EU Digital Agenda in times of COVID-19

In these unexpected and unprecedented times of the COVID-19 pandemic, crisis management measures have largely focused on each national member state instead of a common European approach, not at least illustrated by the bilateral closing of borders. However, we can all agree that coordinated measures and EU solidarity can best protect our European citizens and the health care and economic systems of EU Member States throughout this crisis. This also includes an adaption of the Digital Strategy of the EU to the new situation.

Physical distancing measures forcing millions of Europeans to work from home clearly illustrate how expanding and protecting our digital infrastructure is an essential part in containing the spread of the virus. However, digital solutions can further combat the spread of COVID-19. Sharing anonymous localised or aggregated data in Tracing Apps can help trace infection chains, notify users after contact with infected persons, show the effects of restrictive measures and thus help with effective exit strategies. Artificial intelligence (AI) technology can help with predicting how infections spread and how many intensive care beds are needed. Furthermore, digital solutions can help combat the spread of fake news regarding the virus as well as protect us from false narratives circulated by hostile groups. In order to use the full potential of such digital solutions, we need to adapt our EU digital policy and enhance cross-border cooperation, not only to combat this and any future health crisis but also to remain competitive on a global scale.

The following measures should be taken as a response to as well as lessons that need to be learned from the COVID-19 crisis for the EU Digital Agenda:

I. Use of a Common European Data Architecture for Tracing Apps to combat the spread of COVID-19

- The use of Tracing Apps to trace infection chains, alert possibly infected persons and analyse the effectiveness of restrictive measures has been successful in countries like South Korea and Singapore as a way to combat the crisis
- Instead of diverse Apps in 27 Member States, we need a **common architecture for contact Tracing Apps** that the national initiatives can be built on, to be compatible and interoperable across EU borders
    - That way, contact persons can be traced after a COVID-19 infection, even if the infected person crossed an EU border within the last 14 days

- o Private or commercial initiatives are welcome but should be allowed only to contribute to a common European solution, due to the sensitivity of the matter. They should not be allowed to benefit from such crises
- Tracing Apps should be harmonised with the EU data protection standards (GDPR)
  - o Data should only be stored and collected anonymously within the EU
  - o Any collection of health data should only be done for the purpose of fighting the virus, protecting citizens and European health systems and should be limited to the period of crisis
  - o Limits of data anonymization must be clarified in the GDPR
- Although we support the **principle of voluntary use**, at least 60% of European citizens need to download a Tracing App to disrupt infection chains. Therefore, citizens need to **be informed** about the advantages of using tracing apps.
- Beyond gathering and sharing data in a coordinated fashion**, a single European App** would help in reducing border control and travel restrictions
- We consider a **common data analysis at the European level** to be necessary as a basis for future European solutions, even when data is collected in a decentralised manner within the Member States. The platform already established by the Commission for exchange with health experts on combating the virus should be adapted accordingly
- a post-COVID-19 **assessment and evaluation** of health apps is necessary, to contribute to the digital infrastructure for further global health emergencies
- an extended **analysis of metadata and GPS data** from teleservice providers, as is already in progress, is an additional helpful tool to identify areas with high infection rates
- In addition, an EU-wide monitoring system for **intensive care beds, personal protective equipment**, preserved blood, medicine and retrieval of European citizens across the Member States is necessary for better coordination in order to quickly respond to regions in need

II. Use of Artificial Intelligence to help diagnosis, prognosis and treatment of COVID-19

- Artificial Intelligence can further **increase capacities of diagnosis, prognosis and treatment of COVID-19,** which the **EU should invest** in. For example:
  - o As generic tests are short in supply, deep learning neural networks can analyse X-Rays to take the burden off radiologists that are swamped with COVID-19 patients
  - o predictions about building blocks of the virus were released, giving important information to develop a vaccine and treatment for the virus
  - o AI tools have proven to predict whether a patient runs a risk of suffering lung damage from the infection or needing a ventilator with 80% accuracy.
- However, such solutions require AI training based on a massive amount of high quality data - which is hampered by a lack of access to high-quality data and lack of data sharing on the disease due to incomplete and inconsistent data sets and EU Member States collecting data in silos, slowing down the deployment of such solutions. We need a **European Platform to gather high-quality data** in an anonymous condition for the purpose of **training AI-systems.**

- We need to **reduce the current legal uncertainty** regarding data processing (especially when using healthcare data within the GDPR) and **deploy common standards** that allow for **basic interoperability in a common European data space** instead of various EU information systems
- In the event that the Member States or the EU consider using **digital health certificates / immunity passes / vaccination passes** to open borders (at the latest when vaccination is available on a broad scale), we need a **common digital architecture of these certificates** at the European level. To increase trust in the certificates, a securely managed database using distributed ledger technology (e.g. block chain) is needed to prevent misuse. The certification of immunity must be jointly based on current medical knowledge on immunity and must not further increase the spread of the virus
- These new forms of data sharing shall provide a **template for the next crisis**, as well as better coordination between health care systems

III. Combatting Cyberattacks and Fake News

- Digital European infrastructure such as teleworking facilities and videoconferencing tools, also within the Parliament itself, are prone to cyberattacks and **security/protection measures need to be stepped up.** The EU certification framework for ICT digital products, services and processes proposed with the Cybersecurity Act could serve as a blueprint for the safety indication. The European Cybersecurity Certification Group should be tasked to issue recommendations for this specific issue as a matter of priority.
- The spread of fake news revolving around the virus as well as false narratives spread by groups hostile to the core values of the European Union needs to be **combatted in a coordinated fashion**
- The responsibilities of platform operators must be reassessed in this regard, and the notice-and-take-down procedures must be strictly applied

IV. Digital Education and Culture

- We should focus, within the framework of the European Education Area, on the **creation of a European education platform** with age-specific digital educational offers to share educational material, coordinate, and exchange best practices between Member States
- Within the framework of the Digital Education Action Plan, we must insist on Member States to focus on **media competence education** and the teaching of digital skills from an early age when developing school curricula
- We need to have **targeted investments into digital infrastructures at schools and education facilities**
    - More Internet capacity in schools and at home (broadband coverage and current bandwidth)

- o improve digital infrastructure especially for people with fewer opportunities, so that they are not in a competitive disadvantage (zero-rating solution for educational content)
- Together with stakeholders from the cultural and creative sectors such as museums, concert halls, artists and fine arts and initiatives digitizing cultural and creative content such as Europeana, a **platform for European Culture and Creativity** must be developed that provides access to European cultural content online while ensuring fair remuneration for the creators
- Cooperation with creatives, i.e. artists, designers or artisans, but also with research and exhibition partners from other cultural institutions and collections, has become more digitally complex. Thus, exchanges and the long-term storage of data are particularly important. A suitable digital platform, which offers solutions to the eminently practical problems inherent in cross-museum collaboration, is still lacking on a European level. The Horizon Europe Programme will establish a "**European Collaborative Space** including but not limited to Cultural Heritage" which also includes cloud services. This idea should be implemented as swiftly as possible

V. Lessons Learned: Increase Digital Capacity across the EU in Coordinated and Sovereign Fashion

- The sudden extension of teleworking facilities and the consequential measures taken by member states and the Commission (such as decreasing the quality of platforms of Netflix and YouTube) show a lack of coherent infrastructure which needs to be **increased immediately**
- The exponential use of platforms such as Zoom, Microsoft Teams or Skype shows the **dependence of teleworking facilities from international companies** (which as Zoom has shown can share their gathered data without adhering to GDPR standards), which should be decreased via European solutions
- Cloud-computing and cloud-storage providers are emerging as among the few corporate winners in the coronavirus pandemic as lockdowns pushed more activity online. In the light of these developments and considering that most of those cloud-computing providers are U.S.-tech-firms, the **Commission's data strategy** presented in February 2020 should be **implemented as a priority**, especially concerning investments in European data spaces and trustworthy and energy efficient cloud infrastructures
- We also need to increase the **capacities for E-Health** and the **compatibility of the respective Member States**' systems. The Coronavirus already taught us that seeing a doctor is not always necessary. With a better infrastructure, our health care system can be much more efficient and of higher quality at the same time
- Based on the success of the first **pan-European Hackathon** that took place under the name "EUvsVirus" in April, this digital cooperation format between citizens, companies and public administration could be established as a recurrent event fostering "bottom-up" innovation and citizens' engagement

- A **European digital industrial initiative** should be launched with the goal of creating European digital champions that are competitive to American and Chinese market leaders
- **Digital conglomerates** should be **screened with regards to anti-trust violations** and market abuse
- **Open source, open science and open data projects** should be initiated, evaluated and supported when helpful