

ASGP

Theme: Presentation of concrete examples of the use of artificial intelligence within Parliaments

COMMUNICATION

by

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1. Introduction

Artificial intelligence is often discussed in parliamentary settings as a set of useful tools: automatic transcription, search assistants, drafting aids, or public-facing chat interfaces. In my view, this framing is incomplete. The central question for a parliament is not whether AI can be used in one office or another, but how it can be institutionalized in a way that strengthens the quality, speed, integrity, and continuity of parliamentary work.

For the Federal National Council (FNC) of the United Arab Emirates, the appropriate entry point was therefore not the acquisition of isolated applications, but the design of an institutional architecture. This meant answering a series of administrative and constitutional questions in the correct order: What functions of parliament are most suitable for augmentation by AI? What governance model should apply? What data can be used, under what classification rules, and in which technical environment? What capabilities must Members and staff build before solutions are deployed at scale? And how can experimentation move, in a controlled way, into formal institutional adoption?

Our answer has been to treat AI as a structured institutional programme spanning governance, data, capacity building, infrastructure, and operational redesign. This communication sets out that model and illustrates it through concrete examples already identified within the FNC roadmap. It is offered not merely as a description of a national experience, but as a practical parliamentary architecture that may be of use to other chambers considering how to move from experimentation to institutional maturity.

2. Why an Institutional Architecture Approach was Necessary

Parliamentary administrations face a familiar risk when approaching emerging technologies: the rapid adoption of promising tools before the institution has defined the conditions under which those tools should be used. In a corporate environment, such fragmentation may lead mainly to duplication or cost. In a parliament, the consequences are more serious. Weak governance can affect confidentiality, procedural reliability, record integrity, and the credibility of outputs used by Members in legislative and oversight work.

The FNC therefore adopted an architecture-first approach for four reasons. First, parliamentary work is document-intensive and evidence-dependent. Legislative review, oversight, committee work, inter-parliamentary relations, and record management all rely on large volumes of structured and unstructured information. Secondly, parliamentary information is not uniform: some material is public, some contains personal data, some is confidential, and some is highly sensitive or sovereign. Thirdly, successful AI adoption depends on institutional readiness, not only software availability. Finally, the value of AI in parliament lies in its integration into workflows, not in isolated demonstration projects.

This institutional logic was reinforced by the wider national direction of the UAE. The country's public-sector digital transformation agenda and national commitment to artificial intelligence created a favorable strategic environment for parliamentary innovation. The FNC's task was to translate that national ambition into a parliamentary model suited to legislative procedure, oversight responsibilities, and the administrative standards expected of a national legislature.

3. Institutional Launch of the FNC AI Program

The FNC's AI journey was launched under the guidance and support of the parliamentary leadership. That political and institutional sponsorship was essential. In parliamentary administrations, transformation succeeds when it is clearly linked to the strategic objectives of the institution rather than presented as an isolated technical initiative.

A decisive step was the issuance of a formal administrative decree in 2024, establishing the FNC AI Team. The purpose of that decision was not symbolic. It created the administrative anchor for a systematic program intended to prepare and enable the Council to adopt AI methodically as a strategic instrument for improving operational efficiency, raising the quality of outputs, and maintaining institutional readiness in the face of rapid technological change.

This formalization matters for two reasons. First, it created ownership: AI became a program of the institution rather than a collection of disconnected experiments. Secondly, it created administrative legitimacy for policy development, interdepartmental coordination, data classification work, use-case prioritization, and subsequent implementation.

4. The Core Architecture: Six Interlocking Pillars

The FNC roadmap is built around six interlocking pillars. Their importance lies not only in their individual content, but in their sequence and interdependence. A parliamentary administration that begins with tools before governance or data governance will struggle. By contrast, an administration that connects these pillars from the outset creates the basis for scalable and trustworthy adoption.

4.1 AI Governance and Policy Framework

The first pillar is governance. In our case, governance means the set of rules, roles, decision paths, and policy principles that regulate how AI may be used inside the institution. This includes the definition of acceptable and unacceptable uses, the degree of human review required for different categories of outputs, the treatment of sensitive information, the relationship between AI-generated suggestions and official parliamentary outputs, and the responsibilities of the units involved in design, validation, and deployment.

The practical objective of this pillar is to ensure that AI use is lawful, ethically responsible, operationally reliable, and aligned with national values. In a parliament, governance also protects institutional credibility. For example, if AI is used to support legislative analysis, committee briefs, or session records, the institution must be able to state clearly what has been machine-assisted, what has been human-validated, and under what standards the output was produced.

4.2 Stakeholder and Needs Assessment

The second pillar is stakeholder and needs assessment. This is where many technology initiatives fail: they begin from the supply side of available tools rather than the demand side of parliamentary functions. The FNC therefore mapped the principal beneficiary groups and their needs before deciding which use-cases should be prioritized.

The roadmap identifies four broad groups. First are Members of the Council, whose needs include rapid access to information, comparative studies, impact analysis of legislation, tracking of government initiatives, scenario building, and translation support. Secondly, the General Secretariat requires AI support for parliamentary research, session and committee management, studies and reports, administrative operations, and reduction of repetitive workload. Thirdly, government entities interacting with the Council require smarter and more reliable channels for data exchange and coordination. Fourthly, society as the ultimate beneficiary requires simpler access to parliamentary information, better service channels, and greater transparency without compromising privacy.

The value of this pillar is operational precision. Once needs are clearly identified, AI projects can be judged by their institutional utility rather than by novelty. This allows resources to be directed toward the areas where parliamentary value is highest.

4.3 AI Enablement and Capacity Building

The third pillar is enablement. The FNC roadmap rightly assumes that institutional adoption cannot be achieved merely by giving staff access to models or interfaces. Capability must be built progressively. For this reason, the roadmap adopts a three-track model: awareness and culture-building; specialized training and capability development; and practical application and experimentation.

This sequencing is particularly important in parliamentary administrations. Awareness creates a common institutional vocabulary and reduces unrealistic expectations. Specialized training ensures that Members and officials learn role-appropriate methods of use. Practical experimentation then shifts the institution from abstract interest to disciplined application.

The planned workshop cycle gives this pillar operational substance. It includes topics such as AI governance and digital sovereignty, data-driven oversight, parliamentary prompt engineering, and practical AI applications for reviewing legislation, detecting gaps, and comparing legal texts. This is exactly the type of targeted capability-building required in a legislature, where the value of AI depends on how precisely it can be applied to real procedural and analytical tasks.

4.4 Data Governance and Management

The fourth pillar is data governance and management, which in many respects is the true foundation of the entire architecture. AI systems are only as strong as the data environment on which they depend. A parliament that wishes to use AI seriously must therefore move beyond dispersed document holdings toward a structured institutional data environment.

The FNC roadmap proposes a central repository or data lake, with the explicit objective of consolidating data from different institutional sources into a clean, classified, and usable environment. This is a critical step. Parliamentary records often exist across minutes, committee papers, comparative studies, correspondence, video, media material, and policy files. Without integration, even strong AI tools will generate shallow results.

Equally important is classification. The roadmap defines four data categories: open, private, confidential, and top secret, with access permissions linked to each level. This enables the institution to distinguish clearly between public-facing use-cases, internal administrative use, and applications involving sovereign or highly sensitive information. In my judgment, this classification discipline is one of the strongest features of the FNC model because it connects parliamentary innovation directly to institutional trust and digital sovereignty.

4.5 Technical and Digital Infrastructure

The fifth pillar is technical infrastructure. Here again, the roadmap avoids simplistic assumptions. Parliamentary AI cannot be built on a single deployment model. Different data classes and different use-cases require different environments.

The FNC roadmap therefore identifies four infrastructure options: fully **on-premises** deployment; a **local hybrid** model; a **global hybrid** model; and **public cloud**. This is not a purely technical distinction. It is an institutional design choice. The on-premises model is suitable for sovereign and highly confidential data. The local hybrid model offers flexibility while preserving strong local control. The global hybrid model creates controlled access to wider services where appropriate. The public-cloud option may be suitable for public or non-classified use-cases.

By defining infrastructure in this graduated way, the architecture avoids the common error of treating all parliamentary AI use as if it presented the same risk profile. Instead, the environment is matched to the use-case and to the data it requires.

4.6 Risk and Challenge Management

The sixth pillar is risk and challenge management. In parliamentary settings, this must include more than technical security. It also includes output reliability, bias, hallucination risk, misuse by untrained users, overreliance on machine-generated summaries, poor traceability, and reputational risk where institutional outputs are involved.

The practical consequence is that validation rules and human oversight must be designed into the architecture from the beginning. In our model, AI is intended to augment parliamentary capacity, not replace responsibility. The institution must remain able to explain how an output was produced, who reviewed it, and on what basis it was used.

5. The FNC Roadmap: From Foundation to Institutional Maturity

The roadmap follows a three-phase progression that reflects sound administrative practice.

5.1 Phase One: Foundation and Readiness

The first phase establishes the institutional base: AI team formation, policy development, data classification, and expansion of institutional knowledge through research and directed experimentation. The principle underlying this phase is correct and should, in my view, guide any parliament embarking on AI adoption: knowledge should precede execution.

5.2 Phase Two: Experimental Expansion

The second phase is where the roadmap becomes especially concrete. It provides more than 24 experiments and use-cases. This is important because parliaments need practical evidence before formal integration. The objective is not to launch everything at once, but to test, measure, compare, and refine.

5.3 Phase Three: Maturity and Integration

The third phase provides the institutionalization path: comprehensive evaluation of the experimental stage; conversion of successful use cases into approved institutional projects; acceptance testing; formal launch by senior management decision; and integration into official procedures. This transition from experiment to approved institutional operation is one of the strongest elements of the FNC architecture because it closes the gap that often exists between innovation initiatives and operational reality.

6. Concrete Examples from the FNC Use-Case Portfolio

The practical strength of the FNC model lies in the breadth and specificity of its use-cases. What follows are selected examples showing how the architecture is translated into parliamentary operations.

6.1 Legislative Impact Assessor

One of the most important use-cases is the legislative impact assessor. For any parliament, the ability to move from textual consideration of a bill to structured assessment of its expected effects is a major institutional gain. The FNC model envisages an AI application that analyses current laws, draft laws and amendments and supports assessment using evidence, comparative approaches, and structured methodology adapted to the national context.

Its value is not to determine the political merit of legislation - that remains the prerogative of Members - but to improve the analytical basis on which legislative choices are made. This is especially relevant for committee work, legal studies, and the preparation of briefs before debate.

6.2 Federal Government Policy Expert

The government policy expert model is designed to support evidence-based analysis of federal public policies. This is particularly significant for oversight. Parliamentary scrutiny is often strongest when members and staff can connect policy claims, implementation indicators, comparative evidence, and historical parliamentary recommendations in a single analytical environment.

In practical terms, such a tool can help the institution review policy consistency, identify implementation issues, and support more informed parliamentary questioning and recommendations.

6.3 Integrated Parliamentary Observatory

The integrated parliamentary observatory is a particularly strong example of AI used as an institutional coordination tool. It is designed to track and analyze federal government projects and link them to parliamentary recommendations. This creates a structured mechanism for post-recommendation follow-up and for assessing how parliamentary interventions connect to executive activity.

For parliamentary administrations, this type of observatory is highly valuable because it strengthens continuity. Recommendations often risk dispersal across time and across institutions. An observatory helps convert them into traceable institutional knowledge.

6.4 Parliamentary Minutes and Session Intelligence

The roadmap contains several mutually reinforcing use-cases around parliamentary records. The smart minutes application converts audio recordings of sessions into accurate written text, refines them into Modern Standard Arabic, and produces related outputs such as session briefs, news items, and time-based analytical summaries. The minutes analyzer then takes these textual records further by transforming them from static text into structured data suitable for deeper analysis and production of committee decisions and staff tasks.

Together, these applications illustrate a mature parliamentary logic. The first layer solves the production problem: how to create fast, accurate, and standardized records. The second solves the analytical problem: how to extract trends, participation patterns, issues, and institutional insights from those records.

6.5 Parliamentary Performance Evaluation and Behavioral Modelling

The roadmap also includes a parliamentary performance evaluator and a behavioral modelling application. These tools analyze Members' interventions in session transcripts and extract qualitative and quantitative indicators reflecting participation patterns, themes of interest, and styles of interaction. This is a sophisticated use of AI because it shifts parliamentary analytics from anecdotal impressions to structured evidence.

Naturally, such tools must be governed carefully. Their institutional value lies in internal analysis, performance understanding, and support for parliamentary development - not in replacing political judgment.

6.6 AI Parliamentary Researcher

The AI parliamentary researcher is one of the clearest examples of how the FNC architecture connects data integration with research support. This system is intended to support the General Secretariat's researchers through smart analytical tools, a precise research methodology, and direct integration with more than ten official UAE government sources and six global research databases.

This matters greatly in parliamentary practice. Researchers do not need generic answers; they need reliable synthesis anchored in trusted sources, with speed, traceability, and relevance to parliamentary

business. A properly governed AI research assistant can materially improve the quality and timeliness of committee and plenary support.

6.7 Smart Reader and Interactive Document Workflows

The smart reader use-case turns the document itself into an interactive environment. Rather than merely opening a report or bill, the user can interrogate the document conversationally, obtain concise answers, generate summaries, and view organized outputs within the document interface.

For parliamentary work, where large files must often be processed under time pressure, this is not a convenience alone. It changes the speed at which Members and officials can extract the substance of complex materials.

6.8 Lisan: AI Language and Drafting Review

The roadmap includes a specialized language model, 'Lisan', aimed at improving the quality of parliamentary drafting through precise linguistic review and stronger Arabic usage across documents and minutes. This is an excellent reminder that parliamentary modernization is not only about analytics and data. It is equally about the quality, clarity, and authority of official text.

In legislatures where the integrity of wording matters, language tools designed specifically for parliamentary usage can generate significant value, provided that human editorial authority remains intact.

6.9 External Relations, Country Files, and Parliamentary Diplomacy

A particularly distinctive part of the FNC portfolio is the application of AI to parliamentary diplomacy and external relations. The roadmap includes an external relations assistant able to support position papers, feasibility studies, draft decisions, and discussion proposals for inter-parliamentary unions within the policy framework of the UAE. It also includes a smart country file system designed to prepare standardized country profiles drawing on IPU data and other trusted information.

This is a noteworthy innovation. Many discussions of parliamentary AI focus narrowly on chamber procedure. The FNC model recognizes that modern parliamentary administrations also support diplomacy, protocol, comparative analysis, and international positioning. AI can be highly valuable in these functions when properly governed.

6.10 Media and Public Interaction

The media monitor and the virtual receptionist illustrate how AI can connect the institution both to the information environment and to the public. The media monitor is designed to analyze media content in the UAE with particular attention to the FNC and related legislative and oversight issues. The virtual receptionist is designed to answer enquiries, provide immediate information, and receive complaints using voice and language technologies.

These use-cases are significant because they extend AI beyond internal productivity into transparency, service, and responsiveness. For parliamentary institutions seeking to improve public accessibility, this is an area with considerable promise.

6.11 Translation, Protocol, and Administrative Coordination

The FNC roadmap also includes an AI translator for meetings and bilateral encounters and a protocol and parliamentary delegation coordinator. Taken together, these demonstrate that parliamentary AI can support not only core legislative analysis but also the administrative architecture that enables parliamentary work to function smoothly.

This breadth is important. A parliament is not a single process. It is an ecosystem of deliberation, records, coordination, protocol, research, public communication, and institutional memory. The FNC use-case portfolio reflects that reality.

7. What Distinguishes the FNC Model

Several features distinguish the FNC model from more limited AI initiatives.

First, it is enterprise-wide. The roadmap is not confined to one department or one technical platform. It spans Members, the General Secretariat, government interaction, and public-facing functions.

Secondly, it is governance-led. The institution began with formal team formation, policy framing, classification logic, and controlled enablement.

Thirdly, it is sovereignty-aware. The graduated infrastructure model - on-premises, local hybrid, global hybrid, and public cloud - allows the institution to match deployment conditions to data sensitivity.

Fourthly, it is designed for institutionalization. The roadmap explicitly sets out the path from experiment to approved business requirement, testing, launch, and embedding in official procedures.

Finally, it treats AI not as an abstract innovation theme but as a parliamentary operating model. That is, in my view, the most important distinction.

8. Relevance for Other Parliaments

Other parliaments may differ in scale, constitutional design, language environment, and digital maturity. Yet the underlying institutional questions are strikingly similar. Any parliament considering AI seriously will have to decide how to govern its use, how to classify and structure its data, how to build user capability, how to choose infrastructure according to risk, and how to identify high-value use cases without fragmenting the institution.

For that reason, the FNC experience may be useful less as a template for exact replication than as a sequence of institutional decisions. The generalizable lesson is clear: start with architecture, build governance and data discipline, train systematically, experiment with purpose, and move to institutional integration only when value and control have been demonstrated.

9. Conclusion

Artificial intelligence in parliaments should not be understood as a question of software alone. It is a question of institutional design. The experience of the Federal National Council suggests that the most promising path is to build AI as a parliamentary architecture - one that connects policy, data, infrastructure, people, and workflows in a coherent system.

When approached in this way, AI can strengthen legislative analysis, enrich oversight, improve record integrity, support parliamentary diplomacy, expand public accessibility, and preserve institutional memory. But these outcomes do not arise automatically from tools. They arise from governance, discipline, and design.

That, in summary, is the proposition the FNC wishes to share with colleagues at ASGP: if artificial intelligence is to serve parliaments well, it must be institutionalized deliberately, responsibly, and in direct service of parliamentary function.