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POLITIQUE NUMÉRIQUE
PROJET DE PROPOSITIONS
SOUMISES À CONSULTATION

English version

**This document contains the draft proposals
subject to public consultation
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This document presents the proposals submitted for public consultation in March 2018 by the State of Geneva as part of the elaboration of its digital policy.
The translations in German, English and Italian are provided for information-purposes only. They were automatically translated using the Deepl tool.
The Canton of Geneva is in the process of defining a digital policy, which will enable it to make a successful digital transition and ensure the coherence of its actions for all.
The State of Geneva must actively engage with technologies that will transform our daily lives in the years and decades to come. It is therefore essential to build on the exploration, taming, identification of opportunities and challenges that these technologies represent for Geneva. To achieve this, an inclusive approach involving all stakeholders (academic, business and civil society) is essential.
The digital policy development project aims to provide a coherent and transversal vision of the State's role in supporting the digital transition in Geneva. It is therefore important to present illustrative guidelines and examples. Moreover, this digital policy must support a new way of operating, making it possible to strengthen the transversal nature and openness of service to the citizen.
The public consultation is accessible from numerique.ge.ch

Propositions

i.   Principles

The State is plural. It aims to fulfill its role in these five dimensions in a balanced and coherent manner. It is based on the following important general and cross-cutting principles:

- ➢ **User-centred approach**
  - o Finding:
    - ▪ Citizens today have higher expectations of service and interaction with their public administration.
    - ▪ The administration must therefore adapt as much as possible to the expectations and needs of users and take advantage of their feedback to improve its processes.
    - ▪ In addition, the digital divide* poses a challenge if we do not want to leave aside part of the population.
  - o Proposal:
    - ▪ The State designs services that meet the expectations and needs of users in a dynamic of co-construction. It puts this approach in the perspective of a digital society that does not exclude anyone.
  - o Actions envisaged:
    - A To better respond to citizens' expectations and needs and take advantage of their feedback to improve administrative processes, involve users in the continuous improvement of the services offered to them and co-construct new services.
    - B To simplify business life, involving entrepreneurs in identifying administrative difficulties and trying to resolve them.

*digital divide: disparities between people who have access to and use information and communication technologies (connection, equipment, information literacy) and others. It can be social, territorial or generational.

- ➢ **Trust**
  - o Finding:
    - ▪ Because digital technology can be frightening and destabilizing, dialogue with all stakeholders is important:
      - • to become aware of digital issues and generate the confidence necessary to maintain a positive dynamic, and
      - • to benefit from feedback from the population on their expectations or fears and thus be able to adapt the way they manage their data.
  - o Proposal:
    - ▪ The state is taking stock of the challenges of trust in the digital age. It understands its role as guarantor and referent of trust in the relationships between the actors of the digital society.
  - o Actions envisaged:
    - A To play a role as a guarantor of trust, commit to the government's functions in the digital age.
    - B To strengthen dialogue with citizens and businesses, organise dedicated events.
    - C To maintain ongoing dialogue, establish an online discussion platform.

> **Data compliance**
> - Finding**:**
>   - Today, data is both a strategic resource that needs to be valued and a resource to be protected, particularly with regard to personal data.
> - Proposal:
>   - Data is at the heart of our digital personality and how our society works. The State protects and values those it creates and manages on a daily basis; in this context, it promotes the control and use of personal data by individuals.
> - Actions envisaged:
>   - A In order to allow their valorisation, open the public data of the Geneva administration.
>   - B To promote the control and use of their personal data by individuals set up a "My Data" space on the personal e-process of each citizen.
>   - C To encourage innovation and the improvement of public services, promote a genuine data culture* within the administration.

*Data culture: A corporate culture that understands that data is a strategic resource that needs to be valued and protected.

> **Ethics**
> - Finding:
>   - Digital technology must be an opportunity to shape a better world and put people within the system. In particular, the question arises of our societal choices and the ways in which they are made.
> - Proposal:
>   - State action is part of a process of continuous reflection to take into account the ethical challenges posed by the digital transition (for example, those related to artificial intelligence, autonomous cars or the protection of the personality).
> - Actions envisaged:
>   - A To take these issues into account at all levels of the cantonal administration, raise awareness and train employees on the ethical aspects of digital technology.
>   - B To design a better world and put mankind at the centre of the system, set up an' ethical and digital' committee composed of members of civil society and academia.

> **Efficiency**
> - Finding:
>   - Digital technologies make it possible to dematerialize relations between citizens or companies and the State, an approach initiated with e-Government* strategies. Secondly, it is now a question of working with a posture of agility*, openness and innovation to better serve the citizen. The automation of tasks allows employees to concentrate on human value-added activities, especially in contact with users.
> - Proposal:
>   - The State promotes a culture of agility* and innovation based on co-construction, collaboration and openness. With the aim of better serving users, this approach is necessary to improve or even

disrupt the functioning of the administration while valuing its employees.
- o Actions envisaged:
  - A To engage all State employees in the search for efficiency gains and to focus on human value-added activities, organize innovation challenges* within the cantonal administration.
  - B To seize the opportunities for efficiency gains in management and services provided by the administration, to ensure the experimentation of breakthrough technologies, such as blockchain or artificial intelligence, taking risks and opportunities into account.
  - C To free oneself from silo thinking (which hinders communication between departments) and hierarchies in search of agility, explore new organizational modes, including holacracy*.

*eGovernment strategies: aim to dematerialize relations between citizens or companies and the State, as with the electronic tax returns.
*agility: ability to adapt quickly to changing situations, resilience and autonomy of teams.
*Innovation challenge: an open innovation approach that allows the co-creation of solutions to a given problem or challenge.
*Holacracy: a form of organization that encourages collective and decentralized thinking rather than hierarchical thinking.

At all times, the digital policy of the State of Geneva is part of a balanced and sustainable development perspective.

ii. Facilitate

1. *Geneva fosters participatory democracy through digital tools to strengthen citizen participation (participatory democracy is a form of sharing and exercising power based on strengthening citizen participation in political decision-making).*
2. *Drawing on the opportunities offered by digital technology, Geneva continues to simplify administrative procedures and develop new services for the benefit of citizens and businesses, attentive to their needs.*

- ➢ **Strengthening and broadening citizen participation**
  - o Finding:
    - ▪ Beyond the tools of direct democracy, the tools and practices of digital technology make it possible to facilitate broader citizen participation.
  - o Proposal:
    - ▪ To strengthen and broaden citizen participation through digital media.
  - o Actions envisaged:
    - A To enable citizens to contribute to the development of legal bases, standards, regulations or projects, make a consultation and citizen co-creation platform available to the cantonal administration services.
    - B To enable citizens to submit their proposals to the services of the State, establish an ideas base open to contributions.
    - C To reduce barriers to signature collection, experiment with online signature collection (E-collecting).

  D To improve the transparency of decision-making processes, communicate regularly and document project progress stages through digital platforms.

  E To make the administrative procedures understandable, simplify the language used in the communication, in particular by publishing a guide proposing reformulations for the attention of administrative staff and a guide to administrative jargon for citizens.

- ➢ **Simplification of administrative procedures and development of new services**
    - o Finding:
        - ▪ The introduction of digital technology in the interaction between the citizen and the cantonal administration has made it possible to dematerialise procedures and services (e. g. tax declarations).
    - o Proposal:
        - ▪ Continue simplifying administrative procedures by co-creating new services together with users.
    - o Actions envisaged:
        - A To involve stakeholders and users, rely on Geneva Lab, the Geneva-based digital innovation laboratory of the Geneva administration, which favours multidisciplinary approaches to co-creation, prototyping and experimentation with civil society.
        - B In order to provide services in line with the sovereign functions (under the authority of the State) of the State, taking into account technological possibilities, rethink the tasks incumbent on the State.
        - C To better meet the needs of citizens and businesses, co-create new services and services with the users at their service.

- ➢ **The ability to open up the State to the development of external services in a platform-state posture**
    - o Finding:
        - ▪ The Internet world is marked by the success of the platform model, which is to provide infrastructures and resources that facilitate the development of services for users. The concept of the platform state contrasts the model of an automatic distributor state with that of a bazaar state. In the first, the citizen goes to a counter to obtain a service; in the second, the State provides an infrastructure on which a group of actors can create services provided to citizens.
    - o Proposal:
        - ▪ To seize digital tools in a posture of openness and transparency to enable the development of external services, in a state-platform approach.
    - o Actions envisaged:
        - ▪ To facilitate the development of new services by civil society, implement an Open Data* strategy.
        - ▪ To encourage the emergence of new value-added services based on data made available by both the public and private sectors, federate local players around a common dynamic in a smart city* approach and with the objective of improving quality of life.

*Open Data: open data, or the public availability of digital data for use and access by users.

*Smart city: a city that uses information and communication technologies, especially sensors, to improve the quality of life of its inhabitants and increase energy efficiency.

iii.   Training

1. Geneva supports its citizens in understanding and appropriating the challenges of the digital age and in the evolution or emergence of tomorrow's professions.
2. Geneva is building a fair and creative school that integrates digital technology as an object of education and a tool.

- ➤ **Giving schools a key role in the digital transition**
  - o Finding:
    - ▪ The digital transition is concerned with all dimensions of training: learning content, the way of learning, targeted skills, such as the capacity to innovate and the spirit of initiative. To adapt the school to the digital world, change management and support for all school stakeholders is essential.
  - o Proposal:
    - ▪ Give schools a key role in the digital transition.
  - o Actions envisaged:
    - A   To raise the proficiency of teachers, support them in the appropriation of the societal and pedagogical stakes of digital technology.
    - B   To reflect the changes that affect all areas of society, consider digital technology as a subject in all existing disciplines and not a new discipline.
    - C   To facilitate the exchange of good teaching practices, strengthen their sharing, both on methods and content.
    - D   To facilitate the transition of learning processes, accelerate innovation.
    - E   To ensure broad adoption of a digital strategy, co-create a digital school guide with students, teachers, and parents.
    - F   To promote interdisciplinary mindsets and agility, disseminate prototyping and experimentation methods and tools.
    - G   To prevent risks to the child's health and development, the school is taking responsibility for public health in the deployment of digital technology at school.

- ➤ **To think about digital equipment in the broad perspective of uses and a clear educational project**
  - o Finding:
    - ▪ If the digital world is materialized by a set of devices (smartphones, tablets, sensors,...) and an infrastructure (Wifi,...), its use goes well beyond the mere deployment of equipment.
  - o Proposal:
    - ▪ To think of this equipment in the broader context of usage and a clear educational project, rather than simply by making specific equipment available.
  - o Actions envisaged:
    - A   To ensure adherence, build on the uses of teachers, students and parents in environmental guidelines (i. e. the services and equipment used).

B To increase the success of environmental decisions (i. e. the services and equipment used), register them on the basis of an asserted educational project.

C To enable the use of new online services and mobile devices, provide a wireless connection in all classes of Geneva's public education system, including inclusion factor (which makes it possible to include everyone) and the prerequisites of a school that integrates digital technology as an object of education and a tool.

D To take into account a context in which students are often already connected, consider the issue of "Bring your own personal communication equipment" (BYOD) and mobility.

➢ **To develop the digital skills and digital culture of the Geneva population**
  o Finding:
    ▪ The ever-increasing use of digital technologies in the lives of citizens and businesses is a challenge. The demand for e-skills in the labour market is increasing for both adults and future generations. If some jobs are lost, others will appear. The challenge is that of individual skills to evolve in a safe and competent manner in a digital world as a citizen and economic actor.
  o Proposal:
    ▪ To develop the digital skills and digital culture of the Geneva population and businesses in the canton.
  o Actions envisaged:
    A To raise awareness of the population and companies of Geneva, communicate on the challenge of lifelong learning for all.
    B To support citizens in their lifelong learning pathways, actively offer continuous training targeted at individual pathways.
    C To provide a supply of training corresponding to demand, involve the population, the economic fabric, the academic sector and the administration in the development of initial and continuing training.
    D To develop social skills, creativity and critical thinking skills, to strengthen interdisciplinary mindsets and collaborative pedagogy in project mode.
    E To define the pedagogical objectives, build on an evolving digital skills repository (similar to the European reference framework for languages with levels A1, A2, B1, etc.).
    F To invent the future, strengthen the links between teaching channels and the local fabric around its major innovation poles.
    G To empower citizens, raise awareness of digital identity.

iv.   Protect

1. *The protection of the individual, particularly in its digital personality dimension, is guaranteed.*
2. *Geneva seizes the opportunities offered by digital technology, while taking into account security imperatives respecting individual freedoms.*

- ➢ **Building trust**
    - o Finding:
        - ▪ Trust is essential in any interaction between citizens, business and the state. In a digital world, the vectors of trust are being challenged.
    - o Proposal:
        - ▪ Initiate communication actions and provide tools to support, establish and strengthen trust in a digital society.
    - o Actions envisaged:
        - A To strengthen trust, promote the control of personal data by individuals in their relations with the State.
        - B To increase the impact of existing legal bases, communicate with the public and companies on the legal bases for data protection (at cantonal, national and international level).
        - C To increase the transparency of the administration, allow citizens to know who has access to their data.

- ➢ **Empowering the fight against crime and data abuse**
    - o Finding:
        - ▪ With the explosion of data generated at any given moment, it is also the disappearance of physical barriers that must be acknowledged. There are strong interconnections between local and external actors. Cybersecurity is a major issue that requires significant resources and clear political will.
    - o Proposal:
        - ▪ Empowering the fight against cybercrime and data abuse.
    - o Actions envisaged:
        - A To ensure a rapid police response in case of need and operationalise protection, create a dedicated cybercrime unit within the Geneva cantonal police force.
        - B To strengthen cybersecurity, set up a body for coordination and exchange of security officials from public authorities and companies to share knowledge in the event of a crisis.
        - C To respond to citizens' and businesses' requests for cybersecurity and provide information on identified criminal activities, establish an e-security window.
        - D To ensure a strict legal basis for data protection, make a commitment at federal level to review the Federal Data Protection Act (FDP) at least as restrictive as the European Union's General Regulation on Data Protection (GDPR).

- ➢ **Prevent and respond**
    - o Finding:
        - ▪ Cybersecurity is a major issue and vulnerabilities can be underestimated by both citizens and businesses. Attacks are constant and can have a strong impact of nuisance, particularly in economic matters.
    - o Proposal:
        - ▪ Acting on two fronts: prevention and response, in case of attack or breach, to the population and businesses.
    - o Actions envisaged:
        - A To raise awareness and empower businesses and citizens, communicate regularly on good digital practices, highlighting risks and ways to protect oneself.

  B To inform on the issue of digital identity, take a clear stance on the subject and promote a solution that preserves the role of the state in this matter.

  C To enable rapid reaction to an incident in a company, propose an intervention and communication protocol with the companies.

  D To monitor technological developments, rely on monitoring and foresight methods.

v. Promote

1. *By building on its strengths and the canton's priorities, Geneva stimulates economic development, research and innovation in a digital economy that generates well-being and added value.*
2. *Geneva supports the work of Geneva International on digital technology and collaborates with international organizations present in its territory to support its digital transition.*

➢ **To improve the framework conditions supporting companies' digital transition in Geneva**
   o Finding:
     ▪ Faced with the upheavals brought about by the digital revolution, companies established in our canton are facing new competition and changing uses. They must reinvent themselves in the face of this new situation. In addition, technologies require new skills and expertise to acquire or attract.
   o Proposal:
     ▪ Improving the framework conditions to support companies' digital transition in Geneva
   o Actions envisaged:
     A To facilitate the retraining of employees whose trades tend to be automated, offer a financial incentive (e. g. subsidies or tax rebates) to companies that train their employees for reorientation.
     B To support innovative actors, define criteria for awarding public contracts that highlight innovation.
     C To foster a dynamic around disruptive technologies in Geneva, facilitate the establishment of companies, researchers and specialized talents.
     D To facilitate the development of new services for the population or companies, promote the opening-up of public data by means of an Open Data strategy.
     E To meet the expectations of companies using disruptive technologies in their operations, such as blockchain, develop interfaces between the world of these technologies and the Geneva legal framework.

➢ **Fostering human exchange in a digital world**
   o Finding:
     ▪ Digital ecosystems live not only through online exchanges, but also through face-to-face exchanges. With digital technology, we tend to favour only exchanges via these dematerialized channels. Even if the latter represent an undeniable added value, experience shows the importance of preserving and enhancing human exchanges.

- In the same vein, we will be confronted with a much more ambitious and fundamental challenge than that of the fight against the digital divide*: that of social cohesion, of "living together" despite the isolation of individuals that can be generated by technology and marginalization. However, this social cohesion is essential for any political action in the strongest sense of the word.
  o Proposal:
    - Promote human exchange through encounters in the physical world around digital technology.
  o Actions envisaged:
    A To promote good practices, co-create a charter for responsible digital technology with businesses and civil society and institute a labelling process (similar to the "1+ for all" label in the field of employment).
    B To promote exchanges between companies, the academic sector, the public sector and civil society, create spaces for physical interaction and events to promote discovery and exchange around digital.
    C To reinforce the positive dynamic on this subject in Geneva, continue to organize events promoting exchanges between local actors.
    D To ensure social cohesion in a digital world, establish a network of locations spread out over the territory in order to accompany those who need it in the understanding and use of digital technology.

*digital divide: disparities between people who have access to and use information and communication technologies (connection, equipment, information literacy) and others. It can be social, territorial or generational.

- ➢ **Positioning Geneva as the world capital of digital governance**
  o Finding:
    - Many Internet governance actors are present in Geneva. In addition, organizations active in key areas such as health, intellectual property and commerce are based in our canton. International Geneva provides a framework for work on the future of the digital transformed world.
  o Proposal:
    - Position Geneva as the world capital of digital governance.
  o Actions envisaged:
    A To build on Switzerland's strengths as a data vault and position Geneva as a centre of competence in data matters, contribute to the establishment of digital archives of international organisations in Switzerland by bringing together business and civil society partners, respecting security requirements and offering clear and attractive legislation.
    B To better meet the needs of our international partners for digital infrastructure, study the needs of Geneva-based international organizations through the establishment of an ad hoc working group.

vi. Regulate

1. *In order to swiftly take into account the changes in practices in the digital age, Geneva is adapting its existing cantonal legal framework and is making proposals at the federal level in terms of changing legal standards.*
2. *Generate framework conditions enabling innovation, particularly legislative innovation (including soft law) and facilitating the experimentation of innovative solutions adapted to change.*

➢ **To put in place legal provisions allowing experimentation while regulating**

- o Finding:
    - ▪ Technological developments and the new uses associated with them are accelerating our normative framework.
    - ▪ The legal texts, by their adoption procedure, or even by their very nature, lay down after the fact the rules for the use of techniques when they have already been tried and tested. For example, states hardly bother to regulate the virtual currency of Bitcoin.
- o Proposal:
    - ▪ Put in place legal provisions allowing experimentation while regulating - in particular in the form of exception clauses.
- o Actions envisaged:
    - A To facilitate experimentation, authorise it on a transitional basis to regulate later, in order to better detect the need for regulation.
    - B To allow standards to be appropriate for digital practices, abandon the inclusion of technologies in the law, but clearly articulate expectations in the form of policy principles, required end results and goals.

➢ **Strengthen the digital skills and culture of regulators**
- o Finding:
    - ▪ Legal bases can be a barrier to digital adoption, or provide insufficient protection. In order to allow for their adapted evolution, regulators, both legal and political, must be made aware of the challenges of digital technology.
- o Proposal:
    - ▪ Strengthen the digital skills and culture of regulators.
- o Actions envisaged:
    - A To improve the coherence of the legal framework and technological and customary developments, establish a working group of State lawyers in close collaboration with the digital players in Geneva.
    - B To increase the competence of cantonal administration staff contributing to the definition and implementation of legal and regulatory standards, facilitate access to dedicated training courses, in particular MOOCs* (Massive Open Online Course).
    - C To enable legislators to form opinions, provide the legislator with expertise in digital matters.

*MOOC: training courses open online to all.

➢ **Set up an ethical and digital commission**
- o Finding:
    - ▪ The digital transition poses innumerable ethical questions, such as autonomous vehicles, robotization or artificial intelligence.

- o Proposal:
  - In order to support the State in these endeavours, it is necessary to set up an ethical and digital commission. Ethical questions could be referred to this committee by each of the three powers (executive, legislative, legal) with a view to formulating recommendations.
- o Actions envisaged:
  - A To ensure a broad discussion of digital issues, set up this commission with experts from different fields, in conjunction with the universities.
  - B To facilitate citizen participation in ethical debates, determine a process for citizens to submit recommendations to the Ethics and Digital Commission for publication by a group of citizens.
  - C To strengthen the quality of the commission's work, support it with a network of thematic technological referents (specialists in algorithms, bioinformatics, etc.) from the private, academic or public sector.