



State Comptroller's Report – Cyber and Information
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The Ministry of Interior

Use of Biometric Identification Documents – ID Cards and Passports



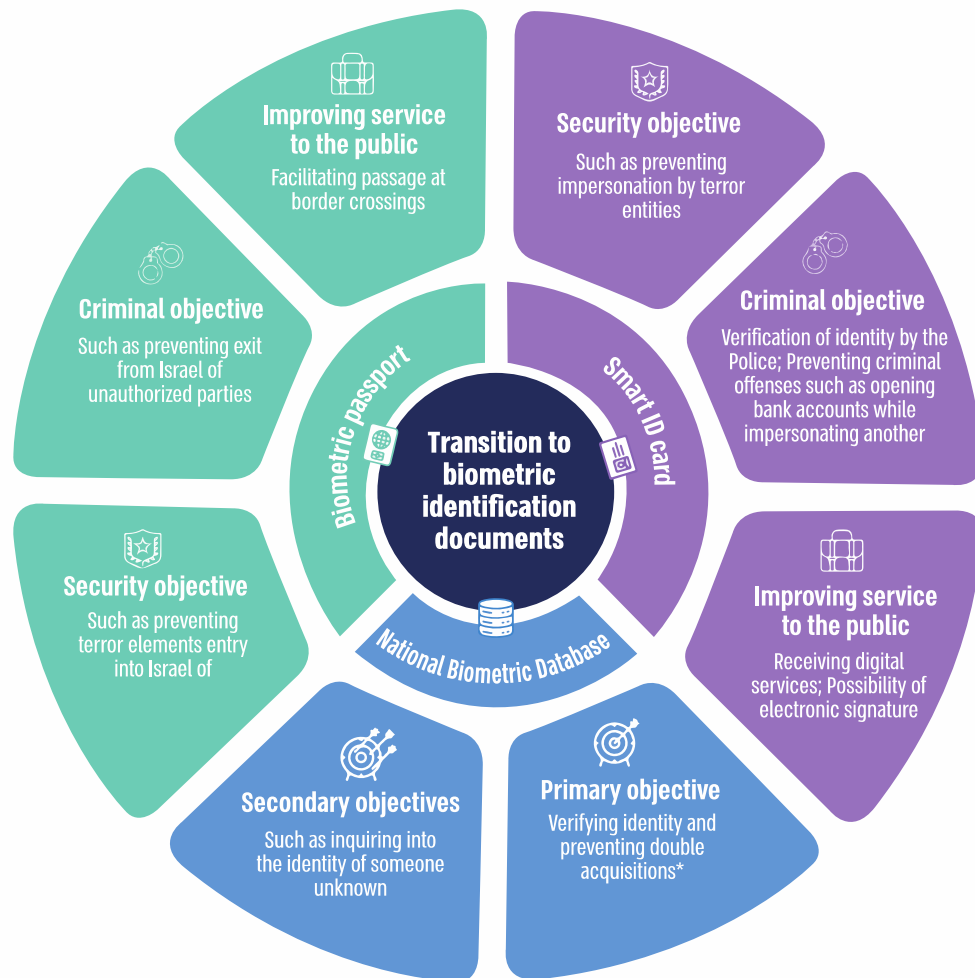
Use of Biometric Identification Documents – ID Cards and Passports

Background

Identification documents of a state's residents and foreigners entering it, such as ID cards and passports, are used for managing the state and maintaining its security. For years, the identification documents issued in Israel were considered easy to forge (old-type ID cards or passports). As a result, the Ministry of Interior promoted a project to issue identification documents that would be difficult to forge, improve the reliability of identification and enable the provision of advanced services to the public. In 2008, the government resolved to replace the identification documents with smart identification documents through biometric identification and to keep the biometric information in a national biometric database. The objectives of the transition to biometric identification documents are presented in the diagram below:



The Objectives of the Transition to Biometric Identification Documents and its Components



- * Double acquisition – where a person impersonates another and receives an identification document indicating the name of another, but where the biometric characteristics included therein are those of the impersonator. This way, a person can have several identities.



Key Figures

**NIS 935
million**

the transition cost to issuing biometric identification documents 2009–2021

45%

of the ID card holders (about 3.2 million residents) still hold an old-type ID card as of July 2022

37%

of the passport holders (about 2.9 million residents) still hold old-type passports, which are easy to forge, as of July 2022

400

attempts to enter the country using forged identification documents through border crossings under the purview of the Crossing Points Authority in the first half of 2022

**less than
1%**

of the residents who entered the National Identification System used the smart ID card to receive government digital services remotely

92%

of the residents who hold smart ID cards (about 3.5 million residents) have a card whose use requires a card reader, which is a barrier to the use thereof

70%

of the 3,834 residents who made three or more reports on the loss or theft of a smart ID card, have a criminal or police record

30%

of the Israelis who pass through the automatic checkpoints at Ben Gurion Airport, which are designed for biometric passports, pass through them using an old-type passport

17%

of the passports issued in the first half of 2022 are old-type passports

65,000

temporary passports (of the old type) were issued at the temporary passport center from the end of May 2022 to the end of August 2022

6 weeks

the time in which the Population Authority undertook to send residents their passports was extended from three weeks to six weeks

**3.6
million**

residents have an ID whose validity is expected to expire in 2023–2024, expected to come to the Population Authority bureaus to issue a new ID card



millions	millions	less than 1%
of Israeli residents' photos are stored in the "Aviv" system (the system in which the population registry is managed)	of Israeli residents' and foreigners' photos are stored in the "Rotem" system (the Border Control's computerized system)	of those applying for biometric identification documents in the months of August – October 2022 requested that their fingerprints be stored in the national biometric database (197 out of 276,000 residents)

Audit Actions

From April to October 2022, the State Comptroller's Office audited the transition to biometric identification documents and their use, including the transition to smart ID cards and the barriers to their use; The transition to a biometric passport and the passage of Israeli residents and foreigners at Ben Gurion Airport; The Population Authority's coping with the demand increase for biometric identification documents and the existence of biometric facial image databases at the Population Authority. The examination was conducted at the Population and Immigration Authority (Population Authority), the Ministry of Interior, the National Biometric Database Authority, and the Biometric Applications Unit in the National Cyber Directorate. Completion examinations were carried out at the Ministry of Foreign Affairs, the Israel Police, the National Cyber Directorate (the Cyber Directorate), the Israel Security Agency (ISA), the Ministry of Justice, including at the Privacy Protection Authority, the Crossing Points Authority at the Ministry of Defense, at the National Security Council (the Prime Minister's Office), in the National Digital Agency, the Bank of Israel, the Institute for Intelligence and Special Operations (Mossad) and the Airports Authority. Furthermore, visits were conducted at the Ben Gurion Airport and the Qalandiya border crossing, as well as the production plants, for the issue of biometric identification documents.

The Knesset State Audit Committee sub-committee decided not to bring this report in its entirety before the Knesset but to publish only parts thereof, to protect the state's security under Section 17 of the State Comptroller's Law, 1958 [Consolidated Version].



Key Findings



The Transition to the Smart ID Card – even though the transition to smart ID cards began a decade ago, in June 2013, for residents expressing a desire for them, and in an obligatory manner for all residents in July 2017, and although NIS 430 million have been invested thus far in issuing them, as of July 2022, about 45% of those holding ID cards (about 3.2 million residents) still hold the old type of card, which is easier to forge. The continued use of these cards has criminal and security implications. Thus, in the first half of 2022, at the border crossings under the purview of the Crossing Points Authority, about 400 attempts to enter the country using forged documents were recorded.



Correlation Between Repeated Requests to Issue a Smart ID Card and Involvement in Crime – a correlation was found between the number of times citizens reported the loss or theft of smart ID cards and asked to issue new cards and the criminal or police record of these citizens. Since the issuance of smart ID cards began in June 2013–3,834 residents have reported the loss or theft of a smart ID card three or more times, and 70% of them have a police or criminal record. Among those who submitted such a request eight times or more, this rate was 100%.



The Use Scope of a Smart ID Card to Receive Government Services – due to barriers, including the need for a card reader and remembering the password, the use of the smart ID card for identity verification and receiving digital government services is extremely limited and almost negligible – less than one percent of residents used it for receiving services in the National Identification System. This, despite the identification using it, is more secure. Consequently, one of the objectives of the transition to a smart ID card – providing advanced services to the public while using it – was not achieved.



Biometric Identity Verification Using the Smart ID Card – as of September 2022, the Population Authority is the only body among the enforcement entities and government bodies authorized by law¹ to use the biometric layer of the ID card to verify a person's identity (1:1)². Even it does it in a limited way, only when the holder of the smart ID card physically arrives to receive service at the Authority's office. It was raised that the Police, and the government ministries, do not use the biometric layer of the smart ID card.



Barriers Hindering Biometric Identify Using the Smart ID Card – due to legal and technological barriers concerning access control to the facial image in the smart ID card chip, the possibility of using it to perform biometric identification verification is

1 The Inclusion of Means of Biometric Identification and Biometric Identification Data in Identification Documents and in a Database Law, 2009 (the Inclusion of Biometric Means of Identification Law).

2 Comparison of the means of biometric identification taken with the previously saved sample.



limited. As of July 2022, about 3.8 million residents held a smart ID card. Since it is impossible to retroactively change the access control in the cards that have already been issued – even when these barriers are removed, these residents will not be able to use them to receive a significant part of the services that require biometric identity verification. Moreover, 580,000 smart ID cards have embedded in them a chip with a small memory capacity, and their holders will not be able to use the ID card to receive services requiring biometric identity verification.



A Certified Electronic Signature on the Smart ID Card – at the audit completion, about 13 years after it was stipulated in the law that the smart ID card would enable a resident wishing to do so to include a certified electronic signature, this option is not realized, since the Population Authority has not completed the preparation required to comply with the Privacy Protection Authority's requirements (Certification Authority Registrar). As a result, residents who are required to perform actions that require a certified electronic signature are forced to pay commercial parties for this service or alternatively go to a service bureau to perform actions requiring a signature.



The Transition to a Biometric Passport – at the audit completion, about a decade after the issuance of biometric passports began (in June 2013) for residents expressing a desire for them, and in an obligatory manner for all residents in July 2017, about 2.9 million residents, about 37% of all passport holders, still hold old-type passports that are easy to forge.





The Passage of Israelis at the Ben Gurion Airport


- From the Population Authority documents and visits, observations, and attempted passing through border points conducted by representatives of the State Comptroller's Office, gaps were found in the conduct of the Population Authority in implementing a procedure it established to block a breach enabling foreign and Israeli crime and terror elements to enter and leave the country. This is a genuine breach of border control.
- The audit raised that this was a risk that had materialized, and the report presented several examples of incidents where various people entered or left the country, taking advantage of the said vulnerability in border control. It should be noted that these examples do not represent the extent of the exploitation of this vulnerability since these are only instances that have been found. However, these incidents and the attempted crossing of the representatives of the State Comptroller's Office while taking advantage of the said vulnerability (an attempt that succeeded) are adequate to illustrate the risk and clarify that it is genuine and is well-known to the Population Authority. Moreover, these incidents raise the concern that this vulnerability is also known to those who seek to abuse it. It is impossible to know how many such instances have occurred thus far, what is the identity of the people who left the




country or entered it, and why they crossed while taking advantage of this vulnerability.

 **The Entry of Foreigners into Israel** – by the analysis of Border Control data and the representatives of the State Comptroller's Office observations, as well as a series of incidents in which foreigners entered Israel without being inspected as required, the working method at the Border Control regarding foreigners at Ben Gurion Airport is not consistent with the guidelines of the Border Control Administration and enables the entry of foreigners, without verification that their entry into the country should be approved. This report, therefore, exposes actual breaches in the entry of foreigners through Ben Gurion Airport.

 **Continued Issuance of Old-Type Passports, Easy to Forge** – from the end of the trial in June 2017 to the end of June 2022, half a million old-type passports were issued, about 10% of all passports issued during this period; In the first half of 2022, there was an increase in the number of old-type passports issued, and their rate was about 17%. Continuing to issue old-type passports (temporary passports and passports issued by Israeli embassies abroad) is not in line with the objectives of the transition to biometric documentation, and it even increases the risk that unauthorized people, including criminal and terrorist elements, will attempt to leave the country and enter it using a forged Israeli passport.

 **Issuing Passports at Israeli Embassies Abroad** – the project outline for issuing biometric passports by Israeli embassies abroad was formulated in 2015. Still, for seven years, until 2022, their issuance did not begin, and tens of thousands of old-type passports, which are easy to forge, are issued every year.

 **The Population Authority's Preparation for the Crowded Queues Following the Covid-19 Pandemic** – during the Covid-19 pandemic, a backlog accumulated in the issuance of about one million passports compared to the volume of issuance in 2019: at the end of 2019, before the outbreak of the Covid-19 pandemic, the percentage of Israelis who held a valid passport was more than 75%, while at the end of May 2022, the rate was only about 63%. This resulted in the formation of a heavy burden on the Population Authority, including difficulty in making appointments. It should be noted that the measures taken by the Population Authority to cope with the rising demand for passports in the post Covid-19 period, including opening a center for issuing temporary passports, expanding the hours of operation of the passport manufacturing production plant and bureaus, and recruiting personnel for this purpose. However, some of the measures have consequences manifested in a delay in the completion of the transition to the national biometric documentation (postponing the expiration date of the old-type ID cards by two years, increasing the scope of temporary passports, and extending their validity). Some have consequences for the Authority's actions (such as diverting personnel and reducing the Authority's enforcement actions).



🔴 Time Extension for Issuing Passports – it was raised that given the increase in demand for passports in the post Covid-19 period, the time the Population Authority undertook to send the passport was extended from three weeks to six weeks. Moreover, the Population Authority's passport production plant is equipped with outdated printers for issuing biometric passports, and the production dependent thereon does not meet the demand for biometric passports in an increase in demand. In November 2018, the Population Authority began procedures to examine the procurement of advanced printers to increase the number of passports produced and meet the population's demand for their supply. It was found that four years later (as of September 2022), the Population Authority still has not completed the process of replacing the printers in the passport-issuing production plant with advanced printers. Furthermore, the Authority does not have printers as backups to print biometric passports in the event of the shutdown of the issuing production plant. I.e., it will be impossible to issue biometric passports if the issuing production plant is shut down.


🔴 The Population Authority's Preparation for Future Crowded Queues at the Bureaus – in the next two years (2023–2024), the ID cards of 3.6 million residents are expected to expire (old-type ID cards and biometric ID cards whose validity is expected to expire). The holders of these cards are expected to come to the Population Authority bureaus to have new identification documents issued. This is in addition to the regular inquiries to the Authority's bureaus. That is, it is an average monthly increase of about 150,000 inquiries over the average inquiries per month in 2019 which was about 200,000 inquiries (an average monthly increase of about 75%). Even if there is some overlap between the rate of residents who regularly come to the bureaus and those who are expected to attend the bureaus in the next two years to issue new ID cards, this is a considerable increase, requiring preparation. It was raised that the response formulated by the Authority to the burden of inquiries expected in its bureaus in the coming years – placing self-service stations – will provide a partial response: the stations will not respond to the 3.9 million residents who, as of September 2022, do not have biometric identification documents (biometric passport or smart ID card); Furthermore, at this stage, the stations are not planned for providing service to minors with biometric identification documents.


🔴 The Population Authority's Facial Image Databases – alongside the national biometric database, the Population Authority has facial image databases of millions of residents in its information systems. Due to technological developments, facial images are of biometric quality, and therefore the possession of the databases is not consistent with the provisions of the law. Furthermore, these databases' protection level is less than that of the national biometric database. As of October 2022, about three years after the Commissioner of Biometric Applications first alerted about this issue, the Authority has not formulated a solution.

🔴 Preparing for the Procurement of the Technological Means Required to the Transition to a Database Based on Facial Images Only – for the National Biometric



Database Authority to be able to fulfill its role – prevention of identity fraud and double acquisition – it should be equipped with a biometric comparison system. In 2017, the law stipulated that upon the expiry of the temporary order³, the biometric database would be based on facial images only, and the fingerprints in it would be deleted. Still, it was raised that the existing biometric comparison system is unsuitable for this purpose. Even though in 2020, the Head of the Cyber Directorate determined that there are technological means suitable for basing the database on facial images only, it was in December 2022 that the National Biometric Database Authority published the first stage of a tender for the purchase of a biometric comparison system suitable for this purpose. According to the Ministry of Interior, the system is expected to be integrated in the fourth quarter of 2024.

 **Saving Fingerprints to Identify Victims of a Mass Casualty Incident** – alongside the stipulation in the law in 2017 that the national biometric database will be based on facial images and the fingerprints in it will be deleted starting in September 2020, the Ministers of Interior asked to examine whether it is necessary to save the fingerprints in the database to use them for a secondary purpose prescribed in the law – identification of victims in a mass casualty event. However, as of November 2022, about two years after the need to examine the secondary use of fingerprints was raised, the Ministry of Interior has not decided on the use of fingerprints, which as of December 2022, are still stored in the national biometric database.

 **Updating the Operating Doctrine** – in 2008, the operating doctrine for the national biometric documentation project was formulated, assuming that it would be valid for about a decade. At the audit completion about 15 years later, it was raised that the Ministry of Interior had not updated it. This is despite far-reaching changes in fundamental aspects affecting the project, including the Widespread proliferation of facial images on social media; A significant improvement in the capabilities of facial recognition technology, including the use of algorithms based on artificial intelligence, Expansion of online services that require secure remote authentication; Allowing passage using biometric passports at automatic stations at border crossings; The existence of significant barriers to the use of smart ID cards; Amendment to the law stipulating that the national biometric database will include facial images only; And the keeping of biometric databases of facial images by the Population Authority.



Measures to Leverage the Use of the Smart ID Card – to try to leverage the use of the smart ID card and remove the barriers that make use thereof difficult, the Population Authority decided to switch to the second-generation ID card (the chip in which can be accessed via an NFC device and therefore a card reader is not required for use thereof). In addition, in collaboration with the Population Authority, the Biometric





3 At first it was determined that the temporary order would be in effect until May 2022, and later it was extended until June 2023.



Applications Unit developed a prototype known as "Shomer Zahav," which enables verification of the resident's identity using the smart ID card. The development is intended to enable the entities authorized by law to perform biometric identity verification of a person offline against their certificate (such as at self-service stations – "kiosks").

Supervision of the Implementation of the Provisions of the Inclusion of Biometric Means of Identification Law – the Commissioner of Biometric Applications is established by the law as a supervisory body for implementing its provisions. The supervision carried out by the Commissioner of Biometric Applications raised gaps in several topics, and these gaps were presented to the public in periodic reports published by the Commissioner, leading to the promotion of this vital project.

Key Recommendations

-  It is recommended that the Population Authority encourage the public to replace the old-type identification documents in their possession even before they expire and that it clarifies to the public the inherent risk of continuing to use them as they are easy to forge.
-  The Population Authority, in cooperation with the National Digital Agency, the Ministry of Justice, and the Commissioner of Biometric Applications at the National Cyber Directorate, should urgently remove the legal and technological barriers that make using smart ID cards difficult, primarily the strict access control. Removing the barriers and increasing the number of bodies authorized to perform biometric identity verification against the smart ID card may improve the identification processes considerably and enable to realize the potential inherent therein.
-  The Population Authority should implement its procedure to resolve the vulnerability at the border control presented in the report regarding crossing using Israeli passports. However, given the warning from some of the professional elements of the Authority cautioning that even the solution in the procedure does not provide a sufficient response to the risk, the Authority should ensure without delay that the border control at Ben Gurion Airport is effective and mitigates the risks involved in the passage through the border crossings, against the considerations of congestion and queues, in particular, public security considerations and the need to prevent the entry and exit of unauthorized people.
-  The Population Authority, in cooperation with the Israel Security Agency, should quickly rectify the situation described in the report, which allows unauthorized foreigners to enter Israel at the Ben Gurion Airport, and to ensure that the Border Control process achieves its goals. It is recommended that the Authority formulate an updated procedure for border control at the Ben Gurion Airport regarding foreigners passing through it, anchor the procedure that will be established in its procedures, and ensure that all the parties comply



with it. It is also recommended that the Population Authority audit the activities of the Border Control Administration to ensure its operation under the established rules.

💡 Given the role of the Israel Security Agency in protecting against terrorist threats, given the risk posed by the entry of foreign terrorist elements into the country at the border crossings, and given the audit findings about vulnerabilities in the border control at Ben Gurion Airport, it is recommended that following an up-to-date risk analysis, ISA will examine, in consultation with the Population Authority, the need to amend legislation so that the Border Control Administration is included in the First Schedule to the Regulation of Security in Public Bodies Law, 1998, and so that it will be guided by the ISA⁴. This is while considering the entirety of security risks at the national level.

💡 It is recommended that the Population Authority formulate a detailed work plan to cope with burdens on the Authority's bureaus based on data regarding the expected inquiries (including 3.6 million applications for smart ID cards to replace cards whose validity is expected to expire in the next two years) compared to the processing capabilities of the bureaus and ensure that the planned solutions should respond to the public's inquiries, at a satisfactory level of service. This includes a recommendation that the Population Authority send a notice to the holders of identification documents whose validity is expected to expire so that they can make an appointment at the bureaus ahead of time; And that it will unify the renewal dates of the two biometric identification documents – ID card and passport. This is to ease future burdens and improve the service to the public so that they are required to come only once to renew their identification documents.

💡 To ensure the response to the demand for issuing biometric passports at peak times and to improve the service to the public, it is recommended that the Population Authority complete the purchase of the advanced printers for the biometric passport production plant and integrate the use thereof. It is also recommended that the Population Authority place printers as backups to ensure functional continuity if the issuing production plant is shut down.

💡 The Population Authority, with the assistance of the Ministry of Justice, should regulate the possession of its biometric facial image databases from the legal aspect, or it should delete the databases while addressing the need raised by the Authority to identify the service applicants, for example by forming an outline enabling reliance on the information stored in the national biometric database. This is subject to maintaining privacy protection and information security. Furthermore, the Population Authority should protect the databases above in its possession according to their degree of sensitivity.

💡 Since the law stipulates that the national biometric database will be based on facial images only, the fingerprints in the database are "excess information." Once the Ministry of Interior reaches a decision regarding the need to continue keeping the fingerprints in the biometric

⁴ This is in addition to the guidance of the Population Authority by the Cyber Directorate, stipulated in the Fifth Schedule to the Regulation of Security in Public Bodies Law, 1998.



database to identify victims in a mass casualty event, it should consult with all relevant parties regarding the national biometric database and consider the following aspects: can the fingerprints be left in the database for secondary use only, once it was determined that the fingerprints are not necessary to achieve the main objective of the law – preventing impersonation and double acquisition; What is the added value of the use of the fingerprints in the database over the use of the facial images stored therein; And in particular considering that these are fingerprints of only two digits, taken in a specific position, which may affect the ability to use them (straight and not rolled position); Since the amendment of the provisions of the law (in July 2022), less than one percent of applicants wishing to issue biometric identification documents, requested that their fingerprints be kept in the database (in the months of August-October 2022, the fingerprints of 197 residents out of approximately 276,000 residents were transferred to the database for their storing); And whether fingerprints are collected for this in other places around the world. Moreover, given the public sensitivity concerning the very existence of the national biometric database, it is recommended that the Ministry of Interior's decision and the legal and professional considerations underlying it be made public.



It is recommended that the Ministry of Interior, including the National Biometric Database Authority, ensure the transition to the biometric comparison system that will enable the database to be based on facial images only as soon as possible. It is also recommended that, if necessary, the Ministry of Interior and the Authority initiate an appeal ahead of time to the Joint Knesset Committee⁵ to request another extension of the temporary provision. The need to promote the necessary actions is highlighted given the experience regarding the existing biometric comparison system, where there were considerable delays in the tender process for its purchase and implementation – four years have passed from the date of the engagement until it became operational.



To the extent that the Ministry of Interior resolves to expand the powers of the National Biometric Database Authority, it is recommended to involve the Privacy Protection Authority, the National Cyber Directorate, and the Commissioner for Biometric Applications in the procedures for formulating the proposed government resolution and the legislative amendments. This ensures that the Authority's activity considers the need to maintain information security and privacy protection. It is also recommended that the expansion of the authority of the National Biometric Database Authority, to the extent as long as it is decided, be done under the supervision of the Commissioner for Biometric Applications, whose role is to supervise the implementation of the provisions of the law and lead the national policy on biometric applications and secure identification.

⁵ The Joint Knesset Committee of the Constitution, Law and Justice Committee, the Interior and Environmental Protection Committee and the Science Committee, pursuant to the Inclusion of Means of Biometric Identification and Biometric Identification Data in Identification Documents and in a Database Law (the Joint Knesset Committee).



The National Biometric Documentation Project concerns various entities, including the Population Authority (the Population Authority bureaus and the Border Control Administration), the National Biometric Database Authority, and the production plants issuing the biometric identification documents. It is recommended that the Ministry of Interior form an updated operating doctrine that will address all the aspects related to the national biometric documentation with the participation of all the parties involved in the process and the risks and vulnerabilities raised in this audit report.

The Use of the Layers of the Smart ID Card for Identification



Physical layer

Visual identity verification against the printed image



Negligible

Electronic layer

Identity verification using the demographic data on the chip



Negligible

Biometric layer

Identity verification using the biometric data on the chip



Electronic signature

Verification of the identity of the message sender and ensuring its contents are unaltered





Summary

Reliable identification documents are critical to a wide range of operations in the government and business sectors. About a decade before the audit completion, in 2013, a transition to biometric identification documents began in Israel to enable secure identification, including remotely. The biometric identification documents are supposed to replace the old type of identification documents, which are considered easy to forge, may be used by terrorists or criminal elements, and may also be used for illegal immigration purposes. The period of the Covid-19 pandemic, during which there was a considerable increase in the use of digital channels, also for receiving services from government branches, highlighted the importance of secure identification in cyberspace.

The findings of this report raised substantial deficiencies in several main areas: a significant delay in the transition to biometric national documentation and the lack of use thereof; The existence of breaches in the entry and exit of Israelis and foreigners through Ben Gurion Airport; Disparities in maintaining biometric data; And the difficulty in coping with the demand increase for issuing biometric identification documents.

The Population Authority stated, regarding the breaches in the passage of foreigners and Israeli residents at Ben Gurion Airport, that there was indeed no strict adherence at Ben Gurion Airport to follow the procedures, and several measures were decided upon for addressing the issue.

Given the importance of the audit findings, it is recommended that the Population Authority rectify the deficiencies raised in the report and that the Minister of Interior ensure that the deficiencies in the areas above are indeed rectified, including deficiencies in information security and data protection in coordination with the professional bodies entrusted with the matter: the Israel Security Agency, the Police and the National Cyber Directorate.

Recently, there have been far-reaching changes in the national biometric project, Including a considerable improvement in the technological capabilities of biometrics. The use of online services that require secure identification has significantly increased. Completing the transition to biometric national documentation while removing the legal and technological barriers that make use complex and adapting the project to the changes in recent years may leverage the use of biometric identification documents and is expected to bring considerable benefits in defense, the economy, and public service.