

## **Dutch House of Representatives hearing / round-table discussion on coronavirus app WRR position paper**

### **Introduction**

The Netherlands Scientific Council for Government Policy (WRR) is currently working on a report on artificial intelligence (AI) and public values. It has also written various publications in recent years devoted fully or partly to the use of new technologies, such as *Preparing for Digital Disruption* (2019), *Security in an Interconnected World* (2017), *Big Data in a Free and Secure Society* (2016), *iGovernment* (2011) and *Better Work* (2020). Drawing on the WRR's expertise in new technologies, this position paper is a brief contribution to the House of Representatives debate on the introduction of a coronavirus app.

It is important to acknowledge at the outset that new digital technologies can offer many benefits to society. Their value has also been evident during the coronavirus crisis, for example with regard to rapid information provision, videoconferencing software, online learning environments and delivery services. It is therefore entirely understandable that the government is seeking to use digital technology by means of an app in the fight against the coronavirus crisis. However, a critical assessment of introducing such a new technology is also important.

### **Guarding against techno-optimism**

It is crucial to follow a careful process. In particular there are two main risks. First, there is a risk that decisions will be taken in haste and will have long-term consequences that are harder to remedy than if they had been considered carefully at the outset, and as such will leave no scope for an alternative approach. The second problem is that insufficient attention may be devoted to embedding the app in the social and technological context. These two points are explained below.

### **Risk 1: Long-term consequences of hasty decisions**

New technologies are often inadequately regulated in the early stages, because there is a lot of optimism but still great uncertainty about their operation and consequences. It is difficult to regulate them later, however, because key decisions have already been taken and power structures often arise that make change difficult (the so-called Collingridge dilemma).

In the case of a radical technology it is therefore extremely important to identify any pitfalls as early as possible, such as:

- *Dependence on the developer.* Major technology companies are also known to be working on a coronavirus app, an example being the cooperation between Google and Apple. Dependence on strong foreign players is already an issue in much modern technology, but it is even more of an issue in the case of this health data.
- *The relationship between public and private interests.* As well as the geographic dimension, the type of developer is also relevant. Since public interests are at stake, it is important to assess at an early stage the potential effects of incorporating commercial logic, and to set clear boundaries.
- *Mission creep.* Many technologies are developed for a particular purpose but find new uses once they have been installed. This case concerns an app for a specific crisis situation. The purpose of the app, of the data it generates and the duration of its use must be clearly defined. The coronavirus measures look set to remain in force for an extended period in the context of the '1.5-metre society'. There is hence a risk of habituation, followed by a shifting of objectives. It is therefore important to define at the outset what the app cannot or can never be used for.
- *Democratic oversight.* A hasty process may make it difficult to exercise such oversight, also retrospectively. Insufficient concern for the conditions relating to the application, the development process and the source code may hinder an informed parliamentary debate at a later stage.
- *Premature disregard of alternatives.* The rapid choice of an app may lead to potentially better alternatives being disregarded prematurely. The Prime Minister of New Zealand, for example, asked all citizens to keep a diary of their daily contacts for use in contact tracing, while The New York Times wrote that Massachusetts was 'the first state to invest in an ambitious contact-tracing program, budgeting \$44 million to hire 1,000 people' (16 April 2020). We cannot assess whether these would be good ideas for our country and we do not know whether the OMT or the government have considered these kinds of options.

Finally, hasty decisions risk arousing false expectations. Although an appathon is a widely used method for generating ideas, it is only a rudimentary step in a larger process. The results of many appathons/hackathons are therefore often presented as ‘vaporware’: major announcements of technologies that will never be developed or are not yet technically feasible.

Another false expectation that can arise due to a hasty process is that a choice must be made between maintaining the stay-at-home order and letting people back onto the street provided they surrender their data. This is a false dilemma.

### **Risk 2: Insufficient focus on embedding**

A second common problem is that technologies are viewed as a solution in isolation, with insufficient account being taken of the context in which they have to operate. That lack of contextualization can cause major problems.

In the first place these concern the technological context. An app relies on a set of supporting technologies in order to operate correctly. In this case it requires widespread use of smartphones, and that cannot be taken for granted – particularly among older and less affluent target groups. The app must have a sufficiently large user base to generate network effects. The communication network must also have good coverage, which can be problematic particularly in high-occupancy buildings. Bluetooth is frequently cited as a supporting technology for the planned app, but among other things this raises the issue of whether proximity adequately represents the infection risk (for example in the case of a neighbour who may be less than a metre away behind a wall). Even if an app operates properly, insufficient consideration of this technological context may undermine its operation.

In addition to technological embedding, social embedding in the societal context is also very important. This involves various dimensions.

- *Legal.* The legal context is one such dimension. There have been calls in various fora to focus attention on privacy, freedom of choice and the dangers of citizen profiling. Moreover, if the app turns out to be less useful than intended, the legitimate interest of tracing infection cases may be outweighed by the associated violation of citizens' privacy.
- *Trust.* There is a risk that people will have blind faith in the operation of a technology and so behave more recklessly. A familiar example is Tesla's Autopilot function. The manual states that the driver remains responsible for operating the vehicle, but many drivers have failed to comply and caused a series of accidents. The coronavirus app

being considered must similarly not replace common sense. Proper communication is extremely important.

- *Deception*. Given the context of human behaviour, the possibility of deception must also be taken seriously: people using each other's phone, deliberately leaving the phone at home or trying to explore the boundaries of the app.
- *Power*. Although it has been made clear that the government will not make the app compulsory, there is a risk that employers, transport companies or others will make installation of the app a precondition for access, opening the way to 'gentle coercion', abuse of dominant positions and inequality of opportunities.

### **Conclusion**

In summary, great caution and care must be exercised when any radical new technology is introduced. There is a need to guard against what could be termed 'techno-optimism', 'techno-chauvinism' or 'techno-solutionism': the idea that the introduction of a new technology in itself can solve complex, intractable social issues. There are many examples of projects in which this has led to highly problematic consequences.