

## **EU Toolbox and Guidance for Harmonized Development and Use of Mobile Apps in Fight Against COVID-19**

On 16 April 2020, the European Commission (**Commission**) published two documents to facilitate and harmonise the use of mobile apps supporting the fight against COVID-19. The first document was adopted on 15 April 2020 by the eHealth Network, a voluntary network of Member States' authorities responsible for eHealth created under EU Directive 2011/24/EC. It contains the first iteration of the toolbox for mobile applications to support contact tracing in the EU's fight against COVID-19 (the **Toolbox**).

The Toolbox is complemented by the Commission's Guidance on apps supporting the fight against the COVID-19 pandemic in relation to data protection (the **Guidance**).

### **THE COMMON EU TOOLBOX**

The Toolbox is the first iteration of a document that will regularly be updated, and which describes the role and requirements for mobile apps in combatting COVID-19. This first version focusses on voluntarily installed mobile contact tracing apps and determines the essential requirements for such apps, providing a common approach to technical challenges and interoperability. The Toolbox also contains an overview of the COVID-19 apps that are made available or under construction in various countries in the EU and abroad.

Several mobile apps have been developed and launched worldwide to help combat the COVID-19 pandemic. From a public health perspective, the eHealth Network considers that contact tracing and warning apps have proven to be the most promising apps since they can warn citizens when they have been close to an individual who has been confirmed positive for COVID-19. In addition, such apps can speed up the process of contact tracing as they can help public health authorities to rapidly identify as many contacts as possible with a confirmed case of COVID-19 in order to take further measures, such as asking them to self-quarantine. Therefore, contact tracing apps are the focus of a common EU approach to the use of mobile apps and data.

The objective of the Toolbox is to determine relevant parameters for a coordinated development, use and monitoring of officially recognised contact tracing apps. The Toolbox provides a detailed list of requirements and functionalities that have been identified collectively by the authorities of the Member States and that should be considered throughout the whole process. These are set out in a practical manner in the Toolbox's annexes. These annexes also contain background information on the use of contact tracing as well as a comprehensive inventory of mobile solutions against COVID-19.

The eHealth Network recognises that requirements for contact tracing may vary to some extent according to the situation in each Member State. Nevertheless, it has identified a common understanding of the requirements which can be divided into four parts, as follows:

**1. Essential requirements for national apps and cross-border interoperability**

The first essential requirement is that Member States should adopt a heuristic method and definitions as commonly agreed between the European Centre for Disease Prevention and Control (**ECDC**) and epidemiological bodies in each Member State. They should define procedures on how to notify and inform persons who may have been exposed to the virus, thereby allowing only authorised bodies to confirm an infection, as well as procedures on how to inform and contact those users at risk, about potential infection and the consequences. Member States must take adequate security and privacy measures for data processing and should disable the apps and stop collecting data once the pandemic has passed.

Regarding the processing and privacy-preserving elements, the Toolbox describes two solutions, namely, the decentralised processing and the backend server solutions. The first solution allows the app to generate arbitrary identifiers of the phones that are in contact with the user. The identifiers are stored only on the device of the user with no additional information. With the second solution, the app functions through a backend server held by public authorities. However, users cannot be identified through these data since only the arbitrary identifiers are stored on the server. Under both solutions, through the identifiers, the users who have been in contact with a person who has tested positive for COVID-19 will receive a notification. In order to keep the personal data processing to the absolute minimum, neither option includes storing of unnecessary personal data, such as names or locations.

The second essential requirement is that the effectiveness of the apps must be ensured through technical functionalities. Member States should consider specifications such as the use of Bluetooth signals to estimate proximity with precision (to avoid false positives). The Toolbox mentions various initiatives such as the joint initiative of Google and Apple related to the use of Low Energy Bluetooth for proximity detection or the Pan-European Privacy Preserving Proximity Tracing (PEPP-PT).<sup>1</sup> In addition, Member States should consider security measures to protect against hacking and tracking by third parties. Finally, they should ensure appropriate performance of the apps.

Third, the interoperability between mobile tracing and warning apps is necessary to allow national health authorities of EU Member States to exchange information about infected individuals. Therefore, common EU interoperability protocols and common foundations for the different technologies should be created and provided to developers. The Commission underlines that interoperability between the different national apps is essential for the EU single market.

Next, Member States should implement measures to ensure adequate cybersecurity, to address the most common cybersecurity risks related to the apps. ENISA, the EU Agency for Cybersecurity, has compiled cybersecurity requirements that are included in an annex to the Toolbox.

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<sup>1</sup> <https://www.pepp-pt.org/>

The final essential requirement is that any officially recognised contact tracing and warning app should respect an individual's fundamental rights, including privacy and data protection. Therefore, the apps should be temporary and voluntary and data processing should be in line with the Commission's Guidance (see, below).

**2. *Measures aimed to ensure accessibility and inclusiveness***

The success of the apps depends on the number of the users, meaning that inclusiveness is important to achieve better results. However, it is difficult to include all citizens because some people might not have a mobile device or cannot properly use the apps. The Toolbox considers that the use of an app may need to be supplemented by manual contact tracing for these groups. In addition, it recommends to Member States to consider location based solutions or the use of wearables to cover areas or population groups where the uptake of the app is low.

**3. *Governance/role of public health authorities covering approval of tracing apps and their access to data generated by tracing apps***

Member States should consider this Toolbox and focus on interoperability, privacy and security. Preferably, the national competent authorities in charge of health crises should be accountable for the app and the national health authority should act as the controller for the processing of personal data.

**4. *Supporting actions***

These actions cover the sharing of epidemiological information between national public health authorities and cooperation with ECDC, measures to prevent proliferation of harmful apps and monitoring of the effectiveness of the apps.

In addition to the above-mentioned requirements, the Toolbox includes principles for communication strategies aimed at the Member States and the Commission to ensure clear, regular and comprehensive communication to the public.

Finally, the Toolbox stipulates that implementing this common approach to mobile tracing and warning apps is only the first step. Public health authorities will assess the effectiveness of the apps, and Member States will focus on follow-up and report to the Commission by 31 May 2020. The Commission will then publish a report evaluating progress by 30 June 2020.

The full text of the Toolbox can be found [here](#). The European Data Protection Board provided recommendations with regard to a draft version of the Toolbox in a letter of 14 April 2020. This letter is made available [here](#).

**COMMISSION GUIDANCE ON DATA PROTECTION**

In addition to the Toolbox, the Commission has published its Guidance with recommendations on compliance with the EU privacy and data protection legislation, in particular the General Data Protection Regulation (**GDPR**). The Guidance only applies to voluntary apps used to combat COVID-19, but – unlike the Toolbox – is not limited to contact tracing apps. Instead, it covers

apps providing information about the COVID-19 pandemic, apps that help with self-assessment, apps that alert those who have been near an infected person as well as apps that provide a communication forum for discussions between patients and doctors. Apps aimed at enforcing quarantine are not covered by the Guidance.

The Commission notes that the functionalities of the apps may have an impact on many rights enshrined in the Charter of Fundamental Rights of the EU and affect these fundamental rights and freedoms, such as the right to human dignity, respect for private and family life, privacy and the right to protection of personal data, the freedom of movement, etc. Therefore, the Commission presents the following remedies to limit intrusiveness of the functionalities of the mobile apps:

- The national health authorities are considered data controllers and are responsible for compliance with the GDPR;
- The installation of the app should be voluntary and the app should be deactivated after the COVID-19 pandemic;
- Health authorities should provide all the necessary information related to data processing, and individuals remain in control of their personal data and should be able to exercise their rights under the GDPR;
- There should be a legal basis for data processing by national health authorities (such as Article 6(1)(c) and Article 9(2)(i) GDPR);
- Applying the principle of data minimisation so that only personal data that is adequate, relevant and limited to what is necessary in relation to the purpose may be processed. However, this can vary depending on the type and functionality of the app;
- Limiting the disclosure or access of data depending on the type and functionality of the app. For example, health authorities could be allowed to access patient information in symptom-checking apps;
- There should be a legal basis for a precise purpose of the processing. However, the precise purpose depends on the functionalities of the app. The Commission recommends not to bundle the functionalities so that individuals can choose between different functionalities and remain in control of their data;
- Applying the principle of strict limitation that requires that personal data may not be kept for longer than necessary;
- Ensuring the security of the personal data. For example, the Commission recommends that the data should be stored in an encrypted form, that the source code of the app should be made public and available for review and that measures such as automatic deletion and anonymization of data should be taken;
- Ensuring the accuracy of the personal data to minimize the risk of having false data on the number of infected persons; and
- Involving the Data Protection Authorities and consulting them.

The full text of the Commission Guidance can be consulted [here](#).