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A Digital Strategy for **Efficient** Public Action

Roadmap
of the Interministerial Digital
Directorate (DINUM)

March 2023

The mission of the Interministerial Digital Directorate (DINUM) is to develop the State's digital strategy and to oversee its implementation. At the start of this new five-year term, the Prime Minister and the Minister for Public Sector Transformation and the Civil Service, under whose authority DINUM is placed, wanted to set a clear and ambitious path for the digital public sector, so that it would be a powerful lever to make the State more efficient, simpler and more sovereign.

This path is built around four priorities, which are included in the DINUM Roadmap:

4 PRIORITIES

1. Engage in a deep transformation of public organisations in order to initiate and conduct the State's digital projects over the long term.

This will imply gradually building integrated multidisciplinary teams rather than siloed teams, proposing incremental and continuous developments with short-term deadlines rather than annualised projects, and requiring ongoing impact measurement rather than a purely 'solutionist' approach. In addition, it is advisable to draw inspiration from the "State Start-ups" or "public start-ups" approach of Beta.gouv by favouring experimentation, iterations and then scaling up. This approach has proven its efficiency in creating new innovative digital services. As such, it deserves to be implemented more widely by all administrations.

2. Significantly enhance digital skills within the State.

The growing need for digital tools and the potential of digital technology to transform the administration and public services and to implement new, more efficient public policies mean that the State must have sufficient skills in terms of quantity and quality. Attracting, recruiting and retaining digital talent is a challenge that must be a priority for the years to come. The transformation of digital project management methods, which consists of supporting the digital aspect of public policies, not only from the point of view of their "dematerialization", but by offering new innovative opportunities, will also be a vector of attractiveness for public digital professions.

3. Develop the efficient exploitation of data for a more efficient State in its action and simpler for citizens, businesses and civil servants.

This exploitation, which has transformed many activities of the private sector, from Transport to Finance to Retailing, is not sufficiently deployed within the State despite the clear benefits it could bring.

4. Guarantee the digital sovereignty of the French State by investing in mutualized digital productivity tools for civil servants.

Most of these digital products have been developed using free software to ensure the control, sustainability and independence of the State's information system. They can fully meet the expectations of civil servants as soon as a critical mass of contributors is gathered, whether from civil society, businesses or States. This shared investment must be based on the digital doctrine drawn up by DINUM for the State and its operators and consolidated in conjunction with the ministries, which must take into account accessibility, eco-responsibility, digital identity issues and the cloud.

THE DINUM ROADMAP

The Roadmap of the Interministerial Digital Directorate (DINUM) sets out a new path to support and ensure the success of the State's digital projects, at the service of the Government's priorities and with a view to improving the efficiency of public action by making the most of digital opportunities.

A co-constructed Roadmap

The new DINUM roadmap is the result of collaborative work involving all digital stakeholders within the State - digital departments of ministries, Chief data, algorithms and source codes officers of ministries, ministerial departments. It also takes into account the best practices of the private sector and of our European neighbours.

While DINUM has made its mark on the digital landscape with real successes to its credit, it is aware on a daily basis of certain weaknesses in the State's digital system. These weaknesses have led to the identification and definition of four main objectives:

- **Enable Ministries to launch successful digital initiatives:** by maximising the impact of digital projects, reducing their costs, and improving their design, accessibility, security, eco-responsibility and interoperability in line with the doctrines developed by DINUM;
- **Put digital technology at the service of the Government's political priorities by creating agile and innovative digital services:** in particular by creating public start-ups with the Beta.gouv method, by mobilising Entrepreneurs of general interest (EIG), by deploying agile methods and by using the full potential of digital technological advances;
- **Value and exploit data as a lever for efficient public action:** by mobilising open and non-open data, steering public action through data and deploying innovative and proactive services for civil servants and users;
- **Manage reliable and trustworthy digital tools that are shared and used by multiple parties:** interministerial information and communication network ("*Réseau interministériel de l'État*" or "RIE"), cloud, collaborative office suite, FranceConnect and APIs, etc.

To achieve these ambitious objectives, it is essential that the State equip itself with a sufficient number of robust skills in the digital domain. Without the creation of a talent pool for these essential skills, through active recruitment policy, skills-training and talent-retention programs, the State will be unable to benefit from the digital transformation. The creation of a digital sector is therefore a priority. **To this end, DINUM will take on the cross-functional role of “HR department for the State’s digital sector”.**

Enable the success of ministries' digital projects

Observations

Since 2017, progress has been made regarding the quality of online procedures. Those most used by the French citizens are monitored in the Observatory of digital public services, which have been digitized, connected to FranceConnect and made accessible to people with disabilities. New procedures, such as electoral proxies, are more in line with quality requirements, with a more suitable user design. Similarly, the increased use of software such as Samba or BigBlueButton in the ministries has **reduced the cost of certain information systems**. Finally, the success of FranceConnect, which has established itself with 1,500 online services, is an illustration of the State's ability to carry out digital projects with impact.

On the other hand, despite the use of Articles 3 and 4 of the DINUM decree, which allow major digital projects to be audited to ensure their viability, the impact of the recommendations issued by DINUM on the life of the ministries' major projects remains relative. A significant proportion of projects, particularly the largest ones, do not comply with the initial framework, which leads to an average budgetary slippage of 24% and an average schedule slippage of 26% by the end of 2022. These slippages are on the increase with several projects worth several tens of millions of euros in clear difficulty.

Similarly, recommendations on design, accessibility, security and interoperability are hampered by an outdated application base, on which the costs and timescales for intervention are high. This situation is the result of an approach to information systems built as a sum of "projects", most of which are now in "maintenance" and do not offer the quality guarantees that the State should have. This situation no longer corresponds to the state of the art: information systems are nowadays managed mainly by sustainable and autonomous product teams, in order to be able to continuously make the improvements required by changes in contexts, regulations and uses, and to limit the accumulated technical debts.

It is no longer possible, with the aim of rationalising resources, to launch information systems projects, whether they be new or overhauled, that do not have clearly defined minimum impact objectives.

Development for efficient information systems

In order to complete DINUM's current tasks in terms of monitoring the State's major digital projects as a 'trusted third party' and to ensure that the recommendations issued or any subsequent major deviation effectively lead to a real reorientation of the project, DINUM is offering ministries, in addition to monitoring, *ad hoc* support through "digital brigades" ("*Brigades d'intervention numérique*").

In order to make DINUM's support offer more transparent, the brigade will henceforth group together all its expertise (accessibility, cloud, UX, DevOps, eco-design, etc.) as well as a support capacity through agile coaches. Indeed, by drawing on the successful experience of public start-ups on complex digital public projects, it is necessary to develop, including for major digital projects, a method based on an agile digital culture with an impact that requires the decompartmentalisation of project management and project implementation. The DINUM offers this assistance to Ministries and other public agencies interested in applying the doctrines for software development established by the DINUM.

In order to identify projects in difficulty and provide the relevant support, it is planned, in close collaboration with the Ministry of Finance's Budget Directorate, to set up ministerial digital conferences enabling the ministries to present their main information systems projects, taking into account their impact and total cost of ownership, but also with regard to other criteria such as accessibility, eco-responsibility or cybersecurity.

In order to disseminate an agile and efficient digital culture, DINUM's support and financing tools will systematically ask the ministries about the desired contributions of the digital projects under development and the targeted impact. This will be embodied in "success contracts" to make the ministries responsible for the deployment of each of DINUM's supports, whether they concern the cloud, data, free software, eco-design, design or accessibility, and whether these supports are human or financial (such as the "*Fonds de transformation de l'action publique*" or "FTAP"). The contracts will also reflect the impact-driven agile method deployed by the project leaders. Finally, these contracts will guarantee the implementation of digital doctrines in all projects financed by public money. The objective is that, in the long term, all of the State's digital projects will be designed and operated to the same standard as those of the most successful private digital players.

Put digital technology at the service of the Government's political priorities by creating agile and innovative digital services

Observations

The **"State Start-up"** or **"public start-up"** method deployed since 2013 has made it possible to support major government policies in the areas of professional integration ("*GIP Inclusion*"), access to culture ("*Pass Culture*"), support for young people ("*1 jeune 1 solution*"), digitization of procedures ("*Demarches-simplifiees.fr*") and digital skills development ("*PIX*"). It demonstrates the ability of administrations to offer innovative digital services by going beyond the traditional modes of administrative organisation: multidisciplinary teams rather than a separate approach to strategy and implementation, decompartmentalisation rather than organisational silos, impact-based rather than activity-based management, a soft launch for products followed by incremental growth, rather than a highly-publicized official launch.

The community of public Start-ups has a thousand members and is a testament to the administration's ability to attract the best digital talent when an ambitious goal in the service of the general interest, working autonomously, and a framework for continuous improvement are proposed.

Nevertheless, these projects come up against daily frictions with the administrative organisation that can make it difficult to scale up:

- **the difficulty of sustainably financing digital products** in an administration that is strongly structured on a project/maintenance basis and where digital technology is seen solely as a cost and not as a lever for public policy itself;
- **the difficulty of maintaining a relationship of digital co-construction of public policies** when digital is often seen only in terms of digitization;
- **the difficulty in retaining digital talent due to various administrative rules:** limited number of positions within administrations, contracts, recruitment deadlines, etc. This situation is all the more detrimental as outsourcing to private contractors can cost up to almost twice the cost of a civil servant.

In fact, the method of public start-ups or digital challenges led by Entrepreneurs of general interest or the Accelerator of citizens' initiatives (AIC) testify to the inventiveness and commitment of civil servants to solve public action problems with digital technology. **However, this inventiveness is not sufficiently used to enable the success of the Government's political priorities (PPG).** This partly explains the difficulty of scaling up these projects.

Finally, it remains difficult to measure the performance and real impact of a digital project, and therefore to adapt its funding accordingly or even to stop projects when necessary.

Developments to better support the Government's political priorities

In order to reconcile the benefits of launching initiatives using an agile, impact-oriented method with the importance of achieving results quickly on priority projects for the French, each of the government's priority policies can therefore be supported to:

- **mobilise the digital and intrapreneurial lever from its scoping phase;**
- **launch new agile and impactful digital services**, using the proven method of public Start-ups (Beta.gouv) whenever relevant;
- **sustain the digital public services developed by scaling them up** through an acceleration programme, with coaching and co-financing.

The increase in new digital public services in the service of the Government's political priorities, whether or not they are public start-ups, will be made possible by the spin-off led by DINUM and the presence of numerous incubators in the ministries.

DINUM will step up its role in leading, advising and guiding this ecosystem with a threefold ambition:

- **ensure that the projects carried out meet the challenges of public action,**
- **encourage the scaling up of digital projects that have an impact,**
- **help stop projects that do not meet expectations in the interests of efficiency.**

This strengthened role of DINUM could be materialised by a "success contract" that will obviously take into account the specificities of each project and of each ministry, which will be made responsible for the success of its digital projects.

Value and exploit data as a lever for efficient public action

Observations

The open data policy implemented over the past 10 years has enabled the creation of useful services for citizens, including "Vite ma dose", a tool to identify the availability of vaccine doses during the health crisis, "DVF", an open register of property prices throughout France, and "Nos Gestes Climat", a carbon footprint simulator. This public data also provides objective and reliable information to journalists to contribute to the transparency of public debate.

Beyond the opening of data, it is crucial for the State to take full advantage of its data by exploiting it. This exploitation must also materialise for data protected by law and only accessible to authorised actors: economic and social data on businesses by "*Signaux Faibles*" to guide the actions of the regional labour directorates in favour of businesses in financial difficulty; pre-employment declarations used by the unemployment agency to guide job seekers with "*Ma Bonne Boîte*"; registration declarations to combat registration fraud. **These achievements, invariably the result of experiments that have been scaled up, bear witness to the potential for reusing data, both for the efficiency of the administration and for the proactive deployment of new services to the benefit of users.**

The industrialisation of the exchange of certain data with APIs has enabled the first online public services to avoid asking users for information known to the administration according to the "once-only" principle and sometimes to anticipate users' needs with proactivity: legal aid applications, college scholarships, extracurricular activities pricing, procedures that are at the heart of the French citizens' daily lives.

The data policy is still thus limited by:

- **the uncertainties regarding the interpretation of the various legal frameworks**, which lead to resistance among holders to making data available. In fact, although the French legal framework appears to be extremely favourable to the sharing, exploitation and enhancement of data, including for proactive approaches, it leaves room for interpretation and uncertainty for data holders, who do not find it a reassuring framework;
- **the outdatedness of the administrations' information systems** and the difficulty of making them evolve so that they can participate in this circulation. A lack of standardisation has also been noted: despite the recent publication of a technical doctrine on data exchange by API, data producers still apply different data exchange methods, making their use more complex;
- **the difficulty of attracting and retaining talent** in all data-related professions: data scientist, data engineer, product manager.

Developments to better exploit the potential of data

The wealth of administrative data is a powerful lever to strengthen the efficiency of public policies, to deploy simpler and more accessible services and to facilitate the work of civil servants. It is therefore necessary to make better use of it and to make it a strong axis of public transformation. In order to accelerate innovation projects using data by overcoming the obstacles identified, **a data project incubator, the "datalab", will be created within DINUM to:**

- **take legal and technical responsibility for innovations** that cannot easily emerge within the perimeters of a ministry, while respecting the protection of personal data and secrets protected by law;
- **accelerate the deployment of numerous use cases by providing access to the necessary resources and data:** for example, sending a letter to households owning two thermal vehicles *via* access to tax and registration data or monitoring the performance of each professional training course;
- **support the administration's project leaders in achieving a real business impact by making full use of existing data;**
- **animate the network of existing or future ministerial data lakes.**

The "datalab" will take the form of:

- a robust and secure legal framework for the project's stakeholders;
- a secure technical infrastructure allowing the provision and processing of non-open data;
- the use of artificial intelligence techniques;
- the possibility of benefiting from DINUM's human resources in data science.

Data exploitation projects will also be eligible for funding through a dedicated FTAP window with a budget of €10 million.

The Interministerial Digital Director, as Chief Data Officer of the State, will also ensure the success of ministerial chief data officers in the design and implementation of impactful data exploitation projects. The implementation of the Data Governance Act will also be an opportunity to give DINUM the role of coordinator of the assistance services and single point of information for administrations and the general public for the re-use of public data, including those that are not open.

DINUM will be responsible for advancing the circulation of data by institutionalising the existing Individual and Businesses APIs according to a doctrine of control by the distributor and not by the data producer. Thus, for interministerial APIs, DINUM will be responsible for accrediting the requester, who will not need any further accreditation to access the data, and the data producers will be able to trace these accesses and stop a flow if necessary. This architecture will make it possible to considerably speed up data sharing projects to avoid having to ask users for information already held by the administration. This is a strong axis of simplification and proactivity, both on the user and civil servant side.

Operate quality and trustworthy mutualized digital tools

Observations

DINUM already operates a number of digital products: the interministerial information and communication network ("*Réseau interministériel de l'État*" or "*RIE*"), which has one million civil servant users throughout France, in metropolitan France and overseas, FranceConnect, with 40 million French users and 300 million connections per year, Démarches Simplifiées, which makes it possible to manage 2.5 million administrative procedures per year, and Tchap, with 500,000 civil servant users. **DINUM has launched digital collaborative work tools that are used by tens of thousands of users.** These products, most of which are under open source licence, are highly appreciated by their users. **However, they still suffer from a lack of promotion.**

The RIE, a strategic infrastructure, serves nearly 14,000 sites throughout France, including overseas territories. It is a clear example of successful interministerial pooling, both in economic terms - the cost of network access, including resilience and secure Internet access, is around €100 per year and per agent - and in terms of uses - by promoting the interoperability of ministerial information systems.

These successes are the result of a desire for continuous improvement based on feedback from users monitored in the civil servant's digital barometer ("*Baromètre numérique de l'agent*"), a professionalization of operations, a search for sovereign open source solutions to replace licensed software and a mastery of cloud technologies to develop and operate these services.

However, the digital product portfolio remains unclear, with duplication and overlap with ministerial offers. In particular, the lack of unified authentication in the State ("*AgentConnect*") encourages each entity to equip itself with multiple tools without interoperability rather than building a coherent and complete range of digital tools (email, diary, conferencing, data sharing, file sharing, etc.) to facilitate the work of civil servants.

Developments to have efficient mutualized digital tools

DINUM is committed to structuring an offer as an operator of shared interministerial digital products, with the aim of providing ministerial departments with a competitive, scalable and ergonomic alternative for office automation tools, but also application tools such as APIs. **This is an essential aspect of the State's digital sovereignty. In addition, the State needs to have cloud solutions adapted to the needs of the administration, within the framework of interministerial coordination.** These projects will be carried out in close collaboration with the French Cybersecurity Agency (ANSSI) to ensure that cybersecurity issues are fully taken into account.

Finally, in this context, DINUM will increase its level of participation in European digital programmes related to its missions, by committing itself to consortiums that target

operational developments, such as unified authentication, "Once-only principle" or the cloud, and by strengthening relevant bilateral partnerships.

Thus, by working in alliance with other ministries and other countries, it will be possible to have open and powerful tools, some of which are already present in administrations, and to allow any entity to use them or interface with them. This strategy will also benefit the ecosystem of European digital services and products, by making it less captive to certain technologies and by opening up larger markets around a few products that are leaders in their category.

This model must be built with clear cost targets for digital tools. For example, for a state-of-the-art collaborative suite famous among civil servants, a cost of €50 per user per year should be targeted. **It should enable us, by drawing up coherent budgetary and human resources trajectories, to have efficient digital tools for civil servants. In return, it will contribute to the attractiveness of the civil service.**

DINUM as HR department of the State's digital sector

The State's ability to attract and retain digital talent must be greatly improved. To this end, DINUM is responsible for implementing, in close collaboration with the Directorate-General for Administration and the Civil Service (DGAFP) and the Interministerial Directorate for the State's top-level management (DIESE), all actions that contribute to the revitalisation of the digital sector within the State, for example by promoting learning in the digital field, by monitoring and animating communities of digital public servants or by building attractive career paths for civil servants of the digital sector.

DINUM will thus fully assume the role of HR department of the State's digital sector.

In order to disseminate a digital culture and skills throughout the administration, from senior government officials to civil servants, DINUM must build a public digital campus. Adapted to the needs of the various professions, the themes should be transdisciplinary, from agile project management to digital law, including design, data exploitation, artificial intelligence and entrepreneurship. This Campus could be carried out in partnership with all the players in the field of continuing education in the public service, and it will gradually gain in importance.

Finally, **although the cumbersome nature of certain administrative processes limits the State's recruitment capacity in a tight market, not all solutions have yet been implemented.** DINUM, in conjunction with the Directorate of Administrative and Financial Services of the Prime Minister's Office and the Directorate-General for Administration and the Civil Service, will launch an experiment to simplify recruitment processes in order to be able to carry out rapid recruitment (over several days rather than several months). This experiment could then be extended to other sectors of the civil service or developed with public operators who wish so.

**DIRECTION INTERMINISTÉRIELLE
DU NUMÉRIQUE**

20 avenue de Ségur – 75 007 Paris – FRANCE

numerique.gouv.fr



@_DINUM