Voorzitter van De Nationale Assemblée
heer dr. h.c. ir. A. Adhin

Griffier bij De Nationale Assemblée
mevrouw Ruth de Windt

Onderwerp: Aanbieding rapport: *'Parliament of the Republic of Suriname and Artificial Intelligence: foundations to frameworks'*

Geachte Voorzitter,

Geachte Griffier,

Hierbij bied ik u, mede namens de heer Rudolf Saridjo, Hoofd ICT, het rapport *'Parliament of the Republic of Suriname and Artificial Intelligence: foundations to frameworks'* aan. Dit rapport, opgesteld naar aanleiding van onze deelname aan de studievisit over Artificiële Intelligentie (AI) bij de Kamer van Afgevaardigden van Chili (21-23 januari 2026), positioneert het strategische pad van De Nationale Assemblée naar AI-integratie als een principieel en doordacht voorbeeld voor parlementen in kleine staten en het Globale Zuiden.

De kernboodschap van het rapport is dat ons parlement bewust kiest voor een *foundation-first* benadering. In tegenstelling tot een *'race to regulate'* of een overhaaste implementatie van geavanceerde tools, legt Suriname eerst de noodzakelijke fundamenten:

1. digitale paraatheid: *systematische digitalisering en structurering van onze volledige wetgevende corpus (vanaf 1900) tot een soevereine, machine-leesbare database.*
2. infrastructurele veerkracht: *consolidatie van ons digitale ecosysteem (M-Files, Step2HR, streamingdiensten) als stabiele basis.*
3. menselijk en bestuurlijk vermogen: *ontwikkeling van interne capaciteit en een duidelijk governance-kader met menselijk toezicht als centraal principe.*

Het rapport bevat een gedetailleerde analyse van het Chileense CAMINAR-project, een uitgebreid ecosysteem van AI-ondersteunende tools voor wetgevende en administratieve processen. Wij concluderen dat een dergelijke, voor Suriname geadapteerde aanpak zeer relevant is, met name voor het moderniseren van onze Handelingen (Hansard), parlementaire research en kennisbeheer.

Als concrete en bestuurlijk verankerde volgende stap presenteren wij in Hoofdstuk 7 een *'Plan van Aanpak'* voor de gefaseerde introductie van **SuriDNAChat.Bot**. Dit plan voorziet in een duidelijk governance- en verantwoordelijkheidskader voor alle betrokken afdelingen (o.a. DIV, ICT, Juridische Ondersteuning) en een tijdpad van vier maanden naar een gecontroleerde pilot. Het benadrukt dat AI een ondersteunend instrument moet zijn dat de menselijke besluitvorming en democratische verantwoording versterkt, niet vervangt.

Het rapport bevestigt dat het door u geleide parlement op een duurzaam en democratisch verantwoord pad is. Door eerst onze institutionele fundamenten te versterken, zorgen wij ervoor dat toekomstige AI-toepassingen zoals SuriDNAChat.Bot veilig, betrouwbaar en in dienst van onze democratie kunnen worden ingezet.

Wij hopen dat dit rapport en de voorgestelde route een waardevolle basis vormen voor de verdere strategische besluitvorming binnen De Nationale Assemblée alsook richtinggevend aan ons nog nieuw te schrijven Strategisch Beleidsplan 2026-2031.

Hoogachtend,

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cc: Substituut-Griffiers, de heer Dino Oedit en mevrouw Agatha Ramdarass

Parliament of the Republic of Suriname and Artificial Intelligence

foundations to frameworks:

Suriname's principled pathway for parliamentary Artificial Intelligence and a critique of premature regulation

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Abstract

This article examines the emerging approach of the Parliament of the Republic of Suriname towards Artificial Intelligence (AI) and positions it as a critical case study for parliamentary digital transformation in small states and the Global South. In contrast to the prevailing 'race to regulate' observed in larger regional economies, Suriname's strategy is characterized by a foundational, human-centered, and use-case-driven methodology. It is argued that this approach, *prioritizing comprehensive legislative digitization, robust digital infrastructure, and internal capacity-building before the deployment of advanced AI tools,* constitutes a more sustainable and democratically sound model. By juxtaposing Suriname's practical roadmap with the advanced, operational AI systems of Chile's CAMINAR project, this article highlights a strategic divergence. While Chile has successfully implemented a comprehensive suite of AI legislative and administrative assistants, Suriname's pathway deliberately focuses on establishing the digital and ethical prerequisites for such technologies. The article concludes that, for parliaments such as Suriname's, the immediate priority is not the adoption of complex, externally modelled regulation or immediate large-scale AI deployment, but rather the responsible construction of the foundational pillars, *data readiness, infrastructural resilience, and human governance capacity,* upon which trustworthy, sovereign AI systems like CAMINAR can be viably built and adapted. Such an approach ensures that technology strengthens, rather than supplants, human judgement and democratic accountability.

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Acknowledgement and program me

Rudolf Sairdjo and the author participated in the *Study Visit for Parliamentary Staff on Artificial Intelligence and Digital Transformation*, held from 21 to 23 January 2026 at the Chamber of Deputies of Chile in Valparaíso. This study visit was designed to provide parliamentary officials with both conceptual grounding and practical exposure to the use of Artificial Intelligence within legislative institutions, with a particular emphasis on human-centered and institutionally governed applications.

The programme commenced with a comprehensive introduction to generative Artificial Intelligence and Large Language Models (LLMs), addressing their underlying principles, functional capacities, and inherent limitations. Particular attention was paid to the implications of these technologies for parliamentary environments, including issues of reliability, transparency, and institutional responsibility.

Subsequent sessions focused on the enhancement of language processing and information retrieval through Retrieval-Augmented Generation (RAG). These discussions highlighted how the integration of authoritative document repositories can significantly improve the accuracy, contextual relevance, and verifiability of AI-generated outputs, thereby addressing core concerns related to trust and legal certainty in legislative settings.

A central component of the programme was the presentation and demonstration of *ArChileBot*, the AI-powered parliamentary assistant developed by the Chamber of Deputies of Chile. This session provided detailed insight into the objectives, system architecture, and practical use cases of the tool, illustrating how conversational AI can facilitate access to legislative archives while remaining firmly grounded in official parliamentary sources.

Participants were further granted access to controlled laboratory environments, allowing for hands-on interaction with AI tools and experimentation using parliamentary datasets. This practical component was complemented by a technical session delivered by specialists from Amazon Web Services, which addressed the design, implementation, and security considerations associated with RAG-based AI systems in public-sector contexts.

The programme also included targeted training on the operational and governance dimensions of ArChileBot. This encompassed instruction on document indexing practices to ensure structured, searchable, and machine-readable data repositories, as well as detailed guidance on metadata configuration to support traceability, retrieval accuracy, and institutional oversight. Additional sessions focused on the use of the ArChileBot web application, enabling participants to query legislative archives and access AI-supported information in a controlled and transparent manner.

Finally, the study visit featured an in-depth presentation of *CAMINAR*, the comprehensive Artificial Intelligence initiative of the Chamber of Deputies of Chile. This session situated ArChileBot within a broader institutional ecosystem, demonstrating how AI applications support parliamentary transcription, reporting, administrative workflows, and organizational efficiency through a clearly articulated human-in-the-loop model.

Together, the programme offered a balanced combination of theoretical reflection, technical instruction, and practical engagement, providing valuable comparative insights into the conditions under which Artificial Intelligence can be responsibly integrated into parliamentary institutions.

1. Introduction on AI: *diverging pathways in parliamentary AI adoption*

The global diffusion of AI confronts legislative institutions with a dual imperative: to harness technological innovation in order to enhance efficiency, transparency, and public engagement, while simultaneously safeguarding the democratic principles and human oversight that underpin parliamentary governance. National responses to this challenge have diverged significantly.

Within Latin America and the Caribbean, a region that has deployed more than 700 public-sector AI systems over the past decade, a strong trend towards rapid regulatory development is evident. Countries such as Chile, Brazil, and Colombia have pursued comprehensive AI legislation, often drawing inspiration from the European Union's Artificial Intelligence Act (Access Now, 2024).

While well intentioned, this regulatory-first trajectory has encountered substantial challenges. Empirical research on Chile's legislative process demonstrates how complex AI debates may be prematurely 'cooled down' through mechanisms such as the deflection of technological liability, the instrumentalisation of AI policy for geopolitical positioning, and the moralization of ethics as a substitute for enforceable regulation (Humeres et al., 2025). These dynamics risk marginalizing critical discussions on implementation capacity, institutional readiness, and the digital prerequisites required for responsible AI deployment.

Against this backdrop, the approach adopted by the Parliament of the Republic of Suriname offers a compelling alternative. As articulated by Rattan Naresh Algoe and Rudolf Saridjo, Suriname's guiding principle is that technology should *support, not replace, the human judgement that lies at the heart of parliamentary democracy.* This report analyses Suriname's phased and principled strategy, rooted in academic research, comprehensive legislative digitization, and the strengthening of core digital infrastructure, as a case study of particular relevance for small states and parliaments in the Global South.

2. ArChileBot and parliamentary digital transformation

Historically, access to parliamentary archives has posed significant challenges for both citizens and researchers. Legislative documents are often dispersed across multiple digital platforms, stored in heterogeneous formats, and presented in a manner that presumes legal or procedural expertise. As a result, large portions of parliamentary memory remain technically accessible yet practically opaque to the broader public.

In response to this structural limitation, the Chamber of Deputies of Chile initiated the development of ArChileBot, an artificial intelligence–based conversational assistant designed to facilitate natural-

language access to legislative archives. The initiative was directly inspired by ArChileBot, a system developed by the European Parliament that enables users to query parliamentary documents using conversational language while receiving responses supported by verifiable citations to official sources.

While drawing on the European model, ArChileBot was deliberately adapted to the Chilean institutional, legal, and linguistic context. Its core objective was clear: to democratize access to Chile's legislative memory and strengthen transparency by transforming complex archival material into an accessible public resource. The system is built exclusively on the Chamber's official document collections and employs retrieval-augmented generation (RAG) techniques to ensure that all responses are grounded in authoritative parliamentary sources.

The results have been tangible. ArChileBot has significantly reduced search times, enhanced the visibility of legislative work, and created a new digital interface between citizens and parliamentary institutions. Rather than replacing primary documents, the system functions as a guided entry point, directing users to relevant sources and thereby reinforcing institutional accountability.

The development of ArChileBot exemplifies effective international knowledge transfer in parliamentary digital innovation. The European Parliament played a central role in this process, not only by sharing conceptual and technical insights derived from ArChileBot, but also by facilitating direct experiential learning.

A pivotal moment occurred during a hands-on workshop in Brussels, where parliamentary teams, including representatives from the Chamber of Deputies of Chile were able to test ArChileBot directly and engage with its underlying technical architecture and methodological principles. This practical exposure proved essential in translating abstract concepts into implementable solutions.

From the outset, the Chilean approach emphasized experimentation, rapid prototyping, and institutional learning. Several key lessons emerged during this phase: the critical importance of high-quality and well-curated document corpora; the necessity of human validation by legal and legislative experts; and the strategic value of maintaining a closed AI system restricted to official sources under full institutional control. These design choices ensured both reliability and legitimacy, enabling Chile to move efficiently from conceptualization to functional deployment.

Following the consolidation of ArChileBot, the Chamber of Deputies of Chile assumed a leadership role in promoting parliamentary innovation across Latin America. In June 2025, with support from the European Parliament, the Chamber hosted a regional meeting to present the tool and discuss adoption pathways with parliamentary teams from Argentina, Mexico, Peru, and Uruguay.

Since then, Chile has actively supported regional counterparts through technical workshops and advisory sessions. These have focused on practical issues such as document preparation, system architecture design, cost evaluation, and the establishment of human-in-the-loop validation protocols. As a result, the Chilean experience has become a reference model for AI-enabled parliamentary archives in the region.

This process illustrates how parliamentary innovation can transcend national boundaries: European expertise informed a Chilean implementation, which is now being shared regionally as a form of public good. As noted by Miguel Landeros, Secretary General of the Chamber of Deputies of Chile, AI applied to legislative archives should serve to *'bring democracy closer to citizens across Latin America.*

Chile's leadership role was further consolidated during a three-day international seminar on Digital Archives and AI, hosted by the National Congress of Chile with support from International IDEA and the European Union. The event brought together parliamentarians and parliamentary officials from Latin America and Europe to exchange experiences on legislative digitalization, transparency, and technological innovation.

A central feature of the seminar was the presentation of ArChileBot as part of Chile's broader parliamentary modernization strategy. Technical sessions led by specialists from Amazon Web Services introduced participants to generative AI concepts, security considerations, and applied legislative use cases. Subsequent workshops provided in-depth insight into the functioning of ArChileBot and ArChileBot, enabling participants to interact directly with digitized legislative archives.

European Parliament representatives emphasized that the intention behind ArChileBot, and by extension ArChileBot, was to inspire other institutions to open their historical archives to the public in a secure and responsible manner. Chilean parliamentary leadership echoed this vision, highlighting the role of AI in fostering a more transparent, accessible, and citizen-centered legislature.

ArChileBot represents a concrete step towards transforming parliamentary archives from passive repositories into active instruments of democratic engagement. Through natural-language interaction, advanced filtering, and intuitive navigation, the system enables users to locate laws, bills, debates, and historical records with unprecedented ease.

Importantly, ArChileBot does not replace traditional archival systems; rather, it enhances their usability and reach. As articulated by Virginia Carmona, Executive Secretary of Innovation and Technology at the Chamber of Deputies, the platform strengthens institutional transparency while making parliamentary work more comprehensible to the public.

3. Lessons for parliamentary digital transformation

The Chilean experience demonstrates that successful parliamentary AI initiatives require more than technological capability alone. Institutional vision, high-quality documentation, human oversight, and strategic international partnerships are all essential components. Incremental development, targeted pilots, and clear governance frameworks emerge as key success factors.

Looking ahead, the Chamber of Deputies of Chile aims to further strengthen ArChileBot, expand citizen access, and deepen regional cooperation. As this case illustrates, when Artificial Intelligence is designed with a clear public purpose and embedded within democratic safeguards, it can serve as a powerful tool for transparency, education, research, and civic participation.

Based on the aforementioned analysis, and with specific reference to the current state of Artificial Intelligence adoption within the Parliament of the Republic of Suriname, we propose the following observations and priorities:

3.1 Theoretical framework: beyond the *'race to regulate'*

This study adopts a comparative policy analysis approach and proposes what may be described as a *foundational prerequisites model* for the integration of artificial intelligence within parliamentary institutions. The model advances the premise that the democratic, accountable, and effective deployment of AI in legislatures is contingent upon the prior establishment of three interdependent pillars.

> First, data readiness refers to the systematic digitization, structuring, and standardization of parliamentary data, such as legislation, official records, and committee proceedings, into machine-readable, interoperable formats. Without such preparation, AI systems lack reliable inputs and risk reinforcing informational asymmetries.
>
> Second, infrastructural resilience concerns the deployment of secure and integrated digital systems for document management, internal communication, workflow automation, and public information dissemination. These systems provide a stable operational environment in which data-driven tools can function safely, consistently, and at scale.
>
> Third, human and governance capacity encompasses the development of internal ICT expertise, the cultivation of a culture of digital innovation within parliamentary administrations, and the articulation of clear ethical principles, including human oversight, transparency, accountability, and bias mitigation.

Taken together, this framework challenges the assumption that AI governance can be meaningfully addressed in abstraction, detached from institutional conditions. Consistent with sociotechnical scholarship, it recognizes that technological systems are inseparable from political, organizational, and normative choices (Winner, 1985). By prioritizing foundational prerequisites, parliaments embed democratic values directly into their digital architectures, rather than relying exclusively on ex post regulatory instruments to correct technological risks.

4. Presentation case study: *the Parliament of the Republic of Suriname and Its Phased, Principled Roadmap for AI Integration*

The experience of the Parliament of the Republic of Suriname offers a distinctive case study of a cautious, phased, and normatively grounded approach to the integration of Artificial Intelligence within a legislative institution. Rather than treating AI adoption as a primarily technological or regulatory exercise, Suriname has framed it as a broader process of institutional transformation, in which ethical orientation, data readiness, and infrastructural consolidation precede the deployment of

advanced AI applications. This section reconstructs that trajectory through three analytically distinct but interrelated phases.

4.1 Phase I: Research and normative orientation (2024)

Suriname's engagement with Artificial Intelligence began not with the acquisition of technological tools, but with structured academic inquiry and internal reflection. In 2024, the Parliament initiated a foundational study entitled *"The Future of Legislation: Artificial Intelligence for More Efficient Legislative Drafting"*. This internal research project examined concrete and context-specific use cases for AI within parliamentary processes, including legislative drafting, legal analysis, and information retrieval. Crucially, the study did not approach AI as a neutral efficiency-enhancing instrument. Instead, it explicitly foregrounded ethical risks, governance challenges, and institutional responsibilities associated with algorithmic decision-support systems. Issues such as transparency, accountability, bias, and the preservation of democratic deliberation were treated as integral to any future deployment. This phase resulted in the articulation of a clear institutional norm that has since guided subsequent developments: Artificial Intelligence is conceived as a tool to augment human expertise and institutional capacity, not as a mechanism for automating or replacing deliberative judgement. By embedding this principle at the outset, the Parliament established a normative orientation that places human oversight and democratic responsibility at the centre of its AI strategy.

4.2 Phase II: Legislative digitization and infrastructure consolidation

Building on this normative foundation, the Parliament of Suriname recognized that the responsible use of AI is fundamentally dependent on the availability of high-quality, structured, and authoritative data. As a result, the second phase of the roadmap focused on comprehensive legislative digitization and the consolidation of digital infrastructure.

A central initiative within this phase has been the systematic digitization of the entire legislative corpus of Suriname, spanning from 1900 to the present. The objective of this effort is not merely archival preservation, but the creation of a sovereign, AI-readable legal database that remains fully under parliamentary control. Such data sovereignty is particularly significant in a small-state context, where reliance on external platforms can raise concerns about dependency, accountability, and long-term sustainability.

This digitization initiative is embedded within a broader and increasingly mature digital ecosystem. Key components include M-Files as a centralized document management system for formal parliamentary records, administrative platforms such as Step2HR for workflow and personnel management, and dedicated digital applications for procedural tasks such as the registration of speaking time during plenary sittings. These internal systems are complemented by public-facing digital channels, including the official parliamentary website and the livestreaming of plenary proceedings.

Taken together, these infrastructures normalise digital workflows across the institution and generate structured, traceable data as a by-product of everyday parliamentary activity. In doing so, they establish the technical and organisational preconditions for future data-driven and AI-supported tools.

4.3 Phase III: Strategic deployment of AI Tools (Planned)

Only after the establishment of normative clarity and infrastructural readiness does the Parliament of Suriname envisage the strategic deployment of advanced AI applications. This sequencing reflects a deliberate rejection of technology-first approaches in favour of institution-first design. Among the planned initiatives is the development of a GPT-based legislative support platform, to be designed in close collaboration with the judiciary and legal experts. The purpose of this platform is to enhance legal analysis, improve the quality and coherence of legislative drafting, and facilitate public understanding of complex legal texts. The involvement of legal professionals is intended to ensure doctrinal accuracy, contextual sensitivity, and alignment with authoritative interpretations of the law. In addition, the Parliament plans to introduce AI-enabled transcription and analytical tools to support the work of parliamentary committees. These systems are intended to automate the production of accurate records and facilitate thematic and longitudinal analysis, while preserving human verification, editorial control, and institutional responsibility.

The successful development of a GPT-based parliamentary knowledge platform within the Parliament of the Republic of Suriname depends fundamentally on the systematic governance of information across the institution. Artificial Intelligence can function reliably and responsibly only where authoritative data sources are complete, structured, validated, and institutionally governed. This necessitates an integrated approach to information management that recognises the distinct but interdependent roles of multiple organisational units.

Parliamentary knowledge within Suriname is generated and maintained across a range of departments, each contributing a specific layer of institutional memory and expertise.

Handelingen, or official parliamentary records of plenary sittings and committee meetings, constitute the procedural and historical backbone of the institution. These records have already been digitised in PDF format by the DIV. The next critical step involves metadata enrichment, including information on dates, speakers, agenda items, and legislative references, to enable AI-supported search, citation, and analytical functionality.

Legislative and legal documentation is primarily managed by the Legal Affairs Department, which acts as the custodian of legislative texts, explanatory memoranda, amendments, and legal interpretations. This department plays a pivotal role in validating the legal accuracy of content and ensuring that AI-generated outputs do not misrepresent or oversimplify legal norms. Its involvement is essential to maintaining doctrinal integrity and institutional credibility.

Parliamentary communication and public information are managed by the Department of Communication, which oversees the parliamentary website and other public-facing channels. Integrating these materials into the GPT-based system ensures coherence between internal parliamentary knowledge and externally accessible information, thereby strengthening transparency and public trust.

Parliamentary committees generate a substantial body of documentation, including agendas, reports, expert submissions, hearing transcripts, and recommendations. These materials provide critical insight into legislative intent, policy development, and deliberative processes. Their systematic digitization and classification are essential for enabling AI-assisted analysis of legislative evolution over time.

Administrative and procedural data generated by HR platforms, workflow management tools, and speaking-time registration systems, while not legislative in nature, contribute to institutional continuity, procedural compliance, and accountability. Such data can inform AI-supported process optimization and organizational learning.

Finally, external knowledge sources play an important complementary role. Collaboration with academic institutions, including the University of Suriname and the SJB, allows for the integration of scholarly research, doctrinal legal analysis, and policy studies into the parliamentary knowledge ecosystem. These partnerships enrich the GPT-based platform with peer-reviewed expertise and contextual depth beyond internal documentation alone.

The overarching objective is the creation of a dynamic and authoritative parliamentary knowledge system that serves Members of Parliament, parliamentary staff, legal experts, and, where appropriate, the wider public. Unlike generic AI tools that generate decontextualized summaries, this platform is explicitly designed to guide users to primary parliamentary sources. It provides traceable references, directs users to relevant documents and debates, supports evidence-based deliberation and oversight, and enhances institutional memory and continuity. In this respect, the system aligns with best practices observed in comparative models such as Chile, where AI tools function as navigational and analytical aids rather than substitutes for authoritative texts.

By adopting a coordinated governance framework and clearly allocating responsibilities across departments, De Nationale Assemblée can ensure that its GPT-based system is not merely technologically advanced, but institutionally grounded, legally reliable, and democratically legitimate. AI thus becomes a trusted extension of parliamentary knowledge, firmly anchored in human oversight and authoritative sources.

A comparative analysis of Suriname's foundational approach and the regulatory dynamics observed in Chile reveals significant contrasts. Whereas the Chilean debate has been shaped largely by abstract definitional struggles and alignment with international regulatory models, Suriname has prioritized practical usability, institutional readiness, and data sovereignty.

By focusing on legislative digitization and infrastructural capacity, Suriname addresses a critical gap often overlooked in regulatory discourse: without structured and accessible data, even the most sophisticated AI regulation remains largely symbolic. By embedding governance principles directly into system design, Suriname seeks to avoid the risks of liability deflection and "ethics washing" identified in the Chilean experience.

The planned introduction of AI-assisted transcription within parliamentary committees and plenary debates constitutes a critical test of the foundational model. Such systems promise to accelerate the production of accurate official records, enable thematic and longitudinal analysis, support multilingual accessibility in Suriname's diverse linguistic context, and enhance transparency and public scrutiny of the legislative process. These benefits, however, are contingent upon the prior existence of secure infrastructure, structured data capture, and clearly defined human oversight mechanisms, conditions that the Parliament of Suriname has deliberately prioritized.

The experience of the Parliament of Suriname demonstrates that responsible parliamentary engagement with Artificial Intelligence must be approached primarily as a challenge of digital transformation rather than as a purely regulatory exercise. For legislatures, particularly in small states and the Global South, the priority should remain the systematic construction of robust digital, institutional, and ethical foundations before engaging in complex and externally modelled AI regulatory frameworks.
Looking ahead, continued investment in data readiness, infrastructure consolidation, and human capacity remains essential. Completing and maintaining a comprehensive, machine-readable legislative corpus, strengthening metadata standards, and ensuring interoperability across parliamentary systems are indispensable prerequisites for trustworthy AI deployment. Without these elements, advanced AI tools risk producing fragmented, opaque, or unreliable outcomes that may undermine institutional credibility.

Participation in international forums, such as this conference, provides valuable opportunities to refine next steps. Comparative insights help assess not only technological feasibility, but institutional appropriateness, proportionality, and sustainability. Translating these lessons into concrete internal policies and pilot projects, particularly in areas such as AI-assisted drafting, retrieval-augmented generation, and transcription, will be critical. Equally important is the further development of enforceable internal ethical and governance frameworks addressing data protection, algorithmic bias, transparency, and institutional responsibility. These issues must be treated as operational challenges requiring clear rules, staff training, and continuous monitoring.

In conclusion, this conference marks not an endpoint but a strategic waypoint in Suriname's AI trajectory. By continuing along a deliberate, phased, and principled pathway, the Parliament positions itself to harness Artificial Intelligence in a manner that strengthens legislative effectiveness, transparency, and public trust, while remaining firmly anchored in the core values of parliamentary democracy.

5. The CAMINAR project

5.I. Introduction

The Chamber of Deputies of Chile has undergone a significant transformation in recent years, moving from a largely paper-based legislative process to a fully digital system. This shift was driven by the need to address inefficiencies in document management, information retrieval, and legislative transparency. The latest stage of this transformation came in the form of the CAMINAR project, a comprehensive Artificial Intelligence initiative designed to modernize both legislative and administrative functions within the Chamber of Deputies.

CAMINAR introduced advanced artificial intelligence and digital tools aimed at streamlining key processes. Modules like CAMINAR-L, focused on legislative tasks, and CAMINAR-A, addressing administrative needs, have significantly enhanced the Chamber's ability to manage legal texts, financial oversight, and parliamentary assignments. By transitioning to a paperless workflow and embracing AI-powered solutions, the Chamber has improved efficiency, transparency, and accountability in its operations.

The following sections provide an in-depth exploration of this transformation, detailing the challenges faced by the Chamber, the development and implementation of CAMINAR, and the resulting impact on legislative and administrative functions.

5.2. Background om CAMINAR-Project

The Chamber of Deputies of Chile has encountered a multitude of challenges over the years, driven by both historical events and evolving demands for legislative efficiency and transparency. Historically, the Chamber operated in a predominantly analogue environment where legislative activities were heavily reliant on paper documents, face-to-face interactions, and traditional methods of information management. This setup, while functional in earlier times, became increasingly inefficient and cumbersome in the face of rapid technological advancements and the growing complexity of legislative work.

Throughout much of the 20th century, the Chamber's operations were characterized by manual record-keeping and limited technological integration. This not only slowed down the legislative process and administration but also made it difficult to manage and retrieve information promptly. The need for more efficient processes became particularly apparent during periods of intense political activity and reform, where the volume of legislative work increased significantly.

The advent of the digital age brought about new expectations for efficiency. The public and Members of Congress began to demand greater insight into legislative processes and quicker access to information. Additionally, the complexity of modern governance required more sophisticated tools to handle the vast amounts of data generated by legislative activities.

An important moment highlighting the need for digital transformation was the COVID-19 pandemic. The pandemic disrupted traditional legislative procedures and administration, necessitating a swift

adaptation to remote work. This sudden shift underscored the Chamber's technological shortcomings and the urgent need for a more robust digital infrastructure. The inability to conduct business as usual due to lockdowns and social distancing measures forced the Chamber to reconsider its reliance on physical documents and in-person interactions.

The need for a comprehensive digital transformation became undeniable. The Chamber of Deputies responded to this need by investing in a robust digital infrastructure, establishing a paperless workflow, and embracing a digital-first approach to legislative and administrative processes. The institution required a solution that would not only modernize its legislative process and administration but also enhance efficiency. This is where the CAMINAR project, and specifically CAMINAR-L and CAMINAR-A, comes into play.

As Esteban Sánchez Rivera, Head of Information Systems Development at the Chamber of Deputies of Chile, noted, *'The AI projects have been the result of the Chamber of Deputies' constant trajectory in the search for implementing innovative, efficient, and useful technological tools that benefit the parliament, the parliamentarians, and the citizens.'*

CAMINAR-L (Legislative) is designed to address these needs by leveraging advanced digital technologies and artificial intelligence to streamline legislative processes. One of the core components of CAMINAR-L is the use of vectorised legal databases. These databases allow for the precise and efficient management of legal texts, ensuring that data is both accurate and easily retrievable. By vectorising the legal databases, the Chamber can quickly access relevant information, reducing the time and effort required to sift through vast amounts of legislative documents.

Another critical aspect of CAMINAR-L is human validation. While AI and digital tools can significantly enhance efficiency, the accuracy and reliability of legislative work still require human oversight. By integrating human validation into the process, CAMINAR-L ensures that the outputs generated by AI tools are checked for errors and relevance, maintaining the integrity of the legislative process.

Bias regulation is also a fundamental principle guiding CAMINAR-L. In legislative work, the presence of bias can significantly impact the outcomes and fairness of the process. CAMINAR-L incorporates mechanisms to modulate and reduce bias, ensuring that the AI tools used provide balanced and impartial support to Members of Congress.

The concept of normative hierarchy is crucial in the legislative context, where different laws and regulations hold varying degrees of importance. CAMINAR-L prioritizes the most significant legal norms in its responses, ensuring that the advice and information provided to Members of Congress reflect the correct legal framework and hierarchies.

By addressing these core needs, efficient information management, reliable human oversight, bias regulation, and respect for normative hierarchies, CAMINAR-L transforms the legislative process within the Chilean Chamber of Deputies. It empowers Members of Congress with tools that enhance their ability to draft, debate, and pass legislation in a manner that is both timely and informed.

Complementing CAMINAR-L, CAMINAR-A (Administrative) is focused on modernizing the Chamber's administrative functions, particularly those related to the management of parliamentary assignments and financial oversight. CAMINAR-A leverages artificial intelligence to automate and enhance various aspects of administrative processes, ensuring that parliamentary resources are allocated and utilized in compliance with the stringent regulations governing public funds.

Through CAMINAR-A, the Chamber has implemented tools that allow for real-time access to financial data, automatic extraction and validation of receipt information, and clear guidance on the complex regulatory frameworks surrounding parliamentary expenses. This ensures that all expenditures are managed efficiently, with a high degree of transparency and accountability. By automating these processes, CAMINAR-A not only reduces the administrative burden on staff but also mitigates the risk of errors, thereby strengthening the Chamber's overall governance.

CAMINAR is not a static solution but a continuously evolving project aimed at continually adapting to the changing needs of the legislative activities and incorporating new advancements in artificial intelligence and additional legislative databases. Additionally, the Chamber is exploring the creation of a public-facing version of CAMINAR, known as CAMINAR-T, which would provide citizens with access to these powerful tools, further democratizing the legislative process.

Together, CAMINAR-L and CAMINAR-A represent a comprehensive approach to modernizing the Chamber of Deputies of Chile. While CAMINAR-L focuses on enhancing the legislative process through advanced digital tools, CAMINAR-A ensures that the administrative side of parliamentary work is conducted with the same level of efficiency and transparency.

5.3 CAMINAR-L: Legislative Intelligence in Practice

Project CAMINAR-L represents the legislative pillar of the broader CAMINAR initiative and constitutes a comprehensive ecosystem of AI-assisted tools designed to support the core functions of the Chilean Congress. Rather than operating as isolated applications, the CAMINAR-L modules form an integrated architecture that accompanies the legislative process from deliberation and drafting to constitutional review and historical contextualization. Together, they illustrate how artificial intelligence can be embedded meaningfully into parliamentary work when aligned with institutional needs, legal safeguards, and human oversight.

The starting point of CAMINAR-L is the transcription of parliamentary activity. The CAMINAR-L1 Transcription Assistant was developed to address a longstanding challenge in legislative administration: the timely and accurate documentation of plenary and committee debates. By integrating OpenAI's Whisper model, the system enables two parallel transcription processes. During live sessions, an online transcription stream generates real-time subtitles for plenary and committee broadcasts, enhancing accessibility and transparency for both Members of Congress and the public. In parallel, an offline transcription process produces literal, high-fidelity records of debates, which serve as the foundational input for the Diario de Sesiones. This automation significantly reduces reliance on manual transcription, minimizes human error, and accelerates the publication of official

parliamentary records. Importantly, the system does not eliminate human intervention; stenographers continue to refine and validate the literal transcriptions before they are used for official and analytical purposes.

Building upon this documentary foundation, CAMINAR-L2 introduces semantic intelligence into legal research. The Semantic Search Assistant enables Members of Congress to navigate Chile's extensive legal corpus using context-aware queries rather than rigid keyword searches. Through the vectorisation of the legal database—structured at the level of individual legislative clauses—the system captures legal meaning with sufficient granularity to support sophisticated semantic retrieval. Hybrid search mechanisms combine semantic and keyword approaches, ensuring precision while preserving legal rigor. Particular attention was given to encoding the hierarchy of legal norms, allowing the system to priorities constitutional provisions, statutes, and regulations appropriately. In practice, this tool has transformed legislative research by allowing lawmakers to locate relevant precedents, amendments, and regulatory frameworks more efficiently and with greater contextual accuracy.

The CAMINAR-L3 Argumentation Assistant extends AI support from research into the deliberative core of parliamentary debate. This module was designed to assist Members of Congress in preparing arguments aligned with specific political orientations, ranging across the ideological spectrum. Rather than imposing neutrality in all contexts, CAMINAR-L3 acknowledges that legislative debate is inherently pluralistic. It therefore enables controlled and transparent alignment with declared political positions, while strictly limiting its knowledge base to verified legal and factual sources. All outputs are subject to expert validation, and feedback from legal professionals is continuously incorporated into system refinement. In doing so, the assistant strengthens the quality of parliamentary debate without substituting human judgement or political responsibility.

Legislative coherence is further reinforced through CAMINAR-L4, the Legislative Tracking Assistant. This module continuously analyses bills under consideration by vectorising their content and comparing them semantically with existing and historical legislation. Its purpose is to identify overlaps, redundancies, or potential conflicts early in the legislative process. By highlighting thematic and conceptual similarities, rather than merely textual ones, the system supports coordination among lawmakers and reduces duplicative efforts. As a result, CAMINAR-L4 contributes to a more coherent legislative agenda and a more efficient use of parliamentary time and resources. Complementing this forward-looking analysis, CAMINAR-L5 introduces structured regulatory scrutiny through its Regulatory Impact Assessment Assistant. This module evaluates proposed bills against the existing legal framework, identifying conflicts, complementarities, and normative gaps. Special emphasis is placed on legal hierarchy, ensuring that constitutional and statutory constraints are respected. By providing Members of Congress with systematic impact assessments at an early stage, CAMINAR-L5 improves the technical quality and legal robustness of legislative proposals, supporting informed decision-making before bills advance further in the process.

Constitutional integrity is explicitly safeguarded through CAMINAR-L6, the Constitutional Support Assistant. This module conducts pre-emptive constitutional reviews by analyzing draft legislation against the exclusive legislative domains and procedural requirements defined in the Chilean Constitution. It identifies applicable quorum requirements and references relevant jurisprudence, drawing on structured XML versions of constitutional and judicial texts. By embedding constitutional analysis directly into the drafting phase, CAMINAR-L6 reduces the risk of subsequent constitutional challenges and reinforces legal certainty within the legislative process.

Historical continuity and institutional memory are addressed through CAMINAR-L7, the Parliamentary Debate History Assistant. This module provides structured access to decades of parliamentary debates, with all Diarios de Sesiones since 1990 digitized, tagged, and vectorised at the level of individual speeches. Members of Congress can retrieve historical debates using keyword and semantic searches, enabling them to trace the evolution of legislative issues, understand prior reasoning, and contextualize current proposals. The sustained effort of the Office of Drafting in structuring these records has been instrumental in enabling advanced AI-driven retrieval and analysis. The legal foundations of legislative work are further strengthened by CAMINAR-L8, the Legal Doctrine Assistant. This module focuses on doctrinal analysis, with particular emphasis on Constitutional Court jurisprudence. Through curated databases and targeted prompts, it provides lawmakers with access to authoritative legal interpretations relevant to their proposals. By grounding legislative initiatives in established doctrine, CAMINAR-L8 contributes to coherence, stability, and legal defensibility within the legislative system. Finally, CAMINAR-L9 addresses one of the most procedurally sensitive areas of parliamentary work: budgetary amendments. This assistant manages the classification, tracking, and validation of proposed amendments to the national budget, identifying conflicts, redundancies, and potential violations of constitutional or regulatory norms. By integrating amendments directly into the budgetary framework and providing real-time feedback, CAMINAR-L9 has significantly improved both the efficiency and accuracy of fiscal deliberations.

Across all CAMINAR-L modules, several guiding principles remain constant. The system is grounded in vectorised legal databases that preserve legal hierarchy and context. Human validation is mandatory for all AI-generated outputs, ensuring accountability and trust. Bias is carefully managed, either minimized or deliberately constrained, depending on the function of each module. Together, these principles ensure that CAMINAR-L operates not as an autonomous decision-maker, but as a legally grounded, ethically governed support system.

The cumulative impact of CAMINAR-L has been transformative. Legislative work within the Chilean Chamber of Deputies has become more efficient, more informed, and more transparent, while preserving the central role of human judgement and democratic deliberation. When combined with the administrative innovations of CAMINAR-A, the project represents a comprehensive model of parliamentary digital transformation, one that demonstrates how artificial intelligence can be integrated responsibly into the heart of democratic governance.

6. Relevance of a CAMINAR-Inspired AI Project for the Parliament of the Republic of Suriname

The CAMINAR project of the Chamber of Deputies of Chile provides a concrete and institutionally grounded example of how Artificial Intelligence can be deployed as a supportive parliamentary instrument rather than a disruptive or replacement technology. For the Parliament of the Republic of Suriname, a similar AI initiative, adapted to national legal, linguistic, and institutional realities, offers a strategic pathway to modernise parliamentary work while preserving human oversight, democratic legitimacy, and data sovereignty.

The transformation of the Chamber of Deputies of Chile through the CAMINAR project highlights the profound impact that artificial intelligence can have on legislative and administrative processes. More than just a shift from paper to digital, CAMINAR represents a rethinking of how parliaments can function in the future. By leveraging AI for tasks like legal research, transcription, and financial oversight, the Chamber has demonstrated that efficiency, transparency, and accountability are not only achievable but can be significantly enhanced through strategic technological investment.

However, the success of CAMINAR lies not only in its technological capabilities but also in the Chamber's ability to navigate institutional and political complexities. The project's effectiveness was contingent on securing buy-in from key stakeholders, managing concerns about AI's role in legislative work, and maintaining the balance between automation and human oversight. This speaks to a broader lesson: the success of technological innovation in parliaments is as much about leadership and institutional will as it is about the tools themselves.

The Chamber's experience with CAMINAR highlights that digital transformation is not a one-time shift but an ongoing process. The system's adaptability to evolving legislative needs and emerging AI technologies will determine its long-term value.

AI-Assisted Parliamentary Proceedings and Hansard: Relevance of the Chilean CAMINAR Model for Suriname

The Chilean experience with AI-enabled parliamentary systems, particularly within the CAMINAR framework, offers a highly relevant and transferable model for strengthening Hansard functions in the Parliament of the Republic of Suriname. At its core, the Chilean approach demonstrates how Artificial Intelligence can be embedded within parliamentary proceedings as a supportive, human-centered instrument that enhances accuracy, efficiency, and accessibility without undermining institutional authority or democratic legitimacy.

In Chile, AI-supported applications are deployed during both plenary sittings and committee meetings to assist in the real-time capture, transcription, and preliminary translation of parliamentary speech. When a Member of Parliament takes the floor, speech recognition technologies immediately generate an initial transcription. Where necessary, the system also produces an automated translation, providing functional multilingual access to proceedings. Importantly, these outputs are explicitly treated as

preliminary working materials, not as final or authoritative records. Parliamentary officials subsequently review, correct, and validate the AI-generated text before it is incorporated into official reports.

This human-in-the-loop model is of direct relevance to Suriname's Hansard system. The Parliament of Suriname faces similar structural challenges: time-intensive manual transcription processes, delayed publication of official records, and limited analytical capacity to systematically examine debates over time. AI-assisted transcription, when combined with clear validation protocols and human oversight, offers a concrete pathway to modernizing Hansard production while safeguarding accuracy, legal reliability, and procedural integrity.

Beyond transcription, the Chilean model demonstrates how AI can add analytical value to Hansard materials. In committee settings, AI tools are used to organize interventions thematically, identify recurring arguments, and link spoken contributions to legislative documents, amendments, and prior debates. Applied to the Surinamese context, such functionality would allow parliamentary staff and Members to move beyond verbatim records towards structured, searchable, and analytically enriched Hansard archives. This would significantly enhance legislative research, oversight, and institutional memory.

Furthermore, the Chilean experience underscores the importance of data governance and institutional control. AI systems operate exclusively on official parliamentary sources and remain under full institutional ownership. This principle aligns closely with Suriname's emphasis on data sovereignty and the responsible use of AI. For Hansard purposes, this ensures that official records remain authoritative, traceable, and protected from external manipulation or opaque algorithmic processes.

From a democratic perspective, AI-assisted Hansard systems also strengthen transparency and public accessibility. Faster production of validated records, combined with improved searchability and multilingual support, enables citizens, researchers, and civil society to engage more effectively with parliamentary debates. In a multilingual society such as Suriname, this dimension is particularly significant, as AI-supported transcription and translation can broaden access while preserving the primacy of human verification.

In sum, the CAMINAR model illustrates that AI-assisted Hansard systems are not merely technical upgrades, but institutional reforms that reshape how parliamentary knowledge is produced, preserved, and accessed. For the Parliament of the Republic of Suriname, adopting a similar approach—grounded in digitization, structured workflows, and human oversight—offers a pragmatic and democratically sound pathway to modernizing Hansard. It reinforces the central principle guiding Suriname's AI strategy: that technology should enhance human capacity, institutional memory, and democratic accountability, rather than replace them.

A Suriname-specific, CAMINAR-inspired parliamentary AI system would deliver measurable benefits at three interconnected levels: Members of Parliament, parliamentary staff, and the parliamentary institution as a whole. Collectively, these benefits would strengthen legislative quality, administrative efficiency, and democratic legitimacy.

For Members of Parliament, AI-assisted tools would enhance legislative quality and decision-making by enabling faster, context-aware access to relevant laws, amendments, jurisprudence, committee reports, and historical debates. Semantic search and retrieval-augmented analysis would support evidence-based lawmaking and reduce reliance on fragmented manual research, particularly in legally and politically complex policy areas. During debates and committee work, AI-supported transcription and debate history tools would allow Members to draw on institutional memory, identify recurring issues, and prepare interventions grounded in documented parliamentary practice. In addition, early-stage constitutional and procedural checks would improve legal accuracy and reduce the risk of flawed or inadmissible legislative proposals.

For parliamentary staff, the most immediate impact would be the modernization of Hansard production through AI-assisted transcription of plenary and committee proceedings. Real-time subtitles, faster draft transcriptions, and accelerated publication of verified records would improve efficiency while preserving human responsibility for validation and final approval. Beyond transcription, the automation of repetitive administrative tasks would reduce workload pressure and allow staff to focus on higher-value functions such as legal analysis, committee support, quality assurance, and institutional memory management. At the same time, structured and searchable datasets would improve consistency and reduce institutional dependence on individual expertise.

For the parliamentary institution, a CAMINAR-inspired system would modernize Hansard as a democratic instrument, transforming it into a searchable, analyzable, and potentially multilingual public resource. This would improve accessibility for citizens, journalists, researchers, and civil society, particularly in Suriname's multilingual context. AI-assisted administrative tools would also strengthen transparency and public trust by improving oversight of expenditures, assignments, and workflows through automated validation and clear audit trails. By embedding AI within existing governance structures, Parliament would enhance institutional resilience, ensuring continuity during periods of crisis, staff turnover, or increased legislative demand. Crucially, such a system would support a gradual and sovereign approach to AI adoption, maintaining full institutional control over parliamentary data and avoiding dependency on generic external platforms.

At a strategic level, adopting a CAMINAR-inspired system would position the Parliament of Suriname as a deliberate and responsible innovator. The Chilean experience demonstrates that effective parliamentary AI begins not with abstract regulation, but with structured data, robust human validation, and strong institutional ownership. For Suriname, this approach would constitute both a technological upgrade and an institutional reform, reinforcing the principle that artificial intelligence must strengthen, rather than replace, human deliberation, legal certainty, and democratic legitimacy.

7. Plan of Approach: *governance and responsibility framework for the introduction of SuriDNAChat.Bot*

Parliament of the Republic of Suriname

1. Purpose and strategic orientation

The planned introduction of *SuriDNAChat.Bot* represents the first concrete application of Artificial Intelligence within the Parliament of the Republic of Suriname following a deliberately phased and principled digital transformation strategy. In line with the Parliament's foundational approach to AI adoption, this initiative is not conceived as a stand-alone technological deployment, but as an institutionally governed knowledge system embedded within existing parliamentary structures, procedures, and democratic safeguards.

The objective of this Plan of Approach is twofold. First, it revises and operationalizes the governance and responsibility matrix for parliamentary AI and information management, ensuring clarity of institutional roles, accountability, and human oversight. Second, it translates this governance framework into a focused, time-bound implementation pathway that enables the Parliament to move, within four months, toward the controlled introduction of *SuriDNAChat.Bot* as a pilot GPT-based parliamentary knowledge assistant.

Consistent with the analytical framework set out in this article, the plan prioritizes data readiness, infrastructural resilience, and human governance capacity as preconditions for trustworthy AI deployment.

2. Revised governance and responsibility matrix

The governance model for *SuriDNAChat.Bot* is based on a distributed but coordinated allocation of responsibilities across parliamentary entities. Each actor contributes a specific layer of legitimacy, expertise, or operational capacity to the system, ensuring that AI functions as an extension of parliamentary knowledge rather than an autonomous decision-making mechanism.

Plenary of DNA

The Plenary retains ultimate political oversight and provides strategic authorization for the introduction of parliamentary AI. Its role is to ensure that the objectives, scope, and use of *SuriDNAChat.Bot* align with parliamentary values, democratic accountability, and constitutional principles. The Plenary thereby confers democratic legitimacy on the initiative.

Clerk / Secretary General

The Clerk or Secretary General holds overall institutional responsibility for coordination, procedural compliance, and continuity. This office functions as the central governance node, ensuring coherence between departments, safeguarding accountability, and embedding AI use within existing parliamentary procedures and administrative rules.

DIV

DIV is responsible for the digitization, archiving, classification, and metadata management of parliamentary documents. Within the *SuriDNAChat.Bot* project, DIV provides the structured,

authoritative, and AI-readable datasets upon which the system operates. Its role is foundational, as the quality and reliability of AI outputs depend directly on the integrity of the underlying document corpus.

ICT Department

The ICT Department is responsible for the technical architecture, system integration, cybersecurity, and operational deployment of *SuriDNAChat.Bot*. This includes managing access controls, ensuring data protection, maintaining system availability, and implementing retrieval-augmented generation mechanisms within a secure parliamentary environment.

Legal Affairs Department

The Legal Affairs Department acts as the guardian of legal accuracy and doctrinal integrity. It validates legislative texts, explanatory memoranda, and legal interpretations used by the system, and reviews AI-generated outputs for legal correctness and contextual fidelity. Its involvement ensures that *SuriDNAChat.Bot* reinforces, rather than distorts, authoritative legal norms.

Department of Communication

The Department of Communication is responsible for the coherence between internal parliamentary knowledge and public-facing information. Its role includes integrating selected AI-supported outputs into communication channels where appropriate and ensuring that transparency objectives are met without compromising institutional control.

Parliamentary Committees

Committees contribute substantive legislative and policy knowledge through reports, agendas, expert submissions, and deliberative records. These materials form a critical analytical layer within the system, enabling thematic and contextual retrieval of legislative intent and policy development.

Administrative Units (HR, Workflow, Procedural Systems)

Administrative units provide structured procedural and operational data that support institutional continuity, process optimization, and accountability. While not legislative in nature, these data streams enable contextual understanding of parliamentary processes and support future AI-assisted administrative applications.

Academic Partners (University of Suriname, SJB)

Academic partners contribute doctrinal analysis, peer-reviewed research, and methodological expertise. Their role is to enrich the parliamentary knowledge ecosystem, support quality assurance, and ensure that AI-supported analysis remains grounded in scholarly standards.

Ethics and AI Governance Committee (to be established)

A dedicated Ethics and AI Governance Committee provides oversight of ethical principles, human-in-the-loop controls, bias mitigation, and accountability mechanisms. This body ensures that AI use

remains transparent, proportionate, and aligned with democratic values, and that responsibilities for validation and correction are clearly assigned.

3. Four-Month action plan toward the introduction of *SuriDNAChat.Bot*

The introduction of *SuriDNAChat.Bot* is structured as a four-month, phased process that mirrors the Parliament's broader AI strategy: institution-first, data-driven, and governance-led.

- **Month 1: governance consolidation and scope definition.** The first month focuses on institutional alignment and formal decision-making. During this phase, the Parliament formally endorses the governance framework and designates responsible units and focal points. The Ethics and AI Governance Committee is established, with a clear mandate covering ethical oversight, validation responsibilities, and escalation procedures. In parallel, the functional scope of *SuriDNAChat.Bot* is explicitly defined. At this stage, the system is limited to a closed, internal pilot focused on information retrieval and guided access to authoritative parliamentary sources. No autonomous drafting or decision-support functions are activated.
- **Month 2: data preparation and validation.** The second month is dedicated to data readiness. DIV, in cooperation with the Legal Affairs Department and Parliamentary Committees, identifies and prepares the initial document corpus. Priority is given to: legislative texts and explanatory memoranda, selected Handelingen and committee reports en metadata enrichment to ensure traceability and retrieval accuracy. Legal Affairs validates the selected materials to ensure doctrinal correctness and consistency. Academic partners may be engaged to review classification schemes and retrieval logic.
- **Month 3: technical configuration and controlled testing.** During the third month, the ICT Department configures the technical environment for *SuriDNAChat.Bot*. This includes the implementation of retrieval-augmented generation, access restrictions to official sources, logging mechanisms, and cybersecurity safeguards. Controlled internal testing is conducted with a limited group of parliamentary staff. All outputs are reviewed under human-in-the-loop protocols, and feedback is systematically documented. This phase emphasizes reliability, transparency, and user understanding over performance optimization.
- **Month 4: institutional review and pilot introduction.** The final month focuses on evaluation and institutional approval. The Ethics and AI Governance Committee assesses compliance with ethical and governance principles, while the Clerk / Secretary General reviews procedural integration and accountability arrangements. Upon positive evaluation, *SuriDNAChat.Bot* is formally introduced as a pilot parliamentary knowledge assistant. Its role is explicitly framed as navigational and informational: guiding users to relevant parliamentary sources, enhancing institutional memory, and supporting evidence-based legislative work without replacing human judgement.

4. Expected institutional value

The introduction of *SuriDNAChat.Bot* under this governance-led Plan of Approach transforms Artificial Intelligence from an abstract policy concept into a concrete institutional instrument. It

strengthens parliamentary knowledge management, improves access to authoritative information, and reinforces transparency and accountability. Crucially, by embedding AI within existing governance structures and assigning clear responsibilities, the Parliament of the Republic of Suriname ensures that technological innovation remains subordinate to democratic control. In doing so, the initiative exemplifies the core argument of this article: that sustainable parliamentary AI emerges not from premature regulation or rapid deployment, but from the deliberate construction of institutional, digital, and ethical foundations.

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