Amsterdam, April 13, 2020

Re.: COVID-19 tracking- and tracingapp and healthapp

Dear Prime Minister Rutte, Minister De Jonge, Minister Van Rijn, Minister Grapperhaus, and Mr. Sijbesma,

"Surveillance is permanent in its effects, even if it is discontinuous in its action." - Michel Foucault

During the press conference on the Corona virus on Tuesday 7 April, Minister De Jonge announced that the cabinet is considering the use of two apps. The first is a so-called "tracking and tracing app" to better identify who has had contact with a person infected with the Corona virus (hereinafter: "Tracking app") as soon as one or more Corona measures can be partially lifted. The second is a health app with which health status and any COVID-19 symptoms can be tracked and shared with medical specialists (the Health app), hereinafter jointly the "Apps".

The use of tracking and tracing apps and health apps is very drastic. It is therefore important to critically consider the actual usefulness, necessity and effectiveness of the Apps, as well as their impact on the broader social system, including our fundamental rights and freedoms. Whether we like it or not, these Apps will set a precedent for future use of similar invasive technologies, even after this crisis. Particularly in times of crisis, very careful social and legal considerations must be made to determine whether one wants to take such a highly invasive measure.

It now seems that the Dutch government is aiming almost exclusively at deploying the Apps (at least insofar as it concerns the exit strategy). The undersigned of this letter would like to state that digital technology can contribute to solving social problems, but that technology is seldom the solution for a certain problem. It is therefore important to first clearly understand which problem you want to address exactly and whether the Apps offer a solution for that problem at all.
The decision on whether or not the Apps should be deployed should therefore be guided by experts, not only in the field of app development, but also in the fields of computer sciences, data sciences, law, social sciences, behavioral sciences, ethics, the health domain and systems science. All the more so to prevent techno-solutionism and to keep the possibility of deciding not to use the Apps open.

The use of the Apps should not affect our fundamental rights and freedoms. In any case, the use of all apps and technologies related to the fight against the Corona crisis must be temporary, strictly necessary, proportionate, controllable, transparent and verifiable.

The undersigned explain the above in more detail below. The undersigned are all experts from various disciplines, including computer sciences, data sciences, artificial intelligence, law, epidemiology, medicine, behavioral sciences, social sciences, ethics, policy and communication sciences.

Summary of the main points

- The deployment of the Apps is very radical. It is therefore important that the usefulness, necessity and effectiveness of the Apps as well as their societal and legal impact of is critically examined before a decision is made to use them.
- Technology is rarely the solution to a particular problem. We must guard against techno-solutionism. The possibility must remain to decide not to use the Apps. Less invasive solutions should be prioritized.
- The effectiveness and reliability of the Tracking app is extremely important, because ineffectiveness and unreliability can lead to a greater risk of contamination. After all, it then only creates ‘false security’.
- The Apps have an impact on more than (data) privacy alone. They also touch on freedom of association, the right to safety, the right to health and the right to non-discrimination.
- Fundamental rights and freedoms cannot simply be put aside. There must be a legitimate interest for this, it must be strictly necessary, proportionate and, above all, time-limited.
- The use of the Apps must be waived if: (i) ‘contact tracking’ or health monitoring via the Apps is no longer effective, effective or reliable; (ii) less invasive solutions are possible; (iii) outweigh the social implications; or (iv) no broadly-based responsible trade-off can be made between conflicting fundamental rights and freedoms.
- The use of the Apps may not be achieved by any form of obligation or coercion.
- A broad team of experts from various disciplines, including computer scientists, data scientists, epidemiologists, intensivists and pulmonologists, experts in the field law (incl. privacy and data protection, human rights and administrative law), behavioral scientists, communication scientists and ethics.
- The possible use of the Apps must be verifiable, transparent and verifiable in addition to being temporary (and therefore reversible), strictly necessary and proportional.
- Only the roll-out of the Apps, without considering the influence on the (social) systems and behavioral patterns, and without the underlying infrastructure (GGDs, test labs, etc.) being set up for this, is insufficient.

Social impact - the need for systems thinking

Only the roll-out of the Apps, without considering their influence on the (social) systems and behavioral patterns, and without the underlying infrastructure being set up for this, is insufficient to achieve the intended goal.
The consequences associated with 'signaling' by the App (such as mandatory isolation, no access to work or shops, etc.) will affect the (correct) use of the Apps. Just as some people do not adhere to certain measures now, some people will not or incorrectly use the Apps, for example to prevent isolation. This will undermine the effectiveness and reliability of the Apps. The WHO has already warned against stigmatization from the use of tracking and tracing apps, and history teaches us that the interplay of surveillance and epidemiology can unfortunately also lead to threats and violence against certain groups. Moreover, if after some time it appears that the use of the Apps is not enough to prevent a new outbreak of the virus, there will be great social resistance to start living under social distancing rules again. Behavioral expertise and experience with similar apps from other countries or from previous epidemics is crucial to properly assess whether their use will have the desired effect at all.

The 'underlying' infrastructure must also be geared to the use of the Apps. If, for example, an 'App signal' leads to advice for testing and extensive contact tracing by the GGD, then the capacity of these facilities must be sufficient to answer the demand. Other, less invasive solutions related to contact tracing need also to be investigated, such as (temporarily) hiring more staff to carry out or support contact tracing.

**Fundamental rights and freedoms**

Fundamental rights and freedoms cannot simply be put aside. There must be a legitimate interest, it must be strictly necessary, proportionate and, above all, time-limited. These Apps lead to the setting aside of various fundamental rights and freedoms, so their use requires careful consideration.

Minister de Jonge announced that the Apps will be privacy-friendly and will work on the basis of anonymity. However, it is important to realize that in addition to impact on the fundamental right to privacy, tracking and tracing apps and health apps also have an impact on other human rights such as the freedom of assembly and association, the right to safety and health and the right to non-discrimination. All these rights are explained below (starting with privacy).

**Privacy - more than just data protection**

The privacy discussions around the announced Apps currently focus mainly on data protection of (sensitive) personal data and on anonymity. However, the impact of the Apps on our privacy goes far beyond just our data and anonymity.

Art. 8 of the ECHR (Right to a Private Life) includes the protection of a wide range of elements of our private life including (i) one's (general) privacy, (ii) one's physical, psychological or moral integrity and (iii) one's identity and autonomy. The Tracking app creates a situation in which we are (constantly) watched, followed and (possibly) identified. It has been shown that once people know they are being monitored they behave differently. As a psychological 'chilling' effect, people may become inclined to change their behavior, with potentially undesirable consequences for the effectiveness and reliability of the Tracking app. Even if the data is fully encrypted and immediately deleted after capture, the technology still invades our private lives and our psychological and moral integrity. Simply guaranteeing anonymity is therefore insufficient to guarantee (broad) privacy.

Returning to data privacy, both Apps will have to meet the most stringent data protection requirements. Both Apps collect special personal data to a greater or lesser extent, the processing of which is only permitted in exceptional cases and under strict conditions.
There is also a risk that the collected data (now or in the future) will not only be used to support contact tracing and health monitoring by a medical specialist, but also to profile, categorize and score people for different purposes. With a longer horizon one can even imagine that 'function creep' could lead to undesired forms of profiling in supervision and surveillance, acceptance for insurance or social benefits, hiring or dismissal, etc. The data collected with the Apps may therefore under no circumstances be used for profiling, risk scoring, classification or prediction.

Other fundamental rights and freedoms - more than just privacy

The Apps also have broader implications for a number of other fundamental rights and freedoms. Freedom of assembly and association, especially of those who are infected and those who have come into "contact" with an infected person, is being affected. The aforementioned stigmatization of persons who display certain characteristics that, according to the Tracking app, are related to COVID-19, can lead to discrimination on the grounds of (suspected) illness. While the Apps may contribute to the right to safety and health, the safety and health protection intended depends entirely on the effectiveness, effectiveness and reliability of the Apps (see below).

Mandatory or voluntary use

When asked by one of the journalists present whether the use of the Apps would be made mandatory, the Prime Minister replied that he 'kept all options open'. First, voluntariness alone is not enough to adequately address the many implications of using the Apps. The social impact and the impact on fundamental rights and freedoms as well as the requirements of temporality, strict necessity, proportionality, verifiability, transparency and verifiability apply just as the Apps are used on a voluntary basis.

If the use of the Apps is made mandatory, this would mean that no one should be allowed outside to move without a (properly charged) mobile phone. This is not reasonably feasible and certainly not enforceable. The undersigned are thus opposed to mandatory use of the Apps, but note that voluntary use will in fact not be voluntary under certain circumstances. When the Apps are used, for example, to provide access to certain places or as a control tool for enforcement, there is no real voluntariness. The Apps may therefore not be used as such.

Purpose, effectiveness and reliability of the Tracking app

Various organizations are now emerging and various initiatives are being developed for the development of COVID-19 tracking and tracing apps. It is important to determine whether, and if so which applications are actually effective and reliable to achieve the desired goal.

The effectiveness and reliability of the Tracking app is of enormous importance, because ineffectiveness and unreliability can lead to a greater risk of contamination. After all, it then only creates 'a false sense of security', where people think they can go outside, to work or to the park again, because they will get a message from the app when they have been near an infected person, while this information is not reliable. In addition, a large number of false positives and false negatives, an inherent consequence of the Tracking app's inefficiency and unreliability, will unnecessarily increase the pressure on the 'underlying' infrastructure.

Questions about the effectiveness and reliability of the Tracking app arise, for example, in the light of: (i) the still relatively limited COVID-19 test policy in the Netherlands and the influence of asymptomatic or surface contamination; (ii) instability and inaccuracy of the possible technologies (Bluetooth, GPS); (iii) the feasibility of reaching the percentage of the population
that should use the Tracking app for reliable results; and (iv) results from the use of tracking and tracing apps in other parts of the world such as Singapore, where there has recently been an increase in infections.

Framework and process recommendations

Below you will find an overview of the framework and the approach that the undersigned propose during the decision-making, possible development and deployment of the Apps.

General framework ("Questions Zero"):

• Before deciding to use the Apps, it must be clear which problem one wants to address and whether the Apps offer a solution to the problem at all. Detailed social simulations could be used to investigate this.

• The Tracking app must be and remain proven effective and reliable (researched during the pilot phase, see approach, as well as during possible use) to achieve the desired goal and actually and better than other less invasive measures, to help significantly reduce the number of COVID-19 infections.

• Less invasive solutions for contact tracing and health monitoring must be actively explored and should be preferred over the use of the Apps.

• If it appears (during the pilot phase or during use) that 'contact tracing' via the Tracking app is no longer effective, effective or reliable, the Tracking app must not be deployed up or terminated immediately.

• The social implications of using the Apps must be taken into account when deciding whether or not to use the Apps.

• The use of the Apps respects all relevant laws and regulations, including fundamental rights and freedoms.

• The use of the Apps must be waived if: (i) 'contact tracking' or health monitoring via the Apps is no longer effective, effective or reliable; (ii) less invasive solutions are possible; (iii) outweigh the social implications; or (iv) no broadly-based responsible trade-off can be made between conflicting fundamental rights and freedoms.

Framework for decision-making:

• The use of the Apps has a legal basis, is temporary, strictly necessary, proportional, controllable, transparent and verifiable.

• The Apps may only be used to achieve the desired purpose, meaning that the Apps and all data collected with them may only be used to support COVID-19 contact tracing (Tracking App) and health monitoring by a medical specialist exclusively in connection with COVID-19 (Health App). Any other use should be made technically impossible as much as possible and should not be allowed.

• The duration of use of the Apps is limited in time and the use is fully reversible. The data collected and/or generated with the Apps will be permanently deleted after dismantling the Apps.

• The use of the Apps may not be achieved by any form of obligation or coercion. Charging usage fees or offering financial incentives should not be allowed. People who refuse to use one or both Apps should not be negatively affected.

• The Tracking app does not replace contact tracing as currently carried out by the GGDs, but is only supporting it.

• The 'underlying' system (GGD, test capacity, etc.) is capacitated for the use of the Apps.

• A system has been set up to monitor the social consequences of the use of the Apps, including the possibility to intervene if abuses occur.
Framework for development and use:
- Verifiable technical measures such as cryptography and anonymization must ensure user privacy and de-anonymization must be impossible. Only policy measures or promises are insufficient for this. A decentralized protocol that does not require data exchange with a central authority (such as the DP3T protocol) should be investigated.
- Only minimal data and metadata necessary for the operation of the Apps can be stored temporarily and as short as possible. For the Tracking app, this means that the collection of data that goes beyond contact between people and its duration is not allowed. For both Apps, data that is no longer needed must be deleted.
- Sensitive data, including but not limited to special personal data, must be stored and encrypted locally and securely on the phone. A link of the data with other (public or non-public) data should not be allowed. Sharing the data with third parties should not be allowed.
- The Apps themselves must regularly remind the user that they are 'on', must be easy to be temporarily deactivated or permanently removed by the user.

Process:
- The effectiveness and reliability of the Apps and in particular of the Tracking App must be investigated and tested in advance (pilot phase).
- Full transparency is given about the progress and results of the pilot phase.
- During the pilot phase, procedures must be developed for the continuous monitoring of the functioning of the Apps, the identification and handling of false positives and false negatives, and the consequences for society and people's behavior.
- In deciding whether or not to use the Apps as well as during the development, the pilot phase and the possible use of the Apps, not only experts in the field of app development must be involved, but also computer scientists, data scientists, epidemiologists, intensivists and pulmonologists, experts in the field of law, including privacy and data protection, human rights and administrative law, behavioral experts, communication experts and ethicists.
- These experts must remain involved during the possible use of the Apps for the monitoring of the results and consequences of the use of the Apps.
- From the point of view of democratic control and accountability, there must be full transparency about the provider(s)/developer(s) of the Apps and the selection procedure.
- The relevant authorities such as the Dutch Data Protection Authority, the Dutch College for the Protection of Human Rights, the Federation of Medical Specialists and the Patient Federation must be involved in the pilot phase and during the possible use of the Apps.
- The Parliament must be fully informed about and involved in (decision-making about) the development and use of the Apps, both during the pilot phase and during any use thereof.

Conclusion

Special times call for special measures. And these are special times. Our democracy and the rule of law require special measures such as these to be critically examined, even in special times. Only then can informed and fully informed decisions be taken. With this contribution, we hope to have given you a broad insight into the many implications of the use of the Apps and to be able to help you in your decision-making.

Sincerely, (see next pages for signatories)
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