



Analytical Unit | Ministry of Defence, Slovakia
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COVID-19 Mass Testing in the Slovak Republic

Preparation, execution, results & lessons learned

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Disclaimer

The opinions expressed in this paper are those of the author and the MOD Analytical Unit and do not necessarily reflect the official opinions or policies of the SVK Ministry of Defence.

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Context

The World Health Organization (WHO) declared a state of global health emergency on 30 January 2020 in connection with the worldwide high numbers of positively tested persons and deaths caused by the coronavirus SARS-CoV-2 (COVID-19). In view of the continuing unfavourable development, the WHO subsequently declared a pandemic on 11 March 2020.

In Slovakia, the SVK Government responded to the global spread of the SARS-CoV-2 virus on 11 March 2020 by declaring an emergency situation. As a result, it was possible to take the necessary measures to prevent and mitigate the consequences of the public health emergency.

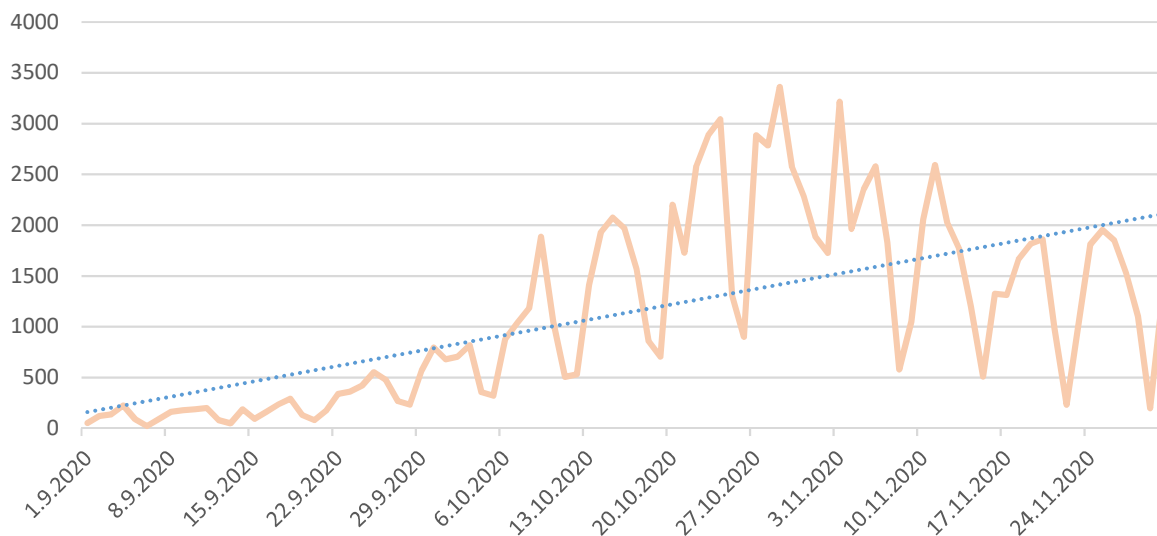
The SVK Government established the Central Crisis Staff which met regularly from 9 March 2020 in order to coordinate the activities of state administration bodies, regional authorities and other elements tasked with managing the crisis situation. It also performed activities in support of the SVK Government in the form of recommendations to prevent the spread of coronavirus and eliminate its negative impacts across the economic, social or cultural fields. A new status was gained by the SVK Government Pandemic Commission, which prepared recommendations always before the meetings of the Central Crisis Staff.

After the partial easing of strict measures in place from the beginning of 2020, the second wave of the pandemic broke out in Slovakia at the end of summer 2020, when the numbers of those tested positively in the Slovak Republic began to rise. Based on SVK Government Resolution No. 587 of 30 September 2020 and SVK Government Resolution No. 718 of 11 November 2020, a state of emergency was declared on 1 October 2020. The following restrictions were imposed during the period:

- an obligation to wear a face mask even outdoors,
- a ban on public mass events,
- a ban on assembly of people,
- food purchased in restaurants must be eaten outside or packed and taken away,
- closure of gyms, wellness centres, swimming pools, aqua parks,
- secondary schools switch to distance learning,
- max 1 person per 15m² is allowed in shops and shopping centres,
- shopping hours between 9:00-11:00 in groceries and drugstores are reserved for seniors over 65 years of age.

The SVK Government approved Resolution No. 665/2020 of 18 October 2020 on the nationwide mass testing for COVID-19 as a means to prevent a further deterioration of the epidemiological situation.

Graph No. 1: Daily Increases in Positive Cases in Slovak Republic (09/2020 – 11/2020)



Source: korona.gov.sk

Despite the fact that testing was voluntary, the participation in testing brought benefits to those who tested negative, namely partial relief from the curfew which the SVK Government declared in order to reduce mobility and slow the spread of the disease.

The strictest lockdown regime came into force on 24 October 2020 in the most affected counties of Námestovo, Tvrdošín, Dolný Kubín and Bardejov, where the pandemic situation was significantly worse than that in the rest of Slovakia. The residents of these counties were allowed to breach the curfew only:

- between 01:00 and 5:00,
- to reach their place of residence no later than 25 October,
- to get tested,
- to visit the nearest grocery or pharmacy,
- to visit a doctor,
- to care for a close person,
- to care for one's own livestock, walk a pet up to 100 meters from home,
- to take a minor to/from the childcare centre for kids aged up to 3 years, the kindergarten and the primary school for first- to fourth-year pupils under compulsory school attendance,
- to attend a funeral.

Provided that the residents of the counties passed the RT-PCR test or took part in the nation-wide testing in the period starting from 23 October 2020, they were allowed to travel to work, buy also other than essential goods and services, and stay in nature around the municipalities within the counties.

Similar restrictions applied to the rest of Slovakia. However, residents of other Slovak counties were allowed a journey to work, a journey to buy groceries, goods and services, and a stay in nature around the municipality within the county without having to produce a negative test result for a week longer until 2 November 2020, as nationwide testing for COVID-19 took place one week after the testing pilot in the Orava region and County Bardejov.

Overview

Three rounds of nationwide testing for the COVID-19 viral disease as part Op Shared Responsibility took place across Slovakia in October/November 2020. The testing was performed with the use of STANDARD Q COVID-19 Ag antigen swab tests.

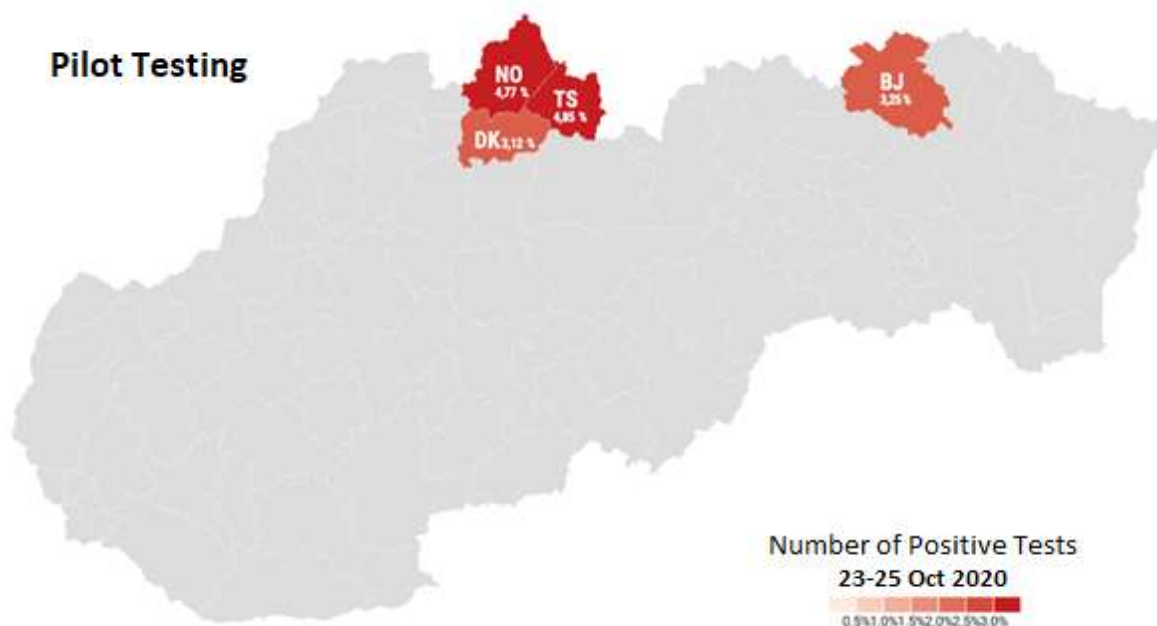
Pilot testing (so-called pre-round) took place in the four most affected counties of Slovakia (Bardejov, Dolný Kubín, Tvrdošín and Námestovo). Testing was carried out in the period between 23-25 October 2020. 140,945 tests were administered, achieving participation levels of 91%. The highest number of positive tests was recorded in **County Tvrdošín** with a prevalence rate of **4.85%**.

Table No. 1: Pilot Testing 23-25 Oct 2020 – Number of Positive Tests

County	NUMBER OF TESTS	TESTED POSITIVE (In absolute numbers)	TESTED POSITIVE (% of tests in county)
Tvrdošín	22 250	1 078	4,85
Námestovo	40 052	1 910	4,77
Bardejov	48 320	1 569	3,25
Dolný Kubín	29 347	916	3,12

Source: SVK Ministry of Interior

Picture No. 1: Pilot testing 23-25 Oct 2020 – Number of Positive Tests



Source: SVK Cabinet Office

The first round of nationwide testing took place from 31 October to 1 November 2020. The testing took place during the period while a partial curfew was imposed across Slovakia. The testing was voluntary, but participation was recommended for all residents between 10 and 65 years of age. All participants who tested negative were exempted from the curfew.

The second round of nationwide testing took place on 7-8 November 2020 in those counties in which more than 0.7% of all those tested were diagnosed positive for the new coronavirus in the first round (the so-called red districts). As in the first round, testing was voluntary in the second round too, with the same rules and exceptions to the curfew. At the same time, all residents of the "green counties" who planned to travel to or stay in the red counties during the curfew had to take part in the testing. Otherwise, they would not have been exempted from the curfew in the red counties.

The third round of nationwide testing on 21-22 November 2020 was completely voluntary and took place in the municipalities where more than 1% of all those tested were diagnosed positive for COVID-19 in the second round. It was carried out across 548 municipalities. Compared to the first and second rounds of testing, participation rates were significantly lower. However, the number of positive tests increased compared to the second round, which suggests that the voluntary third round was attended mainly by those residents who suspected they could be infected with the virus.

Table No. 2: Overview of Individual Rounds of Testing for COVID-19 in Slovak Republic

	Date	NUMBER TEST. SITES	NUMBER TEST. TEAMES	PARTICIPATION	POSITIVE TESTED OVERALL	POSITIVELY TESTED IN %
pre – round	23-25 Oct 2020	235	184	140,976 (91.0 %)	5,599	3.97
1st round of nationwide testing	30 Oct-1 Nov 2020	4,883 (SAT) 4,883 (SUN)	4,782 (SAT) 4,859 (SUN)	3,625,332 (66.4 %)	38,359	1.06
2nd round – municipalities over 0.7 %	7-8 Nov 2020	2,756 (SAT) 2,671 (SUN)	2,736 (SAT) 2,684 (SUN)	2,044,855	13,509	0.66
3rd round – municipalities over 1 %	21-22 Nov 2020	537 (SAT) 445 (SUN)	541 (SAT) 449 (SUN)	110,609	2,501	2.26

* SAT – Saturday, SUN – Sunday (data for Friday is not given for testing sites and teams, as testing was carried out on this day only across companies and specifically designated sampling points)¹

Source: SVK Armed Forces

Basic principles of nationwide testing in Slovakia

- A curfew was imposed throughout the whole of the Slovak Republic (Appendix No. 5),
- nationwide testing was voluntary, all residents of the Slovak Republic from the age of ten and above could take part in testing (as well as children below ten years of age, if interested), and foreigners who found themselves in Slovakia,
- testing was not recommended for seniors over the age of 65 and pensioners who spent most of their time in their homes, or those with reduced mobility or health complications who naturally avoided social contact, however, such persons were not granted an exemption from the curfew, and in case of non-participation in the testing, the curfew applied to them as well,
- clients of care homes and patients hospitalised in hospitals did not participate in testing as they were tested directly in these facilities,
- testing took place outdoors where possible,

¹ The effectiveness of the nationwide antigen testing in Slovakia in its individual rounds is analyzed in a study entitled *the Effectiveness of Population-wide, Rapid Antigen Test-based Screening in Reducing SARS-CoV-2 Infection Prevalence in Slovakia*. The study was prepared by the Ministry of Health of the Slovak Republic and the Institute of Health Analyses of the Slovak Republic in cooperation with the London School of Hygiene & Tropical Medicine, the University of Trnava and the P. J. Šafárik University. The study is available as preprint at <https://www.medrxiv.org/content/10.1101/2020.12.02.20240648v1>.

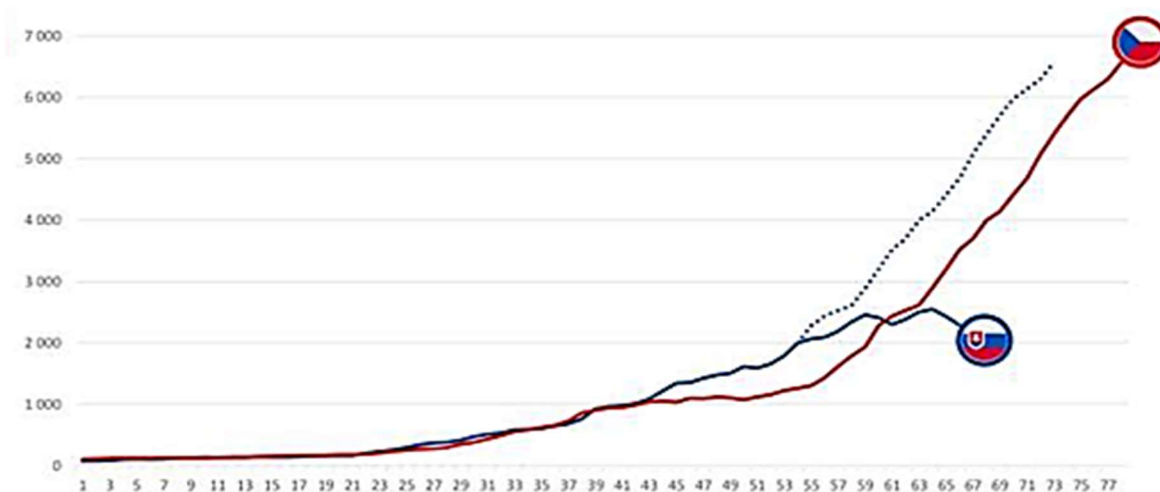
- members of the Police Corps were responsible for enforcing public order at testing sites, while members of the SVK Armed Forces who were appointed as commanders of testing sites were responsible for the operation and organization of activities at testing sites,
- the testing staff were always tested at the beginning of the testing day,
- swab tests were performed only by qualified medical personnel as set out in the guidelines of the SVK Ministry of Health (MOH),
- residents could take the test at any testing site between 07:00 and 22:00 (the last swab test was taken at 21:30), residents did not have to return to their permanent place of residence and it was recommended that they take the test at their current place of residence,
- in case of a positive test result of one of the persons living in the same household, the whole household was obliged to go into quarantine, and if the positively tested persons did not want to undergo quarantine at home, there were several paid accommodation facilities available, where it was possible to undergo mandatory quarantine to eliminate the risk of mutual infection, while the quarantine facilities had to meet the conditions laid down by the Public Health Authority of the Slovak Republic,
- Slovaks living abroad were not recommended to travel to Slovakia and participate in the nationwide testing.

TESTING PROCEDURE AT THE TESTING SITES

- Disinfect your hands after entering the collection point - disinfectants will be available.
- Administrative tasks - you can prove yourself with an identity card and an insured person's card.
- Fill in the form required for registration.
- After registration, you will be assigned a number and a tissue.
- Approach the rubbish bin, blow your nose and clear your throat, throw away the tissue.
- Give the assigned number to the medical staff.
- The medical staff will take a sample from your nasopharynx with a soft stick.
- Wait for results in a dedicated, disinfected area.
- The medical staff will call you to the workplace according to the assigned number.
- Once again present your ID to a medical staff.
- The medical staff will write a certificate stating the result of your test.
- The medical staff will hand you a certificate in a sealed envelope, instructing you on what to do in the event of a negative or positive result.
- Leave the test site, in case of a positive result, to the 10-day home quarantine.

The tested citizens could come to the testing sites on any day within the individual test rounds. In general, the greatest onset was always recorded on the first test day (mostly Saturday). Some municipalities have issued recommendations for residents to come for testing in alphabetical order. Residents did not have to get tested at the place of residence, although this was recommended. This fact caused some districts to exceed the required limit for further rounds of testing in the statistics due to non-resident testing.

Graph No. 2: Development of 7-day Incidence of COVID-19 in Slovak and Czech Republic



(Data as of 6 Nov 2020; SVK data from 1 Sept to 5 Nov 2020, CZE data from 12 Aug; Source: ECDC, UV)

Source: SVK Ministry of Health

Preparation and Planning

The intention to prepare nationwide testing for COVID-19 in the Slovak Republic was made public with SVK Government Resolution No. 665/2020 of 18 Oct 2020 on the proposal for preparation and implementation of nationwide testing of the SVK population for the presence of COVID-19 disease. The goal was to identify the COVID-19 infection rates of the SVK population and to minimize the spread of coronavirus in the Slovak Republic. Up to 8,000 SVK service personnel had been set aside and approved for preparation and implementation of nationwide testing for the presence of COVID-19 in the Slovak Republic and for eliminating the consequences of the emergency. Apart from them, the integrated teams consisted of members of the Police Corps, qualified medical professionals, administrative staff and volunteers. The Ministries of Defence, Health, Finance, Interior and Labour, Social Affairs and Family and local authorities supported the testing campaign. The resulting civil-military operation took place under the codename of Op Shared Responsibility.

The **SVK Armed Forces** were entrusted with the implementation of this task. The SVK Armed Forces planned and managed the testing through the Joint Operations Command (JOC), which included 16 Regional HQs (RHQs). To ensure effective communications between the SVK Ministry of Defence and other ministries participating in the across-the-board testing, a Strategic Steering Group was established at the level of the SVK Defence Staff. The SVK Armed Forces set aside regional coordinators at the level of individual counties in order to streamline communications with local authorities, which significantly helped the success of the entire operation. The decision to entrust the SVK Armed Forces with the execution of this task was adequate due to their internal structure and hierarchical system, which allowed for smooth and efficient execution of assigned tasks in a very short time, as only 5 days passed between the adoption of the relevant resolution and the pilot testing itself.

Due to the fact that the SVK Armed Forces are limited in the scope of their activities by law, they could not undertake all necessary activities. Members of the SVK Armed Forces did not have qualifications and experience with some activities such as the interministerial processes, legal frameworks, etc. Therefore, closer cooperation between the SVK Armed Forces and the MOD civilian component began on 25 Oct 2020, when some of these tasks were transferred.

According to Act No. 321/2002 on the SVK Armed Forces, the armed forces on the territory of the Slovak Republic are commonly used in coordination with the Police Corps exercising command over such cooperation. With the declaration of a state of emergency, it occurred for the first time in the history of the Slovak Republic that the SVK Armed Forces conducted operations across the whole of the Slovak Republic to the extent defined by law.

Testing sites

The number of testing sites largely reflected the number of constituencies in the Slovak Republic. Almost 4,900 testing sites were created throughout Slovakia in the first round of nationwide testing. In addition to nationwide testing at testing sites in the municipalities, in-house testing of employees of the companies that met the set conditions and of those working at individual ministries was performed. Based on the availability of personnel, the number of testing sites was adjusted - some sites were added, others were cancelled. Due to the lack of medical staff, 97.9% of the testing sites were opened on Saturday and 99.5% on Sunday in the first round of nationwide testing. In the second and third rounds of nationwide testing, 100% of testing sites were opened. The daily throughput capacity of a testing site (the number of people that the site can test) was approximately **500 people per day**.

PERSONNEL SUPPORT at testing sites

- At each testing site, the team consisted of:
 - a member of the SVK Armed Forces – the commander of the testing site,
 - 2-4 medical personnel,
 - 2 administrative workers,
 - a volunteer,
 - a member of the SVK Police Corps.
- Medical staff were divided into groups A, B, C. The definition of individual groups fell under the remit of the SVK Ministry of Health, the exact wording is contained in Appendix No. 3.
- As the MOH did not have a database of medical staff suitable for the purposes of nationwide testing, medical personnel were free to register at www.korona.gov and later at www.somzodpovedny.sk.
- Administrative staff was provided by the municipalities themselves (except for the pre-round of the nationwide testing where they were provided by the SVK Armed Forces).
- The selection of volunteers was in the competence of the municipalities and the MOD in case they registered via www.somzodpovedny.sk, volunteers provided assistance services at the testing sites free of charge, they were coordinated and contacted by the Office of the Secretary General of the Ministry of Defence (KaGT).
- A database of individuals was created from the registered medical staff and volunteers who were then contacted and assigned to individual Regional Headquarters (RHQs), depending on which county or testing site they were willing to work on the test days. KaGT along with the Office of Deputy Defence Minister and the Office of Defence Minister also assisted in calling medical staff and finding out their continued interest in participating in nationwide testing. KaGT was a central point of contact for keeping medical staff and volunteers informed.
- The provision of sufficient numbers of medical staff was the biggest challenge in creating sampling teams – commanders of the testing sites, RHQs and municipalities also took part in supplementing medical staff on their own initiative,
- The SVK MOD was in negotiation with the neighbouring countries on medical staff assistance in our mass testing:

- Poland and the Czech Republic were not able to send their medical staff due to their overstretched and overloaded healthcare systems as a result of the bad pandemic situation in their countries.²
- According to current laws, foreign citizens can also perform work of medical nature in the territory of the Slovak Republic. An agreement was reached between the Ministry of Interior of Hungary and the Ministry of Interior of the Slovak Republic (MOI) to allow Hungarian medical staff to perform testing in return for remuneration.
- Austria set aside military medics for humanitarian aid. Their presence in Slovakia was approved and given a mandate by the SVK Government. All costs incurred were covered by the Austrian partner.
- 95% of available SVK Armed Forces personnel participated in the first round of the nationwide testing, which testifies to the extraordinary high personnel demands of the operation.
- Members of the SVK Armed Forces were appointed as commanders of testing sites. Cadets of the General M. R. Štefánik Armed Forces Academy worked as operators and support personnel at RHQs.

MATERIAL SUPPORT TO TESTING SITES

- The logistics of the operation was in the competence of the SVK Defence Staff. Material was supplied from the stocks of the SVK Armed Forces, the direct purchases made by the SVK Armed Forces, the emergency stocks of the State Material Reserves Administration, and subsequently also from the stocks of the Ministry of Interior, Ministry of Finance, state administration bodies and municipalities, as well as from the donations of private entities and individuals.
- All available SVK Armed Forces in-service vehicles (4,025 pcs) and privately owned vehicles of SVK military personnel (7,225 pcs) were deployed in support of the operation. Transport means and operators were also contributed by some components operating under other SVK powerhouse ministries – Police Corps (1,033 pcs), Fire and Rescue Corps (200 pcs), Financial Administration Authority (171 pcs), Prison and Judicial Guard Corps (3 pcs), as well as by a private transport company. Private companies also supported the nationwide testing by donating beverages, food, personal protective equipment (PPE), etc.
- Due to the extremely short time allowed for the distribution of material, most shipments to testing sites took place overnight. In the first round of nationwide testing, key material (tests, certificates, personal protective equipment) was destocked, albeit at only 60% of the SVK military's total requirements as a result of which it was not possible to create reserves. The planning for distribution of material was based on people's permanent residence addresses.
- Although citizens were advised to test at the nearest test site in order to reduce mobility, it was neither possible to accurately estimate the participation levels, nor to calculate the exact number of tests needed for each site. It turned out that many citizens of large cities used the testing sites in the surrounding smaller villages, where no such high turnouts were expected. Therefore, there were short-term testing outages at some testing sites. These outages were

² KaGT was also responsible for:

- communications and division of work with other SVK MOD organizational units assisting in delivery of testing,
- coordination in the field of personal data protection,
- coordination of bio-waste management,
- communications with the Joint Operations Command,
- communications with the Central Military Hospital in Ružomberok.

eliminated gradually by mutual coordination between individual testing sites and the Joint Operations Command, which operatively had the material redistributed according to local requirements, while destocking and delivering material from the Permanent State Material Reserves Administration.

- The highest interest in testing was recorded on the first day of testing, the waiting time for testing was significantly lower on the second day.

Table No. 3: Total Consumption of Material During Pre-round and Three Testing Rounds

ATG TESTS	DISPOSABLE GLOVES	FACE MASKS	RESPIRATORS	OVERALLS	PAPER TOWELS
6,000,000	12,500,000	300,000	400,000	370,000	8,000,000

Source: SVK Armed Forces

IN-HOUSE TESTING IN FIRMS AND COMPANIES

In addition to testing at individual testing sites, testing also took place in large firms and companies and in industrial parks with more than 4,000 employees. The number of 4,000 was set to ensure that sufficient numbers of military personnel were available for individual testing sites. If testing had been conducted in businesses with a lower number of employees, military personnel would not have been available at all testing sites. Another issue was the logistics of the operation. In such a short time, it was not possible to destock and distribute material to a large number of smaller companies. Even in the given situation, queues formed on destocking from the State Material Reserves Warehouse.

A large number of employers (over 500) showed interest in testing on their premises. However, most of them either failed to meet the set conditions or gave up their intention. Finally, testing took place in 16 businesses in the first round of testing and in 10 businesses in the second round of testing. The lower number of businesses tested in the second round was due to the fact that some businesses were no longer in a red district and therefore neither needed to perform testing, nor required a negative test certificate from their employees. In-house testing in businesses was similar to that at standard testing sites, insofar as businesses provided administrative staff and medical staff, while the delivery of tests and certificates was in the competence of the SVK Armed Forces. The commander of the testing point in a business was a member of the SVK Armed Forces.

Communications with businesses interested in in-house testing was the primary agenda of the Office of the Deputy Defence Minister (KaŠTAT). KaŠTAT served as an information point of contact for businesses and the public and participated in the publication of information on testing businesses on the website www.somzodpovedny.sk. As well as setting the conditions and cooperating with businesses and the SVK Armed Forces Joint Operations Centre, it coordinated the places and dates of testing.³

³ KaŠTAT was in charge of:

- communications with local authorities and other involved central government bodies (Ministry of Economy, Ministry of Health, Ministry of Labour, Social Affairs and Family, Ministry of Justice, Public Health Authority Office).
- The office was temporarily strengthened by 4 employees from other MOD Departments (Human Resources Department, Control Department, Defence Policy Department, Legislation and Law Department). KaŠTAT regularly participated in Joint Operations Command (JOC) briefings where individual organizational units coordinated action with each other.

Communication Campaign

A nationwide communication campaign, combined with more intense cooperation with the SVK Cabinet Office, began to take shape on 18 October 2020. The Office of the Minister of Defence (KaMO) represented the main organizational and coordination element in this campaign.

The main goal of the campaign was to provide citizens with enough information about mass testing as it rolled out on the one hand and to mobilize them to get tested on the other hand.

In the interest of raising public awareness, the campaign website was set up at www.somzodpovedny.sk under the remit of KaMO. The aim was to mobilize residents to participate in screening and to provide all necessary updates on mass testing. The website first contained the most frequently asked questions by citizens and state administration bodies as well as answers provided by the MOD helplines on a daily basis. In the next phase, the site contained a registration form for medical staff and a link to a website with information on the most common questions and answers for businesses interested in in-house testing, the procedures for concluding agreements and contracts, etc.

The information campaign on the Internet was also supported by information leaflets. These were sent directly to mailboxes. On Wednesday, 2 days before mass testing, the leaflets were delivered to up to 2.1 million households. Other leaflets and posters were distributed on trains and buses and in public places. They were also sent to municipalities, which published them at their information points. The evening before the pilot and the other testing rounds, a letter was sent from the Minister of Defence to mayors to thank them for their help and support in preparing this operation.

The central theme of the mobilization campaign was the slogan "I'll go". The slogan mobilized and motivated people to participate in testing, supported by promotion ads featuring close friends and trustworthy media personalities. In addition, an appropriate profile frame was created on social networks: "I'm responsible, I'll get tested." Following disinformation campaigns on social media channels that presented the testing sites as dangerous places posing the risk of infection with coronavirus to others, there were concerns over possible low participation levels, but things turned out differently in the end.

Despite the short time to prepare the campaign and the great pressure on television advertising space from commercial customers, not only television but also radio stations strongly supported the campaign. The campaign consisted of 5 different versions of 30-second TV spots and 5 versions of radio spots. They featured celebrities, artists and athletes of the Dukla Military Sports Centre who explained why they would get tested. A well-known personality who had recently recovered from severe COVID-19 was also involved in the campaign. The main goal of the campaign was to show that the disease should not be underestimated.

Based on the contractual relations between the MOD and public and private television stations, the spots were broadcast at least 89 times over a period of 4 days. Advertising outputs were aired by 6 radio stations with nationwide coverage, at least 102 times. Accurate quantification of broadcasts is not possible as some television stations did not provide their media plans. When their long-planned advertising space allowed it, the television and radio stations broadcast the "I'll go" spot even beyond the scheduled media plans.

These spots were also used in online space. Two entities placed the video spots in the body of articles in front of video content or in the video widget at the end of articles - the total number of views was approximately 900,000.

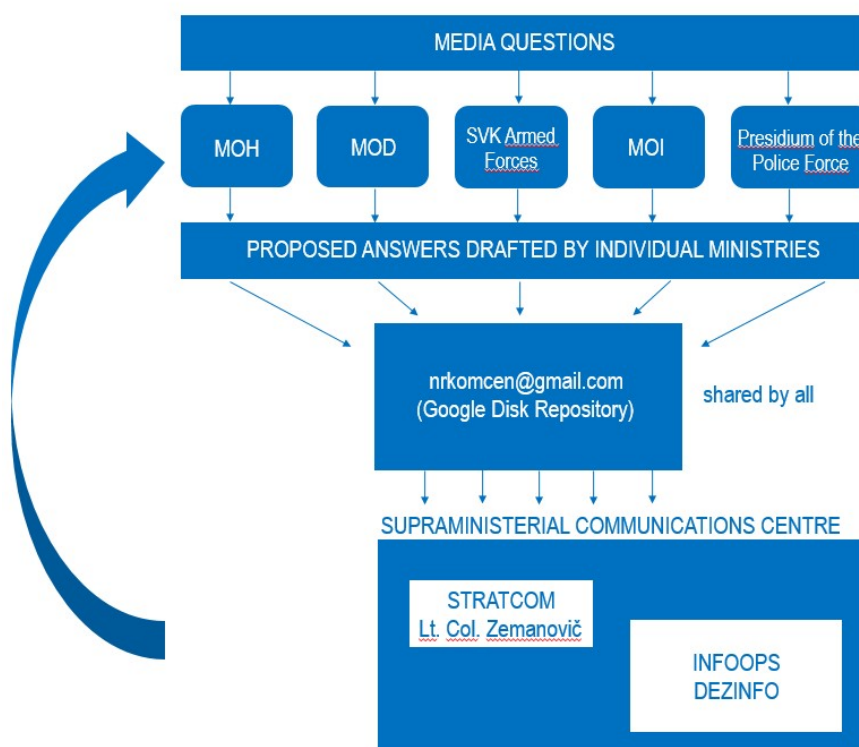
As early as in the preparation phase, cooperation was established with GSM operators that sent out bulk messages in the pre-round of mass testing to mobilize the people of the Orava region to get tested. In the next rounds of testing, messages of a similar nature were sent out to people throughout the Slovak Republic.

SUPRAMINISTERIAL COMMUNICATIONS CENTRE

In the interest of establishing a structure for effective communications, the Supraministerial Communications Centre (hereinafter referred to as "NrKomCen") was created under the auspices of the SVK Armed Forces at the very beginning of the 2nd wave of the COVID-19 pandemic (October 2020). Those represented at NrKomCen were the Press Offices of the SVK Cabinet Office and of individual ministries involved in Op Shared Responsibility, i.e. the Ministry of Defence, Ministry of Interior, Ministry of Health, Ministry of Labour, Social Affairs and Family, Presidium of the Police Corps, Presidium of the Fire and Rescue Corps, and the SVK Defence Staff.

Graph No. 3: Information Flow of the Departmental Communication Center

SHARED COMMUNICATIONS = SHARED RESPONSIBILITY = SHARED VICTORY



Source: SVK Ministry of Defence

A special integral component of NrKomCen was the Analytical-Operational Group. It participated in the creation of STRATCOM, which consisted of employees and analysts of the Information Operations Section (hereinafter referred to as "OdInfoOps") at the SVK Special Operations Forces Command (SOCOM). To ensure effective cooperation and information sharing with this cell, other concerned elements were also invited to join in – personnel of the Situation Centre of the Security Council Office at the SVK Cabinet Office, the Presidium of the Police Corps, the National Security Analytical Centre of the Slovak Information Service (SIS), the Workplace for Hybrid Threats and Disinformation of the National Security Office, the SVK MOD Analytical Unit, the Press Office of the Ministry of Health, and third sector security analysts from STRATPOL, OSF, Infosecurity.sk and SSPI.

Benefits of establishing NrKomCen

- verification by NrKomCen members of press releases and media outputs for individual ministries before publication in real time with minimal delay,
- distribution management of questions and areas of topics from media to relevant ministries by NrKomCen members,
- use of a shared information repository, located in Google Drive, updated 24/7 and structured as follows: press releases of individual ministries, questions and answers to media and citizens (all answers and statements of ministries and those of NrKomCen), photos and videos (among other things, the first and continual images from test sites for further use), graphics (logos, etc. in various formats for information and promotion purposes) and relevant Internet links.

Benefits of establishing Analytical-Operational Group

- creating the operation's communications strategy and conducting information activities,
- designing a strategy for information use and management to achieve competitiveness and advantage in the information environment,
- maintaining the continuous functionality and effectiveness of public communications systems and their reach, and hence the need to understand the role and importance of the information environment in its entire spectrum as one of the key points in delivering impactful activities,
- improving information and communications strategies with the possibility of entering into processes in order to sufficiently cover and adequately respond to the information environment (the use and engagement of such a mechanism in a real situation is the first big step in building the resilience of the Slovak Republic),
- working in close cooperation with the Presidium of the Police Corps, the Situation Centre of the SVK Cabinet Office, the National Security Analytical Centre, the Workplace for Hybrid Threats and Disinformation, the MOD Analytical Unit, the Ministry of Health Press Office and third sector analysts, 400-600 pieces of disinformation and hoaxes on testing were detected daily, these activities were analyzed and evaluated, and an appropriate response was applied.

Problems and Lessons Learned Identified

- **Service personnel.** The operation required that the SVK Armed Forces use the maximum available number of SVK Armed Forces members, the key was a sufficient number of command staff personnel. Almost 95% of all available SVK military personnel participated in the nationwide testing, which testifies to the extraordinarily high personnel demands of the operation. In the event of yet another emergency situation in parallel to this, there would have been insufficient capacity to perform other tasks or to support all testing sites.
- **Logistics of testing sites.** The maximum logistical capacity of the MOD was used to provide the testing sites with required material. However, due to the high volumes of material (see Appendix No. 8), it was also necessary to transport material with privately owned vehicles. Our experience confirmed the need for upgrading the MOD vehicle fleets. Looking into the future,

it would be helpful to conclude contracts with other ministries, so that in similar situations vehicles could be provided for the needs of the MOD/Armed Forces.

- **Medical personnel.** As, in accordance with valid legislation, the Ministry of Health is not in a contractual relationship with medical personnel, their involvement in testing took place on a voluntary basis through a registration form. In practice, this approach brought several shortcomings. Because in the preparation phase the database that was created did not contain sufficient levels of healthcare professionals, the categorization of medical personnel was changed a few times, expanding the circle of people qualified for swab testing. Equally

important, it was also necessary to motivate medical personnel with a higher financial reward, as was announced at a press conference by the SVK Prime Minister just a few days before the actual testing. Had these aspects been taken into account, this could have shortened the staffing of testing sites. The resulting database contained a large number of contacts (approximately 30,000 people). These needed to be verified in a short time. Originally, medical staff were to be contacted and assigned to testing sites under the remit of the MOH, later this task was transferred to RHQs. However, these did not have the necessary capacity. Due to the short time available, RHQs were supported in this task by the SVK MOD civilian component (276 MOD civilian employees and 35 professional soldiers assigned to the MOD structures). However, in the initial phase, due to the limited time available, the MOD employees did not have enough essential information on the assignment of medical staff to specific testing sites, details on contracts, start time or financial reward, and therefore instructed potential applicants to contact RHQs. This exacerbated the problem of telephone line congestion at RHQ. Due to the shortage of time, there was also a parallel process when medical personnel were also contacted by the local authorities themselves. However, this information did not always reach RHQs, which resulted in duplicate staffing of sites and transfers of (not only) healthcare professionals between the confirmed testing sites. If the MOH had a database of healthcare professionals, in case of repeated crisis situations communications would be facilitated.

- **Cooperation with municipalities.** The coordination of testing with municipalities took place mainly through county offices. In real life, communication shortcomings were reported. Due to the short time available, municipalities drew a lot of information primarily from press releases, discussions and news. In practice, close communications with the SVK Towns and Municipalities Association and the SVK Towns Union proved to be effective, insofar as they had live communication channels with representatives of towns and municipalities. Thus, the manuals they created could be immediately distributed to the municipalities. However, as the information and regulations were continually adapted to reflect the developing situation and capacities, the manuals had to be updated accordingly in the preparation process. Communications with municipalities improved as commanders of testing sites were appointed, albeit at some sites with a delay due to changes to testing sites. In most cases, municipalities appreciated the professional approach of service personnel before and during the operation.
- **Interministerial cooperation.** During the preparation phase, the limits of communications between individual ministries were revealed, which was partially corrected by stand-up of the Supraministerial Communications Centre, which helped with the creation of the communication strategy. Due to time constraints, many competencies in testing between ministries were unresolved and addressed, so to say, "on the fly". Namely, the responsible ministries initially relinquished solutions and related requisites that competently belong to them to the MOD. During the preparation process, several population groups crystallised, requiring a special approach of the competent ministries in the testing process – consider, for example, residents of care homes, people securing the critical infrastructure, people working in international transport, people involved in the healthcare system, homeless people and others. It took time to discuss and set rules, while taking into account the specificity of their positions. Interministerial cooperation was facilitated by the presence of representatives of concerned elements at the situational briefings at the Joint Operations Command at the MOD, where commanders of RHQs provided regular situational updates.

- **Accuracy of tests.** How the accuracy (sensitivity, specificity) of the antigen test was communicated to the public remained a significant problem. Politicians, epidemiologists and journalists made partial statements on the test and their information diverged. There was a lack of timely and unambiguous strategic communications on this issue. Misunderstanding the functionality of the tests could be attributed to the less responsible behaviour of those who tested negative. To eliminate this risk, political leaders repeatedly called on everyone to adhere to all anti-epidemic measures, even if they tested negative.
- **Data evaluation.** Equipping testing sites with additional equipment would have made testing significantly more expensive. Aside this, some testing sites did not have sufficiently strong GSM signal coverage, therefore, the collection of statistical data and the issuance of certificates took place manually, through human capacities. For the second and third rounds of mass testing, an application for data collection was created, which was beneficial especially for places with sufficient GSM signal coverage. Interim data on those tested were communicated to RHQs and processed in a non-uniform format. This may have caused that the data declared by the municipalities could differ from the data of the SVK Armed Forces. These moderate errors were attributed to a rare failure of the human factor. In practice, the presence of local government representatives at individual sampling points proved to be effective, as they verified the obtained data and ruled out any further doubts.
- **GDPR.** The handling of personal data required special attention in the preparation process. The transfer of the database of contacts between the MOH and the MOD took place on the basis of a contractual relationship. There were some isolated media cases where information on those testing positive leaked and where a possible violation of the GDPR occurred, however, the investigation into the cases proved these to be isolated failures of individuals or intentional attempts to harm others. Within its competence, the MOD acted in accordance with applicable laws and regulations.
- **Biological waste.** During the testing, biological material was collected and had to be disposed of in accordance with applicable legislation. Due to the large number of testing sites and associated demands of the logistics, it was not possible to transport the waste immediately after the testing. Therefore, the night following the testing, the biological material was stored in separate, designated areas in the municipalities and later, assisted by service personnel, was collected, transported and stored at one site in accordance with the Decree of the Ministry of Environment of the Slovak Republic. The biological material has been in the process of being disposed of gradually within the capacity of the contractor that is authorized to handle and dispose of hazardous waste. Due to the limited time available for preparations before the conduct of the MOD's operation (in accordance with §14 para 1(i) of Act No. 79/2015 Coll. on waste and on amendment and supplementation of certain acts), the request for consent to waste storage was not submitted to the pertinent waste management state administration authority, i.e. the Liptovský Mikuláš County Office. Nevertheless, later on, the consent was issued by the County Office. Most importantly, this minor administrative slip-up did not affect the safety of stored waste and its degree of social significance was minimal. This situation also led to a fundamental amending proposal on the Waste Act, which was welcomed by the Ministry of Environment of the Slovak Republic.

Appendix

Appendix No. 1: Members of SVK Government Pandemic Commission

MINISTER OF INTERIOR	CHIEF HYGIENIST
MINISTER OF DEFENCE	CHAIRMAN OF STATE MATERIAL RESERVES ADMINISTRATION
MINISTER OF TRANSPORT AND CONSTRUCTION	CHAIRMEN OF SELF-GOVERNING REGIONS
MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT	DIRECTOR OF THE CRISIS MANAGEMENT OF MINISTRY OF HEALTH
MINISTER OF FINANCE	DIRECTORS GENERAL OF HEALTH INSURANCE COMPANIES
MINISTER OF ECONOMY	CHIEF EPIDEMIOLOGY EXPERT
MINISTER OF LABOUR, SOCIAL AFFAIRS AND FAMILY	CHIEF INFECTIOUS DISEASES AND TROPICAL MEDICINE EXPERT
MINISTER OF FOREIGN AND EUROPEAN AFFAIRS	DIRECTOR GENERAL OF CRISIS MANAGEMENT SECTION OF MINISTRY OF THE INTERIOR
MINISTER OF EDUCATION, SCIENCE, RESEARCH AND SPORT	CENTRAL DIRECTOR OF STATE VETERINARY AND FOOD ADMINISTRATION
MINISTER OF CULTURE	CHAIRMAN OF SLOVAK ACADEMY OF SCIENCES
MINISTER INVESTMENT, REGIONAL DEVELOPMENT AND INFORMATISATION	DIRECTOR OF PRESS OFFICE OF MINISTRY OF HEALTH

*In case of absence the Minister was represented by his Secretary of State

Source: Public Health Office

Appendix No. 2: List of RHQs and Regional Area of Responsibility

NO.	REGIONAL HQ	REGIONAL SCOPE
1	Bratislava	Bratislava I-V
2	Hlohovec	Trnava, Hlohovec, Piešťany
3	Malacky	Malacky, Senica, Skalica, Pezinok
4	Levice	Levice, Nové Zámky, Komárno
5	Martin	Martin, Dolný Kubín, Námestovo, Turčianske Teplice
6	Michalovce	Michalovce, Sobrance, Snina, Humenné, Medzilaborce, Vranov nad Topľou
7	Nitra	Nitra, Zlaté Moravce, Šaľa
8	Prešov	Prešov, Sabinov, Bardejov, Svidník, Stropkov, Kežmarok, Levoča, Stará Ľubovňa, Poprad
9	Rožňava	Rožňava, Revúca, Rimavská Sobota, Poltár, Gelnica, Spišská Nová Ves
10	Ružomberok	Ružomberok, Lipt. Mikuláš, Tvrdošín
11	Sereď	Galanta, Dunajská Streda, Senec
12	Topoľčany	Topoľčany, Partizánske, Prievidza
13	Trebišov	Trebišov, Košice I, Košice II, Košice III, Košice IV, Košice okolie
14	Trenčín	Trenčín, Bánovce nad Bebravou, Nové Mesto nad Váhom, Myjava, Ilava, Púchov, Považská Bystrica
15	Zvolen	Zvolen, Detva, Žiar nad Hronom, Lučenec, Žarnovica, Banská Štiavnica, Banská Bystrica, Krupina, Veľký Krtíš, Brezno
16	Žilina	Žilina, Bytča, Čadca, Kysucké Nové Mesto

Source: SVK Ministry of Defence

Appendix No. 3: Guidelines of the Ministry of Health of the Slovak Republic for assignment of individual medical professions to medical teams for nationwide testing for COVID-19 viral disease (as of 29 October 2020)

A testing team consists of 4 members, while at least one member must be from Category A!!!

1x Category "A" person, a "swabber" performing swabs

- Doctor
- Nurse
- Practical nurse
- Paramedic

1x Category "B" person, a "swabber" performing swabs

- Childbirth assistant
- Medical laboratory technician
- 5th year medical student
- 6th year medical student
- Nursing student / 2nd year (nurse)
- Nursing student / 3rd year (nurse)
- 2nd year emergency medical care student (paramedical personnel)
- 3rd year emergency medical care student (paramedical personnel)

2x Category "C" persons performing activities related to test diagnostics, except for swabbing (so-called "mixer/reader")

- Dentist
- Pharmacist
- Physiotherapist
- Public health officer
- Nutritional therapist
- Dental hygienist
- Radiological technician
- Dental technician
- Technician for medical devices
- Optometrist
- Pharmaceutical laboratory technician
- Masseur
- Eye optician
- Orthopedic technician
- Dental assistant
- Sanitary worker
- Speech therapist
- Psychologist
- Medical teacher
- Physicist
- Laboratory diagnostician

Source: SVK Ministry of Health

Appendix No. 4: Number of Personnel Involved in Operation

PRE-ROUND 23 OCT – 25 OCT 2020			
SVK ARMED FORCES	3,012		
SVK MOD	182		
SVK MOI	707		
SVK MOH	341		
MUNICIPALITIES	769		
VOLUNTEERS	920		
TOTAL	5,931		
1ST ROUND ROUND – NATIONWIDE 31 OCT – 25 OCT 2020			
2ND ROUND – MUNICIPALITIES OVER 0.7% 7 – 8 NOV 2020			
3RD ROUND – MUNICIPALITIES OVER 1%, 21 NOV – 22 NOV 2020			
SVK ARMED FORCES + SVK MOD	12,611	-	-
SVK ARMED FORCES	-	7,165	2,592
SVK POLICE CORPS	9,838	5,269	988
FARS	241	175	57
FSS	511	223	125
MRS	100	90	0
MEDICAL STAFF	28,862	17,725	3,516
ADMIN WORKERS	20,282	9,456	1,708
VOLUNTEERS	8,122	1,767	54
AUSTRIAN ARMED FORCES	66	-	-
HUNGARIAN MEDICAL STAFF	400	-	-
TOTAL	81,039	41,870	9,040

Source: SVK Armed Forces

SVK Armed Forces – Armed Forces of the Slovak Republic
 SVK MOD – Ministry of Defence of the Slovak Republic
 SVK MOI – Ministry of Interior of the Slovak Republic
 SVK MOH – Ministry of Health of the Slovak Republic
 SVK Police Corps – Police Corps of the Slovak Republic
 FARS – Fire and Rescue Service
 FSS – Financial Administration Authority
 MRS – Mountain Rescue Service

Appendix No. 5: Decisions on Curfews

24 Oct 2020 - 1 Nov 2020

<https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2020/290/202010234>

2 Nov 2020 - 8 Nov 2020

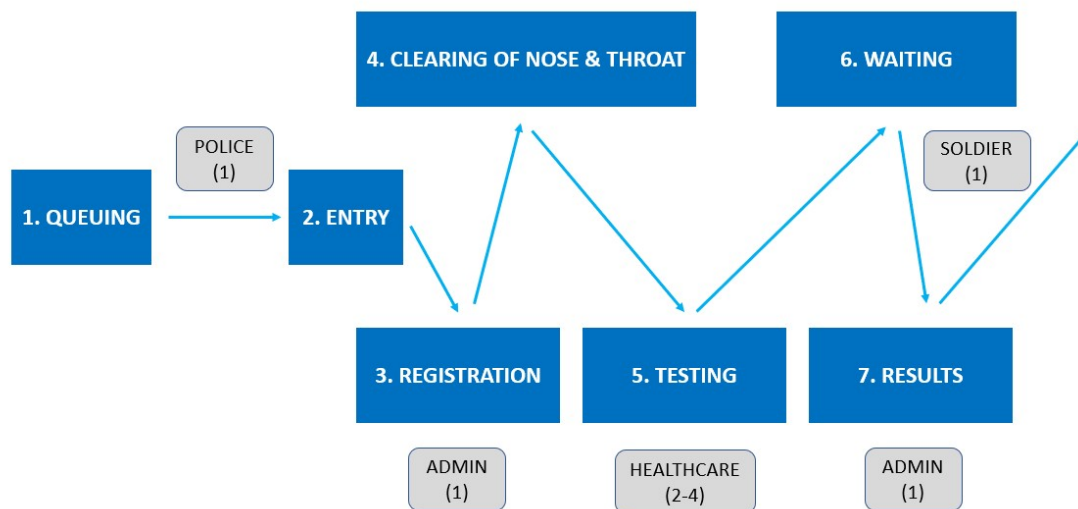
<https://slk.mazars.sk/Home/Postrehy/COVID-19-Vas-biznis/Vladna-podpora-a-pravne-otazky/Nove-uznesenie-vlady-o-obmedzeni-pohybu-2.-8.11>

9 Nov 2020 - 14 Nov 2020

https://www.mestosastinstraze.sk/evt_file.php?file=2990

Appendix No. 6: COVID-19 test Instructional Video

<https://www.youtube.com/watch?v=v9wd2CKKT4c>



Source: The Behavioural Insight Team

Appendix No. 7: Remuneration for Personnel as Part of Nation-Wide Mass Testing

Medical personnel:

An agreement on performance of work was concluded with each member of the medical team. Accommodation was provided for medical personnel, if necessary. Medical personnel signed an agreement with the health care provider, i.e. the Central Military Hospital in Ružomberok. Under the agreement, travel expenses were reimbursed as well.

Remuneration: €7/hour + risk surcharge of €20 for each positive test result, later a reward of €500 was given to medical personnel for the whole weekend. (The reward was paid to medical staff by the Central Military Hospital.)

Volunteers:

Volunteers, without the right to financial remuneration, registered via the websites www.korona.gov.sk and www.somzodpovedny.sk and supported nationwide testing **free of charge**. They were contacted by MOD employees and professional soldiers from individual RHQs. In some cases, they were contacted directly by municipalities.

Administrative workers:

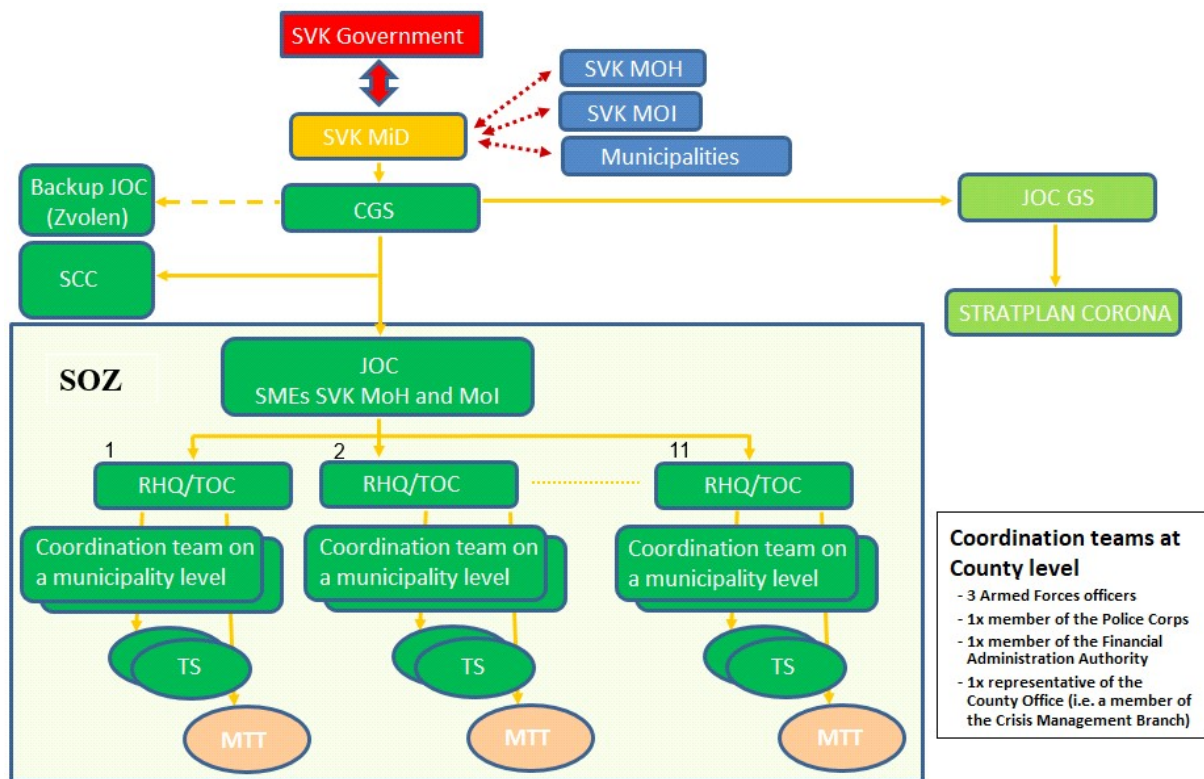
Administrative workers concluded a volunteering activity agreement directly with local authorities. The volunteering activity agreement sample according to the Volunteering Act was sent to the municipalities by the MOI through relevant county offices. The decision on administrative workers was fully within the competence of local authorities, the MOD did not interfere in their selection in any way. The **remuneration** of administrative workers was increased from the original net amount of €70 to €100. The costs incurred by local governments in connection with nation-wide testing **were reimbursed** through relevant county authorities - crisis management branches.

Appendix No. 8: Selected Statistical Data on Equipment Used in Transport of Material in Individual Rounds of Testing

	MATERIAL TRANSPORTED	KILOMETRES COVERED	ARMED FORCES EQUIPMENT	POLICE EQUIPMENT	FIRE AND RESCUE SERVICE EQUIPMENT	PRIVATELY OWNED VEHICLES	UH-60M HELICOPTERS (HOURS)
PRE-ROUND	1,661 m ³ /88 tons	92,810	476	20	0	129	0
1ST ROUND	8,250 m ³ /662 tons	359,916	1,728	230	98	3,540	9
2ND ROUND	6,462 m ³ /354 tons	263,908	1,403	383	82	2,897	9
3RD ROUND	286 m ³ /39 tons	55,625	364	400	20	659	0

Source: SVK Ministry of Defence

Appendix No. 9: Structure of relations between individual components of state administration, municipality and other units involved in preparation of nationwide testing in Slovakia



Source: SVK Ministry of Defence

CGS – Chief of General Staff

JOC – Joint Operations Command

JOC– Joint Operations Centre

JOC CGS – Joint Operations Centre of General Staff of SVK Armed Forces

MTT – Mobile Testing Team

RHQ – Regional HQ

SCC – Strategic Coordination Centre

SOZ – Joint Operational Task Force

SMEs - Subject Matter Experts

STRATPLAN – Strategic Plan

SVK MiD – Minister of Defence of the Slovak Republic

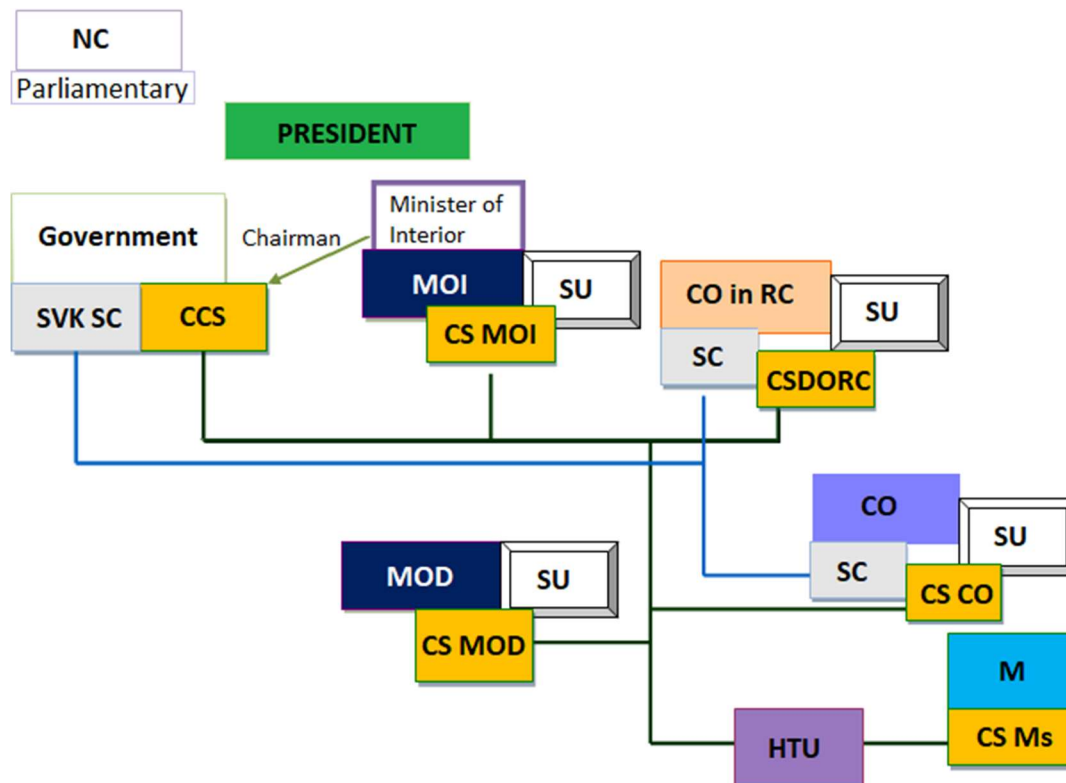
SVK MOH – Ministry of Health of the Slovak Republic

SVK MOI – Ministry of Interior of the Slovak Republic

TOC – Tactical Operations Centre

TS – Testing Site

Appendix No. 10: SVK Crisis Management Scheme



Source: SVK Ministry of Defence

CCS – Central Crisis Staff

CO in RC – County Office in Regional Capital

CSDORC - Crisis Staff of District Office in Regional Capital

CS MOD – Crisis Staff of District Office in Regional Capital

CS MOI – Crisis Staff of Ministry of Interior of the Slovak republic

CS Ms – Crisis Staff of Municipalities

HTU – Higher Territorial Unit

MOI – Ministry of Interior of the Slovak Republic

MOD – Ministry of Defence of the Slovak Republic

M – Municipality

NC – National Council of the Slovak Republic

SC – Security Council

SU – Special Unit

SVK SC – Security Council of the Slovak Republic