of ethical and social implications of developments in science and technology”. Cfr. *Congressional research service, The Office of Technology Assessment: History, Authorities, Issues, and Options*, April 2020, <https://www.congress.gov/crs-product/R46327> (last visited 15/10/2025). As an alternative to the OTA, the Congress decided to develop the existing technology assessment capability of the Government Accountability Office (GAO).

¹² In the UK, for example, the executive and legislature are seen as “a close union, [a] nearly complete fusion of executive and legislative powers” which Walter Bagehot viewed as the “efficient secret of the English constitution” (cfr. W. BAGEHOT, *The English Constitution*, London, 1867, 67–68).

¹³ See G. WEBBER, *Separation of Powers and the Opposition* (April 2025), forthcoming in M. LELOUP et al. (ed), *The Cambridge Handbook Of The Separation Of Powers* (Cambridge University Press), LSE Legal Studies Working Paper No. 4/2025, available at SSRN:<https://ssrn.com/abstract=5219786> or <http://dx.doi.org/10.2139/ssrn.5219786> (last



government accountable for their decisions, including through requests for data and information regarding public policy measures. From this perspective, while Wednesday afternoon question time has become the most mediatic moment in parliamentary life in the UK, the British Parliament, especially through its select committees, has equipped itself with less spectacular but highly sophisticated tools for acquiring and processing the information needed to exercise its oversight function over the Government.¹⁴

The dynamic present in the British Parliament is replicated, with significant variations, in the parliaments of other parliamentary democracies. From this perspective, each system has developed unique characteristics, which must be taken into account when addressing the issue of cognitive support for parliamentary deliberation.¹⁵ In the following section, I examine the salient features of the Italian Parliament's cognitive ecosystem.

3. The Cognitive Ecosystem of the Italian Parliament

The Italian Constitution establishes a parliamentary system based on the confidence relationship between the Government and Parliament. The Government must obtain a vote of confidence from the Chamber of Deputies and the Senate within five days of its formation. The Government can be forced to resign following a vote of no confidence by even just one of the two chambers.¹⁶ The sparse constitutional provisions on the confidence relationship have been further specified by institutional practice and parliamentary standing rules which have, for example, regulated the question of confidence, that is, the procedure by which the Government can request a vote to verify the parliamentary majority's support for its policy.¹⁷ However, the confidence relationship is not expressed only in these key moments. Rather, it pervades all parliamentary activity. All decisions made by the Chambers (except those on their own constitutional prerogatives, such as those regarding the immunity of parliamentarians) are adopted in continuous dialogue with the Government, whose members, pursuant to the Constitution, have the right and, if requested, the obligation to attend meetings of parliamentary bodies.¹⁸

This principle applies not only to procedures specifically aimed at exercising Parliament's oversight function, but also to the Chambers' legislative activity. When legislating, Parliament has the Government as its primary interlocutor, not only as political counterpart, but also as information provider. The relationship between Parliament and Government in terms of knowledge acquisition can therefore be illustrated as follows:

visited 10/10/2025). See also G. RIZZONI, *Opposizione parlamentare e democrazia deliberativa. Ordinamenti europei a confronto*, Bologna, 2012, 145-6.

¹⁴ For the actual impact of the select committees on the work of the British House of Commons, see M. RUSSEL, M. BENTON, *Selective Influence: The Policy Impact of House of Commons Select Committees*, London, 2011.

¹⁵ For a compared overview of the parliamentary oversight functions in Europe, see E. GRIGLIO, *Parliamentary oversight of the executives: tools and procedures in Europe*, Oxford, 2020.

¹⁶ Art. 94 Italian Constitution.

¹⁷ Cfr. art. 161 of the Senate's Rules of procedure and art. 116 of the Chamber's Rules of procedure.

¹⁸ Art. 64 Italian Constitution.

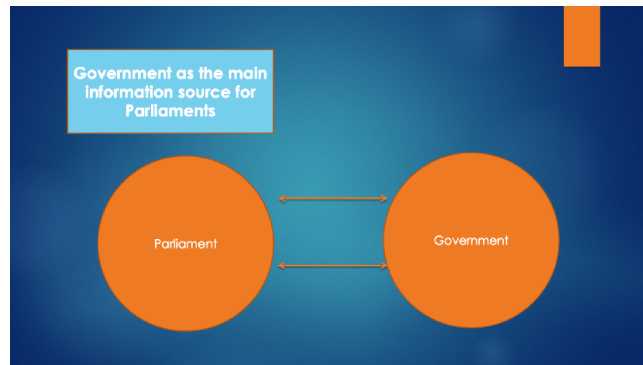


Fig. 1. Government as the main information source for Parliaments

The Government's role as Parliament's primary supplier of information has been further strengthened by the increasing prevalence of executive legislative initiatives over parliamentary initiatives. Currently, over 70% of approved laws originate from Government proposals¹⁹. When the Government submits a bill to Parliament, it is required to provide the information supporting its proposal. For this purpose, a series of documents must be submitted to the Chambers. In addition to the explanatory report required for all proposed laws, Government bills must include a technical report prepared by the State General Accounting Office, which provides a detailed account of the financial costs expected to arise in relation to the new legislation. Government bills must also be accompanied by a regulatory impact assessment.²⁰ In addition to this *ex ante* information, the Government may be asked for further information during the legislative process: parliamentary committees, including at the request of minority groups, may, for example, request the preparation of technical reports regarding specific content of the bills under consideration.

The information that reaches Parliament from these multiple sources has one important aspect in common: it is provided by the Government, which assumes political responsibility for it. The information acquired by the Chambers through these channels is "politically qualified" because it is produced in the confrontation between majority and opposition that is inherent in every parliamentary system.

However, the Italian Parliament also has other sources of knowledge of a different nature, such as those offered by neutral institutions tasked with providing Parliament with objective and complete knowledge on the subjects that fall within their competence. Some of these institutions are expressly provided for by the Italian Constitution and are defined as "auxiliary bodies of Parliament", namely the Court of Auditors and the National Council for Economics and Labor. In addition, the Parliament can rely on the Parliamentary Budget Office, an independent body established in 2014.

The National Council for Economics and Labor (CNEL)²¹ is composed of experts and representatives of trade organisations and acts as a consulting body to the Chambers of Deputies and the Government. The Council has the right to initiate legislation and may contribute to drafting economic and social legislation.

¹⁹ *Camera Dei Deputati. Osservatorio Sulla Legislazione, La legislazione fra Stato, Regioni ed Unione Europea*, Roma 2025, 25, online: <https://www.camera.it/temiap/2025/04/15/OCD177-8033.pdf> (last visited 20/10/2025).

²⁰ Cfr. *Italy* in OECD, *OECD Regulatory Policy Outlook 2025*, Paris, 2025, online: <https://doi.org/10.1787/56b60e39-en> last visited 20/10/2025).

²¹ Article 99 of the Italian Constitution

The Court of Auditors²² undertakes both *a priori* compliance auditing of the legitimacy of government measures and subsequent auditing of the amministrazioni of the State budget. It participates in auditing the financial management of the bodies which receive regular budgetary support from the State. It reports directly to the Chambers regarding the results of audits performed.

The Parliamentary Budget Office (PBO)²³ is responsible for analysing and assessing macroeconomic and fiscal forecasts by the Government and for verifying compliance with national and European fiscal rules. It reports directly to the Chambers.

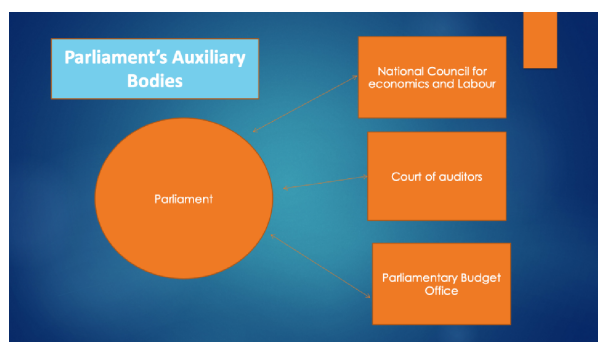


Fig. 2. Parliament's auxiliary bodies

These institutions regularly provide Parliament with a vast amount of information in their areas of competence, which concern the labour market and production issues (CNEL), management of the State budget and of entities dependent on public finances (Court of Auditors), and verification of the macroeconomic assessments underlying public finance decisions adopted by the Government (PBO). The information reaching Parliament through these channels is the product of highly complex technical expertise, which is subject to rigorous validation processes. The assessments released by the Parliamentary Budget Office, for example, are prepared by a Board of three economists of recognized expertise, who are in turn supported by a structure composed of specialized personnel in the field of economic disciplines.

Measuring the impact of the acquisition of new knowledge on the quality of parliamentary deliberation certainly presents many challenges. However, historical data on the activities of Parliament's auxiliary bodies offers interesting insights. For example, it has been observed that, over the years, following the establishment of the PBO, the economic forecasts of the Government when presenting the budget law have become less optimistic. While in the past the Government largely overestimated real and nominal

²² Art. 100 of the Italian Constitution.

²³The Italian PBO was established by the law 243/2012 on the implementation of the balanced budget principle. The establishment of the PBO stems from the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (the so called 'Fiscal Compact'), ratified by Law 114/2012. Implementing the Treaty, Regulation 473/2013/EU ('Two-Pack') requires Euro area Member States to use macroeconomic forecasts produced or endorsed by Independent Fiscal Institutions for medium-term budgetary plans and draft budgets; Directive 2011/85/EU as amended by Directive 2024/1265/EU indicates that IFIs are responsible for monitoring compliance with national numerical fiscal rules and for publishing public assessments of deviations from the adjustment path. The directing body of the PBO is a Board composed by three economists of recognized expertise appointed by the Presidents of the two Chambers. Its reports are submitted to rigorous validation processes.

adoption of a document stating its findings. These documents can then be compared with the reports normally approved by the PTABs of the other European Parliaments.²⁵

Is the knowledge acquired through these channels actually used in parliamentary decision-making? The quantity and variety of information reaching Parliament is truly remarkable, and it is objectively very difficult for parliamentarians, busy with multiple tasks and subject to severe time constraints, to synthesize the input received.

In order to address these challenges, the documentation services of both chambers play an important role in synthesizing and selecting useful information for parliamentarians. It could be said that these structures cover the last mile between information and its effective use in political decision-making: they act as honest information brokers for the benefit of parliamentary bodies.²⁶ They work closely with the parliamentary Committees, following every stage of decision-making with their documentation. The most comprehensive service is the Research Service, which in the Chamber of Deputies is structured into 14 departments corresponding to the Standing Committees with legislative functions. The Service prepares legislative briefs on all bills under consideration by the Committees and the Assembly of the Chamber. Alongside the Research Service, which has general competence, other documentation services specialize in specific matters, such as the Budget Service (for verifying the quantification of the financial burdens posed by bills), the Service for Relations with the European Union (which manages documentation regarding Parliament's participation in decision-making at the European Union level), the Parliamentary Oversight Service (responsible for aspects relating to parliamentary oversight), and the Library Service (which manages one of the largest parliamentary libraries in the world).

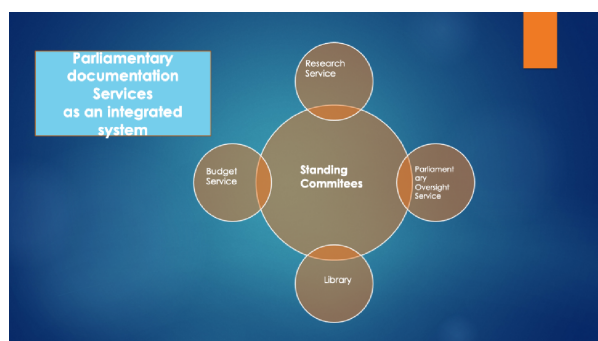


Fig. 4. Parliamentary documentation services as an integrated system

The documentation services form a circular and integrated system with a clear division of labour among the different departments. As already mentioned, they operate as impartial brokers of information with their documentation briefs: they systematically cover the entire legislative agenda of the committees and

²⁵ T. AMICO Di MEANE, *La consulenza scientifica parlamentare*, cit., 3129. For some examples of investigations on topics with scientific aspects, see R. DI CESARE, *Per una connotazione scientifica della documentazione parlamentare*, in *The Future of Science and Ethics*, 4, 2019, 28-29.

²⁶ For a comparative perspective on the role of these services see G. RIZZONI, *Parliamentary Administrations and the Provision of Scientific Expertise*, in T. CHRISTIANSEN, E. GRIGLIO, N. LUPO (ed.), *The Routledge Handbook of Parliamentary Administrations*, London and New York, 2023, 121-134.

of the plenary. Moreover, they cooperate with the committee secretariats in organizing the hearings and investigations on the topics submitted for consideration by the committees. These structures offer reliable, non-partisan, timely support to the MPs in their day-to-day work. However, there are also some obvious shortcomings. The parliamentary documentation services can rely on a limited staff (at the Chamber of Deputies, the largest structure, namely the Research service, has a staff of around 60 people), which mainly comprises experts only in the legal, economic and social disciplines. Moreover, they operate within very strict time constraints as they are expected to follow the rapidly changing agenda of the parliamentary bodies. Could the introduction of structures specifically dedicated to scientific advice strengthen the information ecosystem of the Italian Parliament? Before trying to answer this question, it is appropriate to briefly examine the “cognitive grid” of the Committees as defined by the current rules of procedure.

4. Parliamentary Committees and the Limits of Scientific Evidence in Lawmaking

At the Chamber of Deputies, the rules of procedure define the factfinding activities that should be conducted by the Committees in their legislative capacity. During consideration of the bill, the Committee is responsible for collecting any data needed “to verify the quality and efficacy of the provisions contained in the text”. For this purpose, the pre-legislative scrutiny must take the following aspects into consideration:

- a) whether new legislation is necessary, or whether the same ends might be achieved through sources other than legislation;
- b) whether the proposed legislation is consistent with the Constitution, whether it is compatible with European Union legislation and whether it respects the areas of competence of the regions and local authorities;
- c) whether the objectives of the new legislation have been defined and the means identified to achieve them are appropriate, whether the time limits provided for implementing the proposed legislation are adequate, including the costs to the public administration, citizens and businesses; and
- d) whether the meaning of definitions and provisions is unambiguous and clear, and whether the subject-matter has been appropriately arranged in sections and paragraphs.²⁷

This checklist was introduced in the Chamber’s rules of procedure in 1998: it was extensively influenced by the 1997 OECD Report on Regulatory Reform and has not been updated since then. As can be seen, the consideration of the scientific and technical implications of the legislative options is not explicitly mandated by the checklist. This aspect could be viewed as only implicitly included in the requirement that committees consider the proportionality between the objectives envisaged by the new legislation and the means identified to achieve them. No direct reference to scientific expertise is made by the Chamber’s rules of procedures when it comes to the sources of the factfinding activities either. To collect the information referred to in the checklist, the Committees may ask the Government to provide data and, if necessary, to draft specific technical reports. In practice, however, the technical reports prepared by the Government for consideration during the law-making process focus on the legal, financial and administrative aspects of the bills and do not make any reference to technical or scientific evidence. As already mentioned, a possible source of scientific advice within the legislative process can be expert hearings.

²⁷ Art. 79 of the Chamber’s Rules of Procedure.



However, these hearings are organized on a case-by-case basis and do not allow for a real and permanent accumulation of expertise within the committees' system.

5. Hypotheses for the New Establishment of a PTAB in the Italian Parliament

Within the institutional context I have described, how could the contribution of scientific advice to the work of the Italian Parliament be strengthened?

A first possible option to achieve this goal could be the explicit inclusion of scientific evidence among the matters that must necessarily be considered by the Committees during the legislative process. An amendment to the Chamber's rules of procedure intended to introduce this aspect to the factfinding checklist could raise the committees' awareness of the need to gather the best available scientific and technical expertise. This option would not, however, necessarily change the committees' current practice for their factfinding activities: in order to obtain the necessary scientific advice, the committees would probably avail themselves of the contribution of experts and scientists collected through hearings organised within the legislative process. This solution has the advantage of being extremely flexible, allowing the proper "tailoring" of the expertise to the actual needs of the committees within the usually strict time constraints of the legislative decision-making process. However, such ready-made expertise doesn't permit the accumulation of knowledge on different topics and seems unfit to address long-term policy issues. Moreover, due to time constraints and political pressures, informal hearings are often unable to deliver a fair and reliable representation of the scientific research on the topics to be addressed.²⁸ The most pressing collective challenges of our age require long term strategies that normally transcend the remit of the parliamentary legislative committees. These strategies can only be shaped on the basis of robust evidence collected through the contribution of the scientific community. How can the Parliament be better equipped to address this dimension of contemporary policy-making?

The establishment of parliamentary bodies specifically dedicated to scientific and technological assessment could be a viable answer to this need. In the Italian context, this option could be explored not as an alternative to the evaluation activities conducted by the standing committees, but rather as a means of integrating them. In the parliamentary context, a new PTAB would likely be a bipartisan body similar, for example, to the committees currently operating within the Bureau of the Chamber.²⁹ These bodies are chaired by a vice president of the Chamber and include representatives of all political groups. They are responsible for examining issues of particular technical complexity such as the documentation activities, the security of the parliamentary premises, and human resources management. The institution of the VAST in 1997 followed this model: the new body was established within the Chamber's Bureau even if it actually operated within one of the permanent committees, the Industry Committee.

An even more interesting model is provided by the Committee on Legislation, which has been operating within the Chamber of deputies since 1998. With the aim of improving the technical quality of the

²⁸ L. DEL CORONA, *Libertà della Scienza e Politica. Riflessioni sulle valutazioni scientifiche nella prospettiva del diritto costituzionale*, cit., 97ss.

²⁹ The Bureau of the Chamber is chaired by the President of the Chamber and is composed of the four Vice-President, the three Quaestors and at least eight deputies acting as Secretaries. The Bureau is given multiple functions linked with the governance of the Chamber.

legislative production, the Committee provides opinions on the legislative texts under consideration by the standing committees, “with regard to the homogeneity, simplicity, clarity and correctness of their wording, and to their effectiveness in simplifying and reorganizing the current legislation.”³⁰ However, the Committee consider also wider issues like those connected with the possible solutions to overcome the dysfunctional aspects of the Italian law-making system.³¹ The Committee comprises an equal number of MPs of the majority and of the opposition and is chaired by each of its members on a rotating basis: this composition normally allows the Committee to approve its opinions unanimously. It is supported by a technical body, the Observatory on legislation, established within the Research Service. The Observatory collects all the data on legislation needed by the Committee and prepares an annual Report on the state of Italian legislation drafted in cooperation with the regional Councils and some of the most reputed Italian academic institutions on this field.³² Since 2022, a Committee on legislation has also been established at the Italian Senate.³³

The proposed solutions all involve bodies composed entirely of parliamentarians, as is the case with the French *Office parlementaire d'évaluation des choix scientifiques et technologiques* (OPECST)³⁴ and as was the case with VAST. The question of such bodies' connection to the scientific community naturally remains open, despite this aspect appearing essential to lend authority and continuity to their advisory activities. Several approaches are possible to achieve this goal.

One could involve pairing the political body with a board of experts selected from various fields of technical and scientific knowledge. The political component would be responsible for identifying the topics for evaluation and establishing general guidelines, while the scientific component would instead provide input on the substance of the reports prepared by the PTAB.

Another possible option would be the establishment of collaboration protocols between the PTAB and external research institutions of proven scientific authority.

The experience of the Chamber of Deputies offers examples of both these solutions.

A recent case is the investigation conducted by the Chamber's Supervisory Committee on documentation activities (one of the Committees of the Bureau I mentioned earlier) on the possible uses of artificial

³⁰ Art. 16-bis of the Chamber's Rules of Procedure. On the Committee for legislation of the Chamber of Deputies, see F. BIENTINESI, *Il Comitato per la legislazione e le riforme regolamentari della Camera dei deputati*, in *Diritto pubblico*, 1998, 527; R. MAFFIO, *Politiche per la legislazione e ruolo delle istituzioni: il caso del Comitato per la legislazione*, in *Iter legis*, novembre-dicembre 1999, 396ss.; E. BERARDUCCI, R. ALESSE, *Comitato per la legislazione*, in *Enc. giur. Aggiornamento*, Roma, Treccani, 1999; F. DAL CANTO, *La qualità della formazione e i suoi custodi*, in M. CAVINO e L. CONTE (a cura di), *La tecnica normativa tra legislatore e giudici*, Napoli, 2014; L. GIANNITI, N. LUPO, *Corso di diritto parlamentare*, Bologna, 4th ed., 2023, 234-5.

³¹ See CAMERA DEI DEPUTATI. COMITATO PER LA LEGISLAZIONE, XIX Legislatura, *Indagine conoscitiva sui profili critici della produzione normativa e proposte per il miglioramento della qualità della legislazione* (December 2023-September 2025), https://www.camera.it/leg19/1101?idLegislatura=19&idCommissione=&tipoElenco=indaginiConoscitiveCronologico&annoMese=&breve=c48_profili_critici&calendario=false&soloSten=false&foglia=true&shadow_organoparlamentare=3517&id_tipografico=48 (last visited 20/10/2025).

³² For the last Report of the Observatory, see note 17.

³³ Art 20-bis of the Senate's Rules of Procedure. At the Senate the Committee shall issue not only opinions but also “impact assessments” on the quality of measures, “with respect to their homogeneity, simplicity, clarity and appropriate wording, as well as their effectiveness in relation to simplifying and reorganizing existing legislation”.

³⁴ The OPECST is a bicameral body composed by 18 senators and 18 deputies: see <https://www.assemblee-nationale.fr/dyn/17/organes/delegations-comites-offices/opecest> (last visited 10/10/2025).



intelligence in parliamentary activity. The final document approved at the conclusion of the investigation drew on the contributions of representatives of leading AI market players as well as academics.³⁵ Following the investigation, the Committee launched a call for proposals to develop AI application projects to support parliamentary functions. The best projects were selected by a Technical-Scientific Committee chaired by Professor Luciano Floridi and are currently being implemented by the Chamber.³⁶

As for the cooperation agreements with scientific institutions, it is worth noting the recent agreement signed between the Chamber of Deputies and the Accademia Nazionale dei Lincei (one of the most ancient and prestigious Italian scientific institutions), also with the aim of promoting scientific research on selected topics.³⁷

The functions of the new PTAB could be twofold: on the one hand, it should advise the permanent committees on the scientific aspects of the bills under their consideration; on the other hand, it could prepare long term assessments on social and economic impact of the emerging technologies. In this latter capacity, the new body would likely be similar to one of the “Committees for the Future” established in some parliaments around the world, starting with the Finnish Parliament. Such bodies are typically tasked with examining public policy issues regarding long-term challenges that often have scientific and technological implications.³⁸

A crucial question to be addressed will be the political incentives for the parliamentarian members of the new Committee. It is unlikely that a body such as the PTAB would be granted the power to adopt binding decisions. Rather, its relevance among parliamentary bodies would derive from the authoritativeness of its assessments and from the fact that these are adopted through bipartisan agreement between the majority and the opposition. The decades-long experience of a similar parliamentary body—the above-mentioned Committee on Legislation—demonstrates that committees with purely consultative powers can make an impact and gain visibility both within and beyond the chambers of Parliament, which are crucial factors in encouraging active participation by parliamentarians in these types of committees.

Finally, it should be observed that the establishment of a PTAB within the Italian Parliament would also have the significant advantage of enabling our legislative assemblies to join international networks linking

³⁵ Cfr. CAMERA DEI DEPUTATI. COMITATO DI VIGILANZA SULLE ATTIVITÀ DI DOCUMENTAZIONE, *Report: Using Artificial Intelligence to Support Parliamentary Work*, Rome, February 2024, online: https://comunicazione.camera.it/sites/comunicazione/files/notiz_prima_pag/allegati/Rapporto_IA_ENG_0.pdf (last visited 20/10/2025).

³⁶ CAMERA DEI DEPUTATI. COMITATO DI VIGILANZA SULLE ATTIVITÀ DI DOCUMENTAZIONE, *Manifestazione d'interesse per la raccolta di proposte per l'utilizzo dell'intelligenza artificiale generativa per la Camera dei deputati*, Roma, February 2025, online: <https://comunicazione.camera.it/eventi/intelligenza-artificiale-Camera-report-comitato-documentazione-lavori-parlamentari> (last visited 20/10/2025).

³⁷ ACCADEMIA NAZIONALE DEI LINCEI, *Firmato il Protocollo d'intesa con la Camera dei deputati*, December 2024, online: <https://www.lincci.it/it/notizie/firmato-il-protocollo-di-intesa-con-la-camera-dei-deputati> (last visited 20/10/2025).

³⁸ On these bodies see J. BOSTON, *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow*, Bingley, 2017; S. CANEY, *Political Institutions for the Future: A Fivefold Package*, in GONZÁLEZ-RICOY and A. GOSSERIES (ed.), *Institutions for Future Generations*, Oxford, 2016; V. KOSKIMAA and T. RAUNIO, *Political Institutions and Long-Term Policymaking: How Parliamentary Future Committees Can Make a Difference*, in *European Journal of Risk Regulation*, 14(4), 2023), 686-696. The Committee for the Future was established in the Finnish Eduskunta in the early 1990s: today, eight parliaments have similar committees (Austria, Brazil, Chile, Finland, Iceland, Lithuania, Philippines and Uruguay), and two have future-regarding research institutes that connect MPs to foresight work and scenario building (Estonia and South Korea).

parliamentary bodies with similar functions, such as the European Parliamentary Technological Assessment Network (EPTA).³⁹ Exchanges with parliaments of other countries and knowledge of best practices in the evaluation of scientific and technological decisions are indeed essential to the proper functioning of these bodies.

6. Concluding Remarks

The incorporation of technical and scientific expertise into the parliamentary system cannot be based on abstract principles. To be successful, institutional innovation must take into account the concrete working methods of parliaments and their effective capacity to integrate knowledge into political decision-making processes.

To achieve this, it is essential to take into account the specific cognitive ecosystem in which each parliament operates. Equally important is ensuring that the various actors in the parliamentary arena (government, majority, opposition, individual deputies) find adequate incentives to participate in an institutional game capable of generating new knowledge from the interaction of the various interests of the parties involved. From this perspective, the Italian Parliament has a particularly complex cognitive ecosystem, developed over time under the pressure of the political need to acquire knowledge on specific aspects of public policy. Through this system, Italian legislative assemblies have demonstrated their ability to master highly technically complex topics, such as economic and financial issues concerning the state budget or the expertise needed for an active parliamentary participation in European decision-making. This has been achieved through the support of highly skilled technical structures, both external and internal to parliamentary services, which have been enabled to interact positively within the conflictual environment of the Italian Chambers.

Given this context, the establishment of a parliamentary body specializing in evaluating the scientific and technological aspects of public policies could significantly enhance the Parliament's information system. In particular, it could fulfill functions currently not performed by other bodies: supporting the technological assessment activities of permanent committees and preparing long-term reports on the scenarios arising from new scientific discoveries and technological progress. These are issues of enormous importance for our democracies, but are highly challenging to address within our Parliament's current organizational structure, due to the segmentation of committees' responsibilities and the short timeframes for legislative decision-making. However, to be successful, the establishment of the new body would need to carefully identify an appropriate combination of political input and technical expertise, as well as a positive integration into our Parliament's factfinding procedures.

The introduction of a PTAB would not only support the lawmaking function of the Italian Parliament with robust scientific evidence. It could also contribute to "parliamentarizing science" in the sense of making scientific research more aware of the pressing political and social needs addressed by representative assemblies. Helping to fill the gap between human experience – of which politics is a major part – and science⁴⁰ can be one of the emerging functions of contemporary parliaments.

³⁹ Currently the network has 24 members: see the EPTA website <https://eptanetwork.org/> (last visited 20/10/2025).

⁴⁰ On the distance between science and everyday human experience, see A.FRANK, M. GLEISER and E. THOMPSON, *The Blind Spot. Why Science Cannot Ignore Human Experience*, Cambridge (Mass.), 2024.

