

Office of the State Comptroller | 2020

The State of Israel Response to the COVID-19 Crisis Special Interim Report

Utilization of General Security Service's Technological Capabilities to Assist the Ministry of Health's Epidemiological Studies

# Abstract

BACKGROUND

Since the State of Israel was facing a large outbreak of COVID-19, on 15.3.20 the Government authorized the General Security Service (the GSS) to assist in the national effort to limit the pandemic, by collecting and processing technological information that would help the Ministry of Health conduct epidemiological studies<sup>1</sup> (hereinafter: the assistance). The GSS operated in accordance with a Government resolution and legislation (as described below) in two rounds of activity. The first round of assistance was from 17.3.20 to 8.6.20, and the second, after a resurgence of the disease, from 1.7.20 onwards.

The GSS had two missions: (a) **verified patients**<sup>2</sup> – identification of their location and movements in the 10 to 14 days prior to the diagnosis; (b) **patient contacts** – identification of people who were in close contact with the patient (at a radius of less than 2 meters for at least 15 minutes).

1 The purpose of an epidemiological study is to track an outbreak of an epidemic at the individual level in order to prevent the spread of infection. In the COVID-19 context, it assists in the rapid isolation of people who may be infected and to locate possible sources of the infection in other people.

2 'Patient' means someone who has tested positive for COVID-19.

#### **KEY FIGURES**

### A few dozen

Number of GSS workers who were directly exposed to data received from the Ministry of Health

### **28.5%**

Ratio of verified patients found among contacts to the total number of patients examined by the GSS Number of patients whose details were forwarded from the Ministry of Health3

62,219

### 3.5%-4.6%

Ratio of verified patients to the number of contacts for each patient located by the GSS ("signal noise ratio") Number of patients whose contacts were examined by the GSS

43,250

# 17,719

Verified patients among contacts located by the GSS Total number of contacts located by the GSS for the patients that they examined

499,577

11.55

Average number of contacts per patient

3 The key figures data refer to the period ending 3.8.2020. The GSS supplied the State Comptroller's office with updated information on the "signal noise ratio", in its reply to the draft audit findings on 22.9.2020.

# **Audit Actions**



From early July 2020 to mid-August 2020, the State Comptroller's Office examined various aspects of the GSS assistance activities. Supplementary data was gathered from the Ministry of Intelligence and the Privacy Protection Authority in the Ministry of Justice. Simultaneously, the State Comptroller's Office conducted a separate audit in the Ministry of Health on the subject of epidemiological studies. The following audit focuses mainly on the GSS actions to assist the Ministry of Health.

The sub-committee of the Knesset's State Audit Affairs Committee decided not to place before the Knesset and not to publish certain parts of this document for reasons of national security, pursuant to Section 17 of the State Comptroller Law, 1958 [Consolidated version].

## **Key Findings**

- **GSS compliance with the tasks assigned to it:** the tools used by the GSS did not enable it to comply fully with the tasks assigned it.
- Ratio between the number of patients whose contacts located by the GSS and all located contacts: during the audit period, about 3.5% of people found to have been in contact with patients and therefore required to quarantine eventually tested positive. This ratio, which the GSS calls the "signal-noise" ratio and is a measure of the effectiveness of GSS actions. It indicates the potential for a very widespread quarantine including many people who were not in close contact with a patient. The GSS response of 22.9.20 to the draft Audit Report stated that the "signal-noise" ratio gradually improved and rose to about 4.6%. According to the Ministry of Health figures, and after offsetting items relating to family members and duplicate contacts, the signal-noise ratio of the GSS activity improved in the second period of operation to 7.3%; and that the accuracy is continually improving. The audit found that the effectiveness of epidemiological studies done by questioning patients is considerably greater than the GSS assistance actions: the "signal-noise" ratio based on questioning patients was about 24% in the same period.

- Fully utilizing the GSS capabilities: The method employed by the GSS ultimately identified a substantial number of verified patients (GSS assistance identified almost 30% of verified patients). However, the locating process utilized did not make full use of the GSS capabilities, and is insufficient to complete the epidemiological studies process in full (i.e. a combination of GSS and Ministry of Health activity) or optimally utilize the capabilities required to break the chain of infection.
- Problems with GSS activity that reflect specific deviations from rules and procedures: although the GSS took many steps to minimalize invasions of privacy, there were four incidents in which they acted contrary to the rules and procedures, in a way that could affect the right to privacy.
- Damage to GSS activity resulting from helping the Ministry of Health: the GSS assistance provided to the Ministry of Health affected the regular activity of a particular department. It also led to some exposure of GSS capabilities, which could affect its future operations in the performance of its tasks.
- **The Shield Application:** The Ministry of Health developed the "Shield App". A Ministry of Health Report to the State Attorney General dated 6.8.20, stated that as of 5.8.20 there were about 900,000 users of the "Shield App"<sup>4</sup>, and in the week from 29.7.20 to 5.8.20, the app was downloaded to the mobile devices of 71,600 users, but during the same period, 74,000 users removed it.



The GSS acted quickly to provide the required assistance, and the teams assigned to the project displayed dedication and determination.

In spite of difficulties and technological limitations, the GSS managed to locate almost 30% of verified patients. They estimated that their activity located about 40%-60% of all patients who are not family members of patients.

As a rule, the GSS used supervisory and monitoring methods to avoid an unnecessary invasion of privacy. It saved data on separate servers and limited the number of personnel involved in the activity and exposed to the data. Originally, data was deleted after 7 days and later after 14 days. It performed random quality checks and responded to appeals from the public to the Ministry of Health. The GSS legal advisers scrutinized the entire process and provided regular reports to the State Attorney and the head of the Knesset's Intelligence and Secret Services Sub-Committee.

4 There are about 5.6 million smartphones in Israel, and about 500,000 devices defined as "kosher". This refers to cellphones used by the Haredi public that are intended mostly for making telephone calls and do not have other features of most mobile devices, such as access to the Internet and use of Internet-based apps.

# **Key Recommendations**

Everyone involved in the subject, including the ministerial team coordinated by the Minister of Intelligence<sup>5</sup> and the Ministry of Health, must consider the limits on the effectiveness of GSS assistance to the Ministry of Health, inter alia, in view of the outcomes of GSS activity, including invasion of privacy.

Epidemiological studies conducted by questioning patients should be augmented together with periodic examinations of the "signal-noise" ratio in the GSS locating method. Concurrently, epidemiological studies should incorporate the GSS location data.

The Ministry of Health should examine the wording of the SMS that it sends to people who were in contact with patients based on GSS location data, in order to reflect the location findings more precisely.

If there is a decision that the GSS will continue to help the Ministry of Health with epidemiological studies, everyone involved, including the ministerial team coordinated by the Minister of Intelligence and the Ministry of Health, must ensure performance of all necessary steps to make full and effective use of GSS results. This is crucial to ensure a comprehensive effort to break the chain of infection and, as much as possible, strike a reasonable and proportionate balance between the benefit derived from the GSS use of the data and the cost of invading privacy, as well as possible damage due to revealing GSS capabilities. The National Security Council (NSC) should take action to ensure the necessary inter-ministerial preparations.

The GSS should examine the gaps between its capabilities and the required output, and present the decision makers with alternatives, given the legal restrictions on invasion of privacy, the resources required, its technological capabilities, the need for confidentiality, and without undue interference in performing its required tasks.

The GSS must act with great caution in order to avoid the few incidents that occurred in the first round of its activity.

The GSS must do everything possible to draw conclusions from the appeals the Ministry of Health forwards it, to determine whether faults in its location tools led to mistaken identification of contacts, and evaluate the entire process.

<sup>5</sup> The "Authorizing the General Security Service to assist the national effort to limit the spread of the novel COVID-19 Law (Emergency Provision), 2020" passed on 1.7.20 states that the Government will appoint a team of ministers to "examine the need for further GSS assistance pursuant to this Law". Government Resolution 180 of 5.7.20 states that the Minister of Intelligence or his appointee will coordinate the team's work.

The Ministry of Health must ensure that everyone conducting COVID-19 tests has the mobile phone number used by the test subject in the previous 14 days, and that these details are checked and obtained as a built-in part of the process of registering the subject's details. This means that the GSS will receive verified and up-to-date information, reducing the need for it to perform certain tests. It will also enable the GSS to locate a higher proportion of the patients whose details are sent to it by the Ministry of Health.

GSS assistance with epidemiological studies for the Ministry of Health should be carried out in addition to thorough epidemiological studies done by questioning patients, and the information received from the GSS should be incorporated into the epidemiological studies process of questioning patients.

The Ministry of Health and the Ministry of Intelligence, as applicable, and with the assistance of the NSC, must prepare very clear definitions of the methods to promote the use of digital means as an alternative to GSS assistance, and act to achieve the most effective implementation possible of these means considering the circumstances.

**Overview of the GSS Process of Assisting the Ministry of Health in the Fight against COVID-19** 



Source of data: the GSS, processed by the State Comptroller's Office.

#### Summary

The Audit found that the tools used by the GSS to provide assistance were restricted and did not allow complete performance of the main tasks assigned to it. These tasks were the basis of the decision to charge it with helping the Ministry of Health to perform epidemiological studies. Considering the findings in this report and the changes in circumstances since the decision authorizing this assistance, everyone involved in the subject, including the ministerial team coordinated by the Minister of Intelligence and the Ministry of Health, should map out the entire process. On one hand, they must consider all the outputs of the GSS activity, and the impact of the invasion of privacy deriving from the activity, as well as the implications of revealing GSS capabilities and possible damage to its ability to perform its regular tasks and fulfill its mission. On the other hand, they must examine the continuation of GSS assistance, or alternatively, ensure incorporation of the GSS assistance into thorough epidemiological studies based on interviewing patients. The NSC should ensure performance of the necessary interministerial preparations. In addition, the Ministry of Health and the Ministry of Intelligence, with the help of the NSC, should act to achieve effective implementation of civilian applications.