VIS Technical Report (2021-2023)
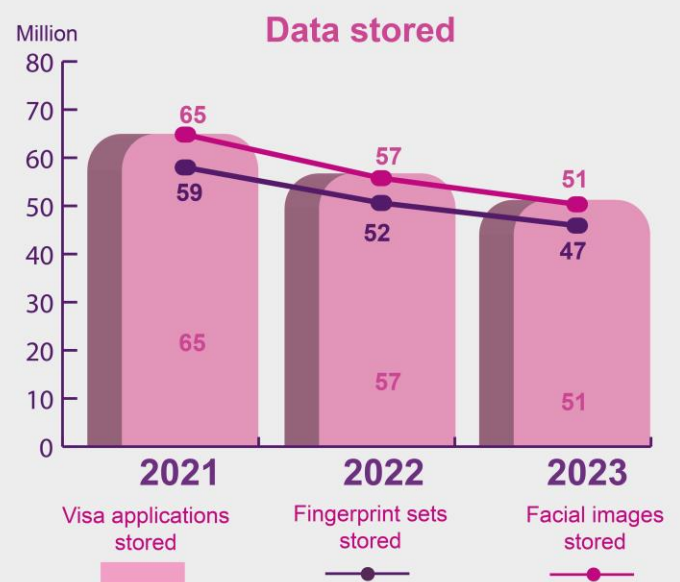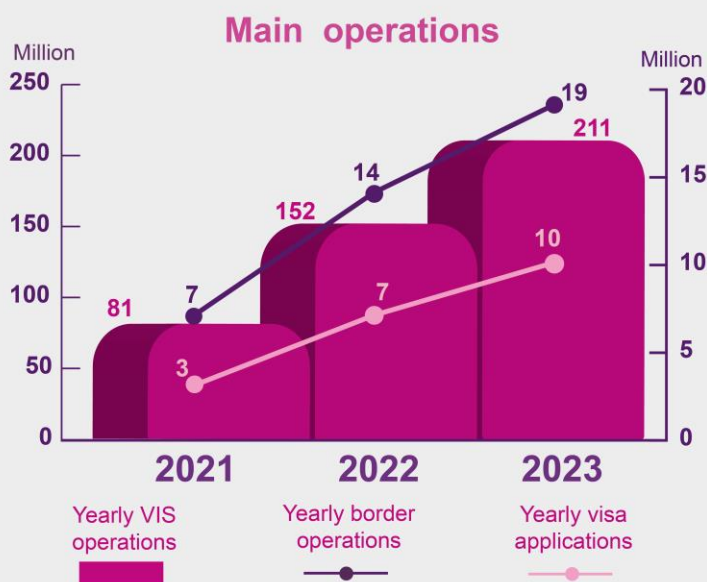# August 2024

Contents

EXECUTIVE SUMMARY

July 2021 Adoption of new VIS Regulations (Regulation (EU) 2021/1133 & Regulation (EU) 2021/1134):

- **Long-stay visas** and residence permits alongside **short-term visas**.
- Ensure **interoperability** to other relevant EU IT-systems (between VIS and EES, VIS and ETIAS).
- Innovations to the system including the **migration of the BMS to sBMS**.

Entry into operation of the Revised VIS is **set to be completed in 2026**.

Usage trends

Main operations

Million / Million

	2021	2022	2023
Yearly VIS operations	81	152	211
Yearly border operations	7	14	19
Yearly visa applications	3	7	10

- Yearly VIS operations
- Yearly border operations
- Yearly visa applications

Data stored

Million

	2021	2022	2023
Visa applications stored	65	57	51
Fingerprint sets stored	59	52	47
Facial images stored	65	57	51

- Visa applications stored
- Fingerprint sets stored
- Facial images stored

Availability

99.98%
2021

99.63%
2022

99.97%
2023

Projects

- VIS is the first system **database** to be **migrated** from VIS Business Database to the **Common Shared Infrastructure (CSI)**. A step in the direction of interoperability, it ensures a common platform for legacy systems.

- VIS integration with I**nteroperability components is set to be completed** by the end of 2026.

- **VIS-sBMS** functional **integration was completed in 2022**. In Jan 2023 sBMS was deployed on compliance testing, and playground environments.

New users

July 2021 Bulgaria and Romania connected to VIS for **passive (read-only)** access. Full inclusion in the Schengen acquis in March 2024.

December 2022 Croatia **full application of the Schengen acquis**. All border crossing controls lifted by March 2023.

October 2022 Europol **connected** to VIS.

1. Introduction

The Visa Information System (VIS) is an indispensable part of the Schengen acquis, being the technical solution connecting Member States[1] and consulates in non-EU countries with all external Schengen border-crossing points. The system streamlines visa verification at external border-crossing points and facilitates the work of the Member States' consular authorities in managing visa applications for entering and transiting the Schengen Area.

The VIS deployment phases began in 2011 and the system has been operational worldwide since February 2016. Since 1 December 2012, eu-LISA (the 'Agency') has been in charge of the operational management and further development of the central system. The central VIS system is operated in close coordination with the Member States and the European Commission. In this respect, the **eu-LISA Management Board (MB)** and the **VIS Advisory Group (AG)** meet regularly – the former three times a year, the latter four times a year – to discuss, among others, system availability and performance, the approval of proposed changes, and the release of future developments.

The Visa Information System uses a **Biometric Matching System (BMS)** to store fingerprints and facial imaging[2] connected to visa applications and related decisions. The BMS allows Member States' border authorities to identify and verify, through fingerprints alone, third-country nationals holding a Schengen visa and travelling to the Schengen Area. The system simplifies visa application procedures, makes it easier to identify internal security threats, and prevents 'visa shopping' fraud by storing a precise history of individuals' applications and decisions.

In July 2021, new Regulations revising VIS were adopted[3]. The new legal basis added a significant number of functionalities to the system, expanding its initial remit. Most importantly, the scope of the system was broadened to include **long-stay visas and residence permits** alongside the previous focus on **short-term visas**. Additionally, the revision ensures **interoperability with other relevant EU IT systems**, most notably between **VIS and EES**[4], and between **VIS and ETIAS**[5]. These Regulations bring many innovations to the system, including the migration of the BMS to sBMS, which will happen once EES is in operation.

This report is published every 2 years and submitted to the European Parliament, to the Council and to the Commission[6] in line with Article 50(3) of Regulation (EC) No 767/2008[7] and Article 17(3) of Council Decision 2008/633/JHA[8]. It covers the period from **1 October 2021 to 30 September 2023**, and details the technical functioning of the VIS central system, providing an overview of operational management activities during the reporting period. The report includes data provided by Member States on use of VIS[9], and the requirement for and use made of Article 4(2) of the VIS Decision.

During the reporting period, VIS's overall usage grew steadily to rates closer to the period preceding the COVID-19 pandemic. In **2022, yearly operations[10] increased by 88% compared to 2021**. Similarly, **in 2023**, activity continued to grow, marking a **39% increase over the previous year**. Despite this increase, VIS operations have not returned to pre-pandemic levels yet, with 2022 and 2023 operations 48% and 28% lower respectively compared to 2019.

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[1] 'Member States' refers to the EU and Schengen-associated countries connected to VIS, unless otherwise specified. At the end of the reporting period, connected Member States of the EU were: Austria, Belgium, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia, Slovakia, Spain and Sweden. Connected associated countries: Iceland, Liechtenstein, Norway and Switzerland. During the reporting period, Romania and Bulgaria had read-only access to VIS. Their access changed in spring 2024 following Council Decision (EU) 2024/210 of 30 December 2023. Controls at sea and air borders were lifted from 31 March 2024.
[2] Facial images are not used for biometrics matching.
[3] Regulation (EU) 2021/1133 as regards the establishment of the conditions for accessing other EU information systems for the purposes of the Visa Information System; Regulation (EU) 2021/1134 for the purpose of reforming the Visa Information System; Regulation (EU) 2021/1152 as regards the establishment of the conditions for accessing other EU information systems for the purposes of the European Travel Information and Authorisation System.
[4] For more information on the Entry/Exit System (EES) see https://travel-europe.europa.eu/ees_en.
[5] For more information on the European Travel Information and Authorisation System (ETIAS) see https://travel-europe.europa.eu/etias_en.
[6] Previous issues are available on eu-LISA website: **https://www.eulisa.europa.eu/our-publications/reports.**
[7] Official Journal of the European Union, L 218, 13 August 2008, hereinafter the 'VIS Regulation'.
[8] Official Journal of the European Union, L 218, 13 August 2008, hereinafter the 'VIS Decision'.
[9] As per Article 50(6) of the VIS Regulation and Article 17(5) of the VIS Decision.
[10] VIS operations are: AddBiometricData, AuthenticateByFingerprint, CheckFingerprintQuality, CopyBiometricData, CorrectApplicationDecision, CorrectVisaCreationDecision, CorrectVisaDecision, CreateApplication, CreateApplicationDecision, CreateApplicationWithSearchByFingerprint, CreateVisaCreationDecision, CreateVisaDecision, DeleteApplication, DeleteBiometricData, DeleteDecision, ExecuteAdHocReport, ExecuteUsageAdHocReport, GroupApplications, LinkApplication, ListApplicationsInDossier, ListApplicationsInFamilyGroup, ListApplicationsInGroup, ListBiometricData, ListFacialImageData, ListVisaInGroup, Retrieve, RetrieveApplicationWithFullDecisionHistory, RetrieveAuthority, RetrieveBiometricData, RetrieveFacialImageData, Search, SearchByFingerprint, UngroupApplications, UnlinkApplication, UpdateApplication and UpdateAuthority.

The number of visa applications stored, and accordingly fingerprints and facial images stored in the system, continued to show the impact of the COVID-19 pandemic. This is because no or few new applications were stored in the system at the height of the pandemic, whereas at the same time, automatic deletion continued as a result of the retention policy. The VIS stores information for five years. The period for data storage begins:

○ On the expiration date of a visa, if a visa has been issued.
○ On the new expiration date of a visa, if a visa has been extended.
○ On the date of the creation of the application file in VIS, if the application has been withdrawn, closed, or discontinued.
○ On the date of the decision of the visa authority, if a visa has been refused, annulled or revoked.

2021

59 million
fingerprint sets stored

65 million
facial images stored

65 million
visa applications stored

2022

52 million
fingerprint sets stored

57 million
facial images stored

57 million
visa applications stored

2023

47 million
fingerprint sets stored

51 million
facial images stored

51 million
visa applications stored
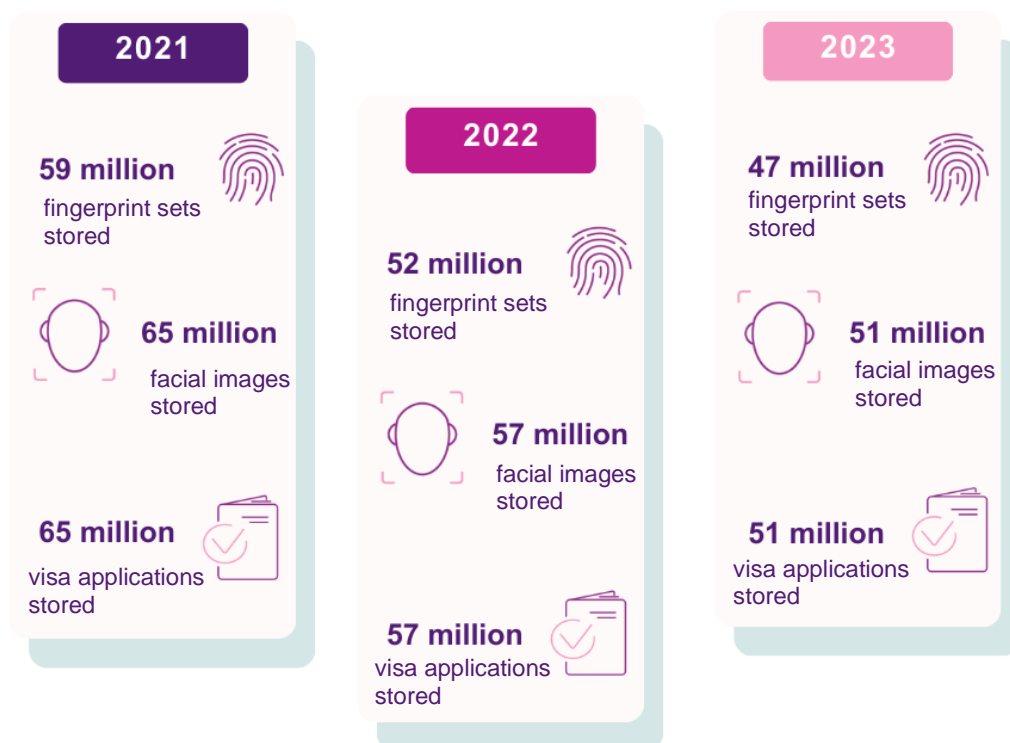
2. Operational management of VIS

VIS consists of the Central VIS (CS-VIS), the Backup Central Unit (BCU)[11], a national interface (NI-VIS) in each Member State connected to VIS, and the communication infrastructure (VIS mail)[12]. The CS-VIS includes the **Biometric Matching System (BMS)**, which is a subordinate automated fingerprint identification system (AFIS) responsible for biometric operations entering into play depending on the specific VIS operation requested.

eu-LISA is responsible for the operational management of CS-VIS and certain aspects of the communication infrastructure 24/7. **The operational management** is done in close coordination with the **Member States** and **the Commission**. In performing the operational management of VIS, the Agency has been steered by the Management Board (MB) and the VIS Advisory Group (VIS AG) [13], which play an important strategic role. The role of the VIS AG is to provide the MB with expertise related to VIS. Each Member State is responsible for implementing, operating and managing its own national system.

The maintenance in working order (MWO) framework contract covers the provision of services related to corrective, adaptive, preventive, perfective and evolutive **maintenance** of the Central VIS, the BMS, the VIS Mail System, devices shared between VIS and SIS[14], and associated services and technical support to the Member States. eu-LISA is responsible for the operational management of the Central VIS and the BMS. Meanwhile, the MWO contractor is responsible for the performance of the system, any dysfunction or degradation in the performance of services, and complementary maintenance needed to overcome and solve such dysfunctions or degradations.

During the reporting period, the old VIS MWO contract expired and new contracts were signed. eu-LISA is doing its best to ensure business continuity between the old expired MWO and the new framework contracts in place. The handover and operations are currently managed under the new framework contracts, which no longer cover only one system, but are of a transversal nature (the **Transversal Engineering Framework** (TEF) and the **Transversal Operations Framework** (TOF)).

eu-LISA is also responsible for **the technological and functional development** of the VIS central system. Developments and changes are analysed and formalised within **the Demand Management Process**, and then discussed and approved by the VIS Advisory Group.

2.1. Performance and availability

During the reporting period, the overall technical performance of the VIS central system and BMS was in line with the service-level agreement (SLA).

- Performance and availability in 2021 remained within the targets specified in the SLA. The availability indicator[15] was 99.98% and the response time performance was 99.9%. In the last 3 months of 2021 covered by the reporting period, there was one incident reported, on 21 November: there was an issue during the planned downtime for adaptive maintenance, and the downtime had to be extended, totalling 3 hours.

The availability of the VIS central system was 99.63% in 2022, and the response time performance indicator was 99.70%. In addition to the planned unavailability in the context of release deployment, two incidents were recorded:

- On 1 January 2022, the BMS encountered a bug related to the change of year, which resulted in the biometric service being completely unavailable for 21 hours and 59 minutes. Services related to VIS were impacted for 1.5 hours due to a switchover to the backup central unit and a switchback to the central unit after troubleshooting, and a tentative plan to restore BMS service.

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[11] The backup site is located in Sankt Johann im Pongau (Austria), and ensures all the functionalities of the principal CS-VIS in the event of failure or planned maintenance of the system. Data contained in the CU and BCU are kept synchronised at all times, guaranteeing business continuity.
[12] As per Article 1(2) of Council Decision 2004/512/EC.
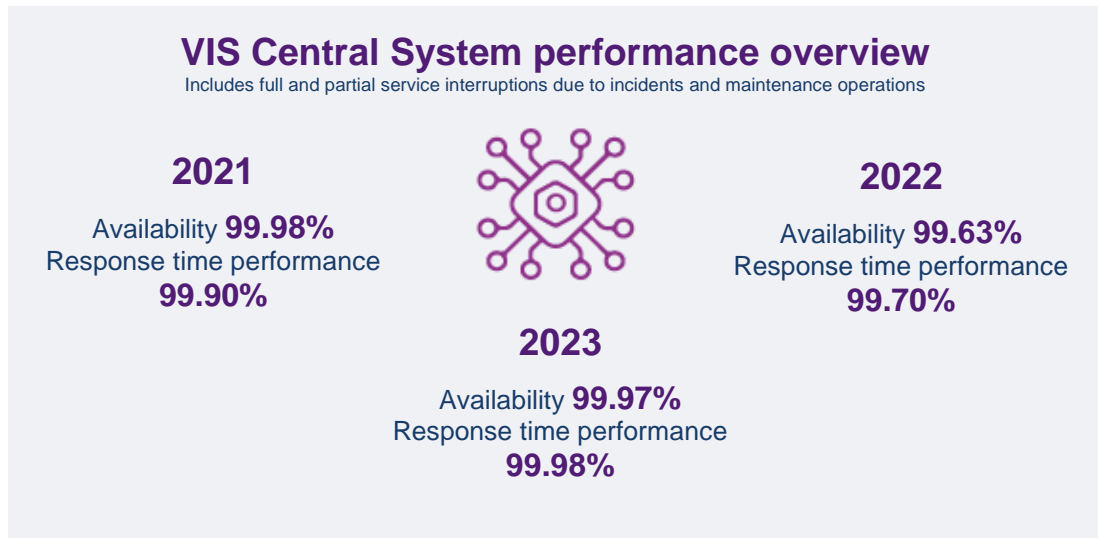[13] Both forums are made up of representatives of Member States and the European Commission.
[14] Schengen Information System.
[15] This indicator includes partial and full service interruptions due to either incidents or maintenance.

- On 14 October 2022, VIS faced a severe degradation in performance triggered by a faulty storage disk. Although the service was available, it was not compliant with the service-level agreement. In order to restore performance, a switchover to the backup central unit was performed, resulting in 30 minutes of VIS/BMS downtime.

The VIS experienced no incidents in 2023; the only recorded unavailability of the system was caused by planned maintenance operations. The availability indicator was 99.97% and the response time performance was 99.98%.

VIS Central System performance overview
Includes full and partial service interruptions due to incidents and maintenance operations

2021
Availability **99.98%**
Response time performance **99.90%**

2022
Availability **99.63%**
Response time performance **99.70%**

2023
Availability **99.97%**
Response time performance **99.98%**

2.2. Testing activities and releases

eu-LISA is responsible for coordinating tests, determining test requirements, and planning. Before each release is deployed, extensive testing campaigns are carried out. The deployment and release activities are planned and carried out in such a way as to minimise the impact on the operational activities of the systems, with special attention paid to their performance and availability. During the reporting period, eu-LISA supported the Member States in a variety of testing activities, ensuring that VIS functions properly, as required by the VIS Regulation.

In order to better support Member States during testing, in the Management Board endorsed a proposal by the Agency concerning the VIS testing environment and to include it in the Single Programming Document 2020-2022. The testing platforms, which went live in spring 2022, increased availability, reliability and agility for operational support, significantly improving incident resolution and service recovery time for the benefit of all Member States.

RELEASE 2022_ADP

Release type
Adaptive

Objective
Upgrade firmware and apply patches on multiple components of VIS-BMS infrastructure

EiO switchover/switchback date:

8 MARCH / 20 APRIL 2022

RELEASE 2022_R1

Release type
Adaptive/corrective

Objective
Solve defects on CS reported by MSs; apply security patches and preventive changes

EiO switchover/switchback date:

16/31 MAY 2022

RELEASE 2023_R1 (VIS-BMS)

Release type
**Adaptive/corrective/perfective**

Objective
Provide corrections for VIS and BMS, and implement a perfective change and security patches on VIS

EiO switchover/switchback date:

17 MAY / 13 JUNE 2023

During the reporting period, eu-LISA deployed three releases of adaptive, corrective and perfective maintenance. The main focus of the releases, with the respective dates of entry into operation (EiO), are shown in the graphics above.

2.3. Monitoring and quality of service

Central VIS monitoring is carried out at the operational centre in Strasbourg by the eu-LISA Service Desk, operational 24 hours a day, 7 days a week. The **eu-LISA Service Desk** is the entry point for users' reports of incidents[16] and for requests for information or technical advice and support. eu-LISA provides a single point of contact through the Service Desk function, **where users can report incidents and request services**.

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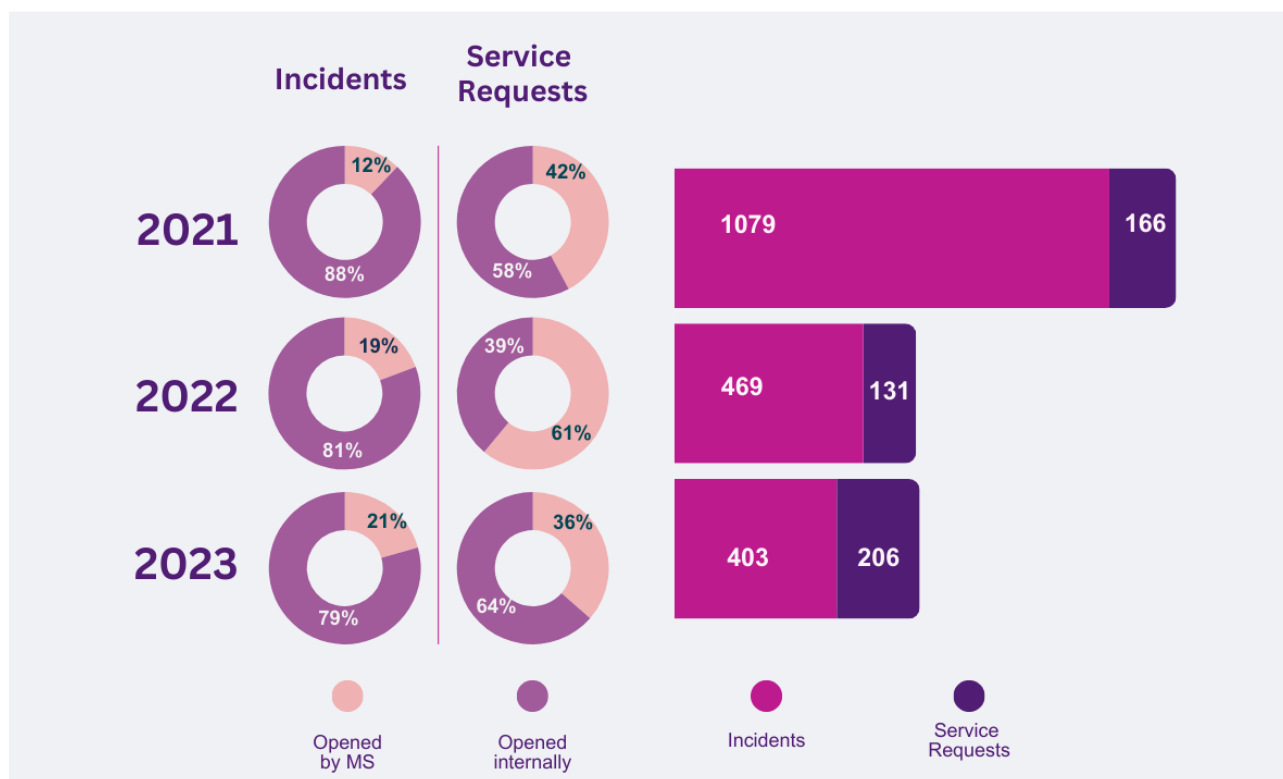
[16] An incident is opened by the service desk following an exchange/interaction with Member States or following eu-LISA monitoring activities (abnormal observations). The impact, urgency and priority of the incident are defined at this first stage. Throughout the process, eu-LISA technical staff review the status and priority by assessing the severity of the incident.

All requests and incidents are registered in a central incident management tool (SM9) for follow-up. The relevant assistance is provided based on the initial analysis, and then the impact, urgency and priority are defined. The most commonly reoccurring types of ticket were opened in relation to VISMAIL, the TEB testing environment, and general alerts and statistics regarding the central system. As expected, eu-LISA opened the majority of incident-related tickets, while service requests are mostly opened by Member States. The majority of tickets are opened in relation to incidents.

2.3.1. The VIS customer satisfaction survey

Each year, for the systems that eu-LISA manages, **Member States are asked to evaluate** the eu-LISA Service Desk, incident and problem management, operational communication, technical assistance, support for national activities, and release management. The exercise is carried out via a customer satisfaction survey and is presented to the VIS Advisory Group.

- In 2021: **26 out of 26 Member States** took part in the survey and the satisfaction rate was **94%**
- In 2022**: 20 out of 26 Member States** took part in the survey and the satisfaction rate was **97.5%**
- In 2023: **21 out of 26 Member States** took part in the survey and the satisfaction rate was **96%**

Participation in the survey has steadily increased over the years, reaching 100% in 2021 before decreasing by a few points in the following years. Member States' feedback in the customer satisfaction surveys helps the Agency fulfil its commitment to stakeholders. Once the survey is completed and results are presented, the Agency prepares an action plan to cover comments and areas for improvement.

▼ **Figure 1 – VIS satisfaction and participation, 2014-2022**
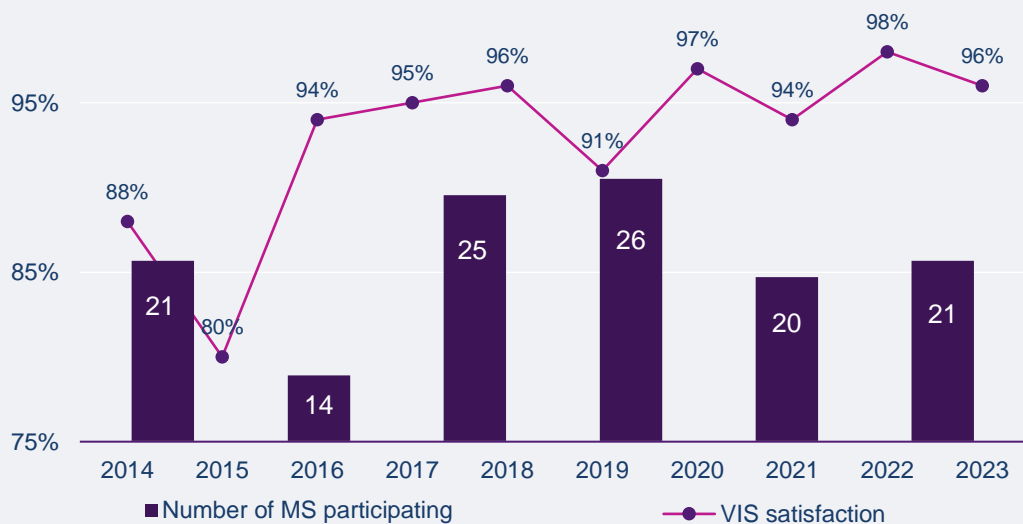
2.4. Completed projects

During the reporting period, several projects and activities were conducted on VIS and the BMS in addition to the central system developments and releases mentioned above. The following sections give an overview of the most important projects that have been completed or worked on.

2.4.1. Database migration to the CSI

In 2021 the Agency **successfully migrated the VIS Business Database to the Common Shared Infrastructure (CSI)**. The CSI platform is a step in the direction of interoperability, as it ensures a common platform for legacy systems previously managed and operated in silos. The migration of system components to the CSI was an important step contributing to the more efficient and standardised use of infrastructure resources. Additionally, the Agency migrated the VIS Mail system onto the CSI.

VIS was the first system to be migrated; it will be followed by the migration of EURODAC and SIS II. Some components of the VIS are maintained in the legacy infrastructure until the Revised VIS, which will be built directly on the CSI platform, along with all new systems. The legacy VIS will be decommissioned by 2027.

2.4.2. Annexation and new VIS users

During the reporting period, the Schengen acquis was extended partially to some Member States and fully to others – including connection to VIS.

On 26 July 2021, **Bulgaria and Romania were successfully connected to VIS for passive (read-only) access**. Passive access enables Member States to view visa applications and access VIS mail services, allowing them to verify the authenticity of Schengen visas issued by other Member States and supporting them in the implementation and future usage of EES. Passive access includes all variants: Consular, Border, Territory, Asylum and Law Enforcement. Bulgaria and Romania's integration followed a series of successful technical tests that were required to connect to the system. Moreover, 2023 marked the set objective to complete the full application of the Schengen acquis to Bulgaria and Romania from spring 2024. For this reason, the Agency closely followed progress in view of the technical implications on VIS and other systems[17].

On 8 December 2022 the JHA Council approved the **full application of the Schengen acquis in Croatia**[18]. Border controls at internal land and sea points were lifted on 1 January 2023, followed by internal air borders on 26 March 2023. The decision included full access to the use of VIS from 1 January 2023. Close collaboration between Croatia and eu-LISA ensured a successful transition on schedule. Croatia had already completed VIS and VIS Mail tests in 2016 and 2017, but these were repeated once again in November and December. Additionally, the Agency organised training for Croatian VIS operators.

On 6 October 2022 **Europol** also connected to VIS and started querying the system. This access, similar to the Member States' law enforcement authorities, allows Europol to identify victims of crime and make progress in their investigations.

2.5. Ongoing projects

During the reporting period, several projects were underway to update and improve VIS, with particular regard to the implementation of the Revised VIS Regulation adopted in July 2021, which adds new functionalities and other changes to the system. In addition, preparations for VIS to connect to EES steadily progressed, as did Interoperability.

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[17] In accordance with Council Decision (EU) 2024/210 of 30 December 2023, Romania and Bulgaria were fully included in the Schengen acquis from 31 March 2024, when checks on persons at internal air and maritime borders were lifted.
[18] Council Decision (EU) 2022/2451 of 8 December 2022 on the full application of the provisions of the Schengen acquis in the Republic of Croatia.

2.5.1. Revised VIS project

The Revised VIS Regulation requires significant changes to both the business processes and central system. At the beginning of 2022, eu-LISA launched two projects towards the system's update according to the new legislation: the **Revised VIS project** and **VIS Interoperability**. In June 2022, the Management Board invited the Agency to explore the possibility for closer integration of the timeline for the implementation of VIS Recast into the overall Interoperability timeline. In September 2023, the VIS AG adopted the opinion recommending merging the **Revised VIS and VIS-IO programmes**.

As part of the **Revised VIS project**, the system is being redesigned to accommodate for functions such as **long-stay visas and residence permits**. In the first few months following the launch of the project, eu-LISA took stock of the requirements and prepared the business use cases. By October 2022, the Interface Control Document (ICD) was prepared together with the Member States and the Commission. The Agency also provided technical support to the Commission in preparing secondary legislation: on the conditions for operating the web service and data protection[19], on the collection of data by Member States and Europol[20], on quality compliance checks and standards[21], and on the list of occupations[22].

The implementation of the VIS active-active architecture is also ongoing as part of the Revised VIS' development. This is set to be completed by the end of 2026.

2.5.2. VIS Interoperability project

The **VIS Interoperability project** was the second project launched in January 2022 and was subsequently merged with the Revised VIS project. The system is to be upgraded to ensure that it fulfils its critical role through its interoperability with other JHA systems firstly with **Entry-Exit System (EES)** and **the European Travel Information and Authorisation System (ETIAS),** and later with **the Schengen Information System (SIS), the European Criminal Records Information System – Third Country Nationals (ECRIS-TCN), European Dactyloscopy (Eurodac).** VIS will also be connected **Common Identity Repository (CIR), European Search Portal (ESP), Multiple Identity Detector (MID) and Central Repository for Reporting and Statistics (CRRS). VIS's integration with Interoperability components is set to be completed by the end of 2026.**

- As per the **VIS-EES Interoperability** provisions, the systems will be connected to each other, streamlining the efficiency of border checks. The interoperability between the two systems is designed to allow authorities to retrieve visa related information from VIS and import it to EES, and to consult EES when processing visa applications.

  In September 2023, the Management Board supported the revised Interoperability Roadmap presented by the Agency. Following that, eu-LISA presented the revised roadmap to the Justice and Home Affairs Council in October 2023, which endorsed it. As per the revised roadmap, **the entry into operation of EES was moved to autumn 2024**, with the EES Core full-scope release by the end of January 2024. Mitigation measures were taken to avoid or minimise possible delays, with testing continued and advance preparations made at national and central level, in cooperation with Member States.

  At the start of 2022, eu-LISA developed the **microservices** that enable VIS-EES interoperability by establishing a shared channel. Additionally, throughout the reporting period, a joint VIS-EES Testing Expert Group focused on **configuring the different environments to ensure smooth end-to-end testing**.

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[19] Commission Implementing Regulation (EU) **2022/1409 of 18 August 2022** concerning the detailed rules on the conditions for the operation of the web service and data protection and security rules applicable to the web service, as well as measures for the development and technical implementation of the web service and repealing Implementing Regulation (EU) 2021/1224.
[20] Commission Implementing Decision (EU) **2022/2366 of 2 December 2022** on laying down the specifications for a technical solution to facilitate the collection of data by Member States and Europol for the purpose of generating statistics on the access to the VIS data for law enforcement purposes.
[21] Commission Implementing Decision (EU) **2022/2413 of 5 December 2022** on the mechanism and the procedures for carrying out quality checks and appropriate requirements for data quality compliance, and the specification of quality standards pursuant to Regulation (EC) No 767/2008 of the European Parliament and of the Council.
[22] Commission Delegated Regulation (EU) **2023/1177 of 5 April 2023** supplementing Regulation (EC) No 767/2008 of the European Parliament and of the Council as regards the predetermined list of occupations for the purposes of the Visa Information System.

- Similarly, eu-LISA started working to achieve **VIS-ETIAS interoperability**. To enable the simultaneous querying of VIS and the European Travel Information and Authorisation System (ETIAS), Interoperability connection will be established between VIS and the European search portal (ESP). Moreover, the ETIAS software will enable the ETIAS CU and ETIAS NU to exchange information for the analysis of specific security threats. By September 2023, the business use cases and requirements were ready, as was the VIS-ETIAS ICD specifying the operations that VIS will share with ETIAS, in order to allow the required queries. Additionally, work on the high-level design, the Security Plan and the Business Continuity Plan has started.

- Regarding the Interoperability with **CIR, ESP, MID and CRRS**, the Agency began collecting requirements and prepared the business use cases and the relevant ICD. The first versions of the technical documents were submitted to the Member States and approved. Likewise, the Agency began defining and specifying a common interface between VIS and the Central Repository for Reporting and Statistics (CRRS).

2.5.3. Development of the sBMS

In order to achieve interoperability, the BMS is set to be replaced by the shared Biometric Matching Service (sBMS). The sBMS will enable biometric data queries to be delivered across different JHA information systems by sharing them in the Common Identity Repository (CIR). As such, it is one of the cornerstones of the EU's internal security and border management system. VIS will be the first system to use the sBMS once it is available.

The **VIS-sBMS functional integration was completed in 2022**, and several tests were carried out in preparation for data migration. In 2023, the Agency kicked off preparations for the migration of the VIS biometric search functionality to the sBMS, and this was still ongoing by the end of the reporting period. Data migration from BMS to sBMS was planned for the first half of 2024.

At the end of January 2023, eu-LISA **deployed sBMS on all compliance testing and playground environments** in May 2023, and made them available to all Member States in June.

The European Data Protection Supervisor (EDPS) approved eu-LISA using part of the VIS operational data to test the accuracy of the sBMS. As these tests were particularly relevant for the proper functioning of the interoperability architecture, it was important to have operational data used for them.

In collaboration with Sweden, the Agency carried out and completed the **sBMS User Software Kit (USK) VIS pilot project**. This project aimed at improving the processes involved in issuing and checking visas, in particular when testing tools for biometric quality assessment. The analysis showed that the quality strategy used in the sBMS user software kit (USK) would improve the capture process. In addition, the project validated the overall quality of the facial-image datasets.

2.6. Additional projects

2.6.1. Outcome of the eVISA Prototype project: European Visa Application Portal

In 2019, the European Commission, supported by eu-LISA and 23 Member States, launched the e-VISA prototype project to test the feasibility (design and development) of an EU online visa application platform and to provide a usable prototype. The development of the prototype was finalised in June 2021, demonstrating successful results. Afterwards, Member States tested the prototype extensively in assisted and unassisted testing sessions. The prototype's development process consisted of three steps: user journeys (for applicants, the central authority and consulates), mock-up delivery and tests, and delivery and testing of the prototype. The prototype was also found to be successful in end-user testing, showing acceptance and benefits of such an online visa application portal. The outcomes of the pilot project helped the European Commission to prepare a legal proposal for visa digitalisation.

On 27 April 2022, the Commission submitted a legislative proposal aimed at digitalising the visa procedure. In November 2023, the European Parliament and the Council adopted a Regulation on the rules to **digitalise the Schengen visa procedure. eu-LISA is tasked with the** setting up and operation of the **EU Visa Application Platform (EU VAP)**[23]. All applications for Schengen visas will be made through this platform – including uploading relevant documents, and visa fee payments – which will forward them to the relevant national visa systems. Under the new rules, visas will be issued in digital format as a cryptographically signed 2D barcode, replacing visa stickers. This will reduce security risks related to counterfeit and stolen visa stickers.

2.7. Training

eu-LISA provides training for relevant national authorities in the Member States and EU agencies on the technical use of all the large-scale IT-systems it manages, and the new upcoming systems, including interoperability components. Training sessions are organised as face-to-face events and via the Agency's e-Learning platform (online courses and webinars). The latter have grown considerably in the last 4 years, becoming the main channel for training delivery.

During the reporting period, eu-LISA made **significant progress in further developing the training portfolio, its implementation methods and collaboration with stakeholders.** In 2022-2023, **the eu-LISA Learning Management System (LMS) was revamped** following feedback from stakeholders and an external evaluation. The platform underwent a major technical upgrade, and outdated materials were archived. This benefits the users of all systems managed by eu-LISA, including the VIS community.

The training approach was further enhanced by **adopting a clear, profile-based approach**. Thought the reporting period, eu-LISA provided **eight training activities**[24] **specifically for the VIS community: overall, participation was sustained and satisfaction was high**.

The Agency piloted the 'virtual classroom' delivery method, including scenario-based challenges and real-time simulations. Moreover, emerging training needs were promptly addressed. For example, support was provided to Croatia for onboarding and to Europol Single Point of Contact (SPoC) in VIS incident and request management.

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[23] Regulation (EU) 2023/2685 of the European Parliament and of the Council of 22 November 2023 amending Council Regulation (EC) No 1683/95 as regards the digitalisation of the visa procedure.
[24] In 2022, eu-LISA delivered six training activities to the VIS community. These included one face-to-face course, focusing on VIS SPoC/Service Desk profile and bringing together participants from 10 Member States. The online activities included two virtual classroom activities ('*VIS ICD Analysis*' and '*VIS Incident and Request Management*'), one course ('*VIS-EES Interoperability*'), one online module ('*VIS Biometric Modalities*') and one update for the *SPoC course*, adding new modules. Altogether, **556 participants** took part in training in 2022. In 2023. the Agency added a course update to the VIS training catalogue ('*VIS SPoC / Service Desk online course*') and provided a face-to-face activity on '*VIS SPoC / Service Desk - Processes, Tools and Operational management 14*'.

3. The communication infrastructure and its functioning

In accordance with Article 1(2) of Council Decision 2004/512/EC and the parallel provision in Article 2 of the Annex to Commission Decision 2008/602/EC, **one of the three elements comprising VIS is a communication infrastructure** between the VIS central system and the national interfaces (NI-VIS). The infrastructure provides an encrypted virtual private network dedicated to VIS data for communication among Member States and between Member States and the authority responsible for the operational management for the VIS central system. This communication infrastructure is provided via a European private secure network named **Trans European Services for Telematics between Administrations – new generation (TESTA-ng)**.

The VIS network provides a secure wide-area network for data exchange between central and national systems. The network's architecture can be described as a dual-star topology with resilience. **The central unit (CU) and backup central unit (BCU) contain the systems to which each national network connects**. The CU and BCU are interconnected by a dedicated point-to-point connection. The VIS network is permanently monitored in order to ensure continuous service availability, and strict performance service-level requirements have been established.

During the reporting period, there were no incidents with a critical impact on the functioning of the overall VIS community and no incidents affecting the connectivity of more than one site. **The yearly availability of the TESTA-ng network was 99.99% during the reporting period, in 2021-2023**.

eu-LISA has been responsible for VIS administrative tasks related to the communication infrastructure between the Central VIS and national interfaces since 30 June 2018 pursuant to the VIS Regulation, as amended by Article 61 of the EES Regulation[25]. Furthermore, Article 7 of the EES Regulation requires certain hardware and software components of the EES communication infrastructure to be shared with the VIS communication infrastructure. The logical separation of VIS data and EES data must be ensured. Finally, Article 6 of the ETIAS Regulation[26] also requires certain hardware and software components of the ETIAS communication infrastructure to be shared with the EES (therefore VIS) communication infrastructure.

To accommodate the requirements for EES and ETIAS, a feasibility study was conducted in 2019 with the TESTA-ng provider. As a follow-up, the Agency signed contracts with the TESTA-ng provider in mid-2020 to increase the capacity of the VIS communication infrastructure and to interconnect it with the NUI, as defined in Article 7(1)(b) of the EES Regulation. The upgrade was achieved through a combination of line upgrades and the replacement of the turnkey access points (TAPs) with new models at sites where line upgrades alone would not be sufficient.

The upgrade of the VIS communication infrastructure was completed in 2021, enabling the VIS communication infrastructure to have a capacity almost seven times higher than before, in order to support **the entry into operation of EES and ETIAS**. With this project, the TAPs at the Agency's operational sites were also upgraded to ensure that the VIS, EES and ETIAS central systems would have sufficient bandwidth.

Furthermore, in order to ensure the overall functioning of the communication infrastructure, the Agency signed contracts with the TESTA-ng provider and, during the reporting period, performed all the necessary upgrades, reconstruction and re-cabling works. This was performed at the VIS data centres in CU and BCU, as well as at four Member States' sites (TAP relocations in coordination with the Member States).

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[25] Regulation (EU) 2017/2226.
[26] Regulation (EU) 2018/1240.

4. Security

eu-LISA ensures the operational effectiveness of the security controls at VIS central level, and the continuous improvement of the security strategy, in line with the requirements of the VIS Regulation and relevant Commission Decisions relating to data protection and information security. **Security is a core element of all activities undertaken at eu-LISA**. Furthermore, the Agency is a centre of excellence in the provision of IT services, emphasising the assurance of system and data security in all its activities.

In the context of the Agency's security monitoring and incident management processes, **no critical security incidents occurred during the reporting period**. The Agency's security unit continued to maintain and develop security measures concerning both physical and system security. As a core element of its Information Security Management Framework, the Agency operates and continuously develops its **Information Security Management System (ISMS)** in compliance with the relevant ISMS standards and ISO 27001. The residual tasks were continuously monitored and managed to provide assurance that the appropriate security controls for the large-scale IT systems had been properly implemented and managed.

In accordance with the relevant security principles, standards and good practices mentioned, the VIS security and continuity risk management strategy covers all layers of the security spectrum: physical security, personnel security, network security, operating-system security, application security, business continuity and data security. Security requirements are embedded in all development projects, changes and maintenance activities. eu-LISA's security unit is part of the VIS Operational Change Advisory Board, and takes part in all VIS development projects from the initial phase to develop requirements.

As a follow-up to the different VIS activities and upgrades, it was deemed necessary to reassess security risks through the full cycle of Security Risk Assessment by adopting a new Security Plan and Business Continuity Plan based on the European Commission IT Security Risk Management (ITSRM) methodology. The VIS Security Plan and Business Continuity Plan were endorsed by the VIS Advisory Group and ultimately adopted by the Management Board.

As part of the update to the VIS ICD due to the interconnection with the EES as mentioned above, there was a **thorough review of the baseline security requirements** supporting the interoperability of the VIS system. These were updated in line with the risk-assessment findings.

Throughout 2023, eu-LISA and six Schengen countries[27], together with the European Union Agency for Cybersecurity (ENISA) and the Trans European Services for Telematics between Administrations (TESTA-ng), prepared the VIS 2023 Security and Business Continuity Exercise, aiming to test the system's resilience and recovery capabilities. The approach was to run a simulation exercise combining both technical and operational levels.

The exercise was executed at the beginning of October 2023, outside the reporting period. It included rehearsing the existing processes and technical procedures and further improving the overall coordination and readiness in the event of a disaster. Following the consolidated tests, the exercise was closed with lessons learnt and actions to be implemented to further enhance the resilience of VIS.

In the third quarter of 2023, eu-LISA received the **European Data Protection Supervisor's** report on the inspection of the SIS, EURODAC and VIS central systems at the end of 2022. The inspection focused on operational management, internal communication infrastructure and security. The recommendations were analysed and an internal action plan was drafted. Overall, the inspection report noted no critical findings regarding the security of the Central VIS, and no unauthorised access to VIS data were reported.

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[27] Czechia, Germany, Finland, Malta, the Netherlands and Norway.

5. Data protection

Data protection is a key factor for the success of VIS operations and for the Member States using the system. The legal framework outlines the conditions for VIS in the visa procedure and border checks, with particular attention paid to data quality and security. Compliance with the Regulation supports Member States in visa procedures while upholding the rights and freedoms of third-country nationals applying for a Schengen visa.

The protection of personal data related to individuals processed by the VIS at central system level is monitored by the **European Data Protection Supervisor (EDPS)** in close cooperation with **eu-LISA's Data Protection Officer (DPO)**. The quality of data stored in the VIS central system and the rights of data subjects, as per the legal provisions, are ensured by the Member States.

The latest on-site inspection of the VIS central system was carried out in October 2022, during the EDPS joint audit on SIS II, VIS and Eurodac. In relation to VIS, the scope of the audit focused on three main areas:

- a follow-up of the 2018 VIS inspection (EDPS Case 2017-0615);
- security incidents and personal data breaches in VIS for the period 2018-2022; and
- methodology and practices for the secure development and testing of VIS components, with a focus on access control management for the different environments (development, testing, pre-production, production, training, etc.).

The draft report of the audit was received in April 2023. As per Article 19(1) of the eu-LISA establishing Regulation[28], the Management Board adopted formal comments on the report for the EDPS's consideration. **The final EDPS report on the SIS II, VIS and Eurodac inspection was received on 25 September 2023.** The report contained **37 recommendations** to be implemented by eu-LISA. In the same report, the EDPS confirmed the closure of the 43 recommendations from the previous 2018 SIS/VIS Audit, and added 4 recommendations to be followed under the 2022 EDPS audit follow-up.

To ensure that the EDPS's recommendations were implemented appropriately, regular internal follow-up meetings were organised, and progress was reported to the EDPS. Throughout the reporting period, the VIS Product Manager and the VIS Operational Change Advisory Board regularly consulted eu-LISA's DPO on a number of VIS-related projects involving the processing of personal data.

Accountability, a risk-based approach, transparency and managing data breaches are key aspects stemming from the EU DPR, which entered into force on 11 December 2018. eu-LISA's DPO is committed to informing, raising awareness and advising on these obligations, in particular in regard to the operational management of the VIS central system and the developments required for interoperability with other large-scale IT systems.

The eu-LISA DPO represents the Agency in the **VIS Supervision Coordination Group**, which meets twice a year, and reports on the current state of the VIS central system, future developments, data quality issues and security incidents, both at central system level and as reported by Member States. This group comprises the national data protection authorities and the EDPS, and monitors legal data protection compliance at both Member State and VIS central system levels.

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[28] Regulation (EU) 2018/1726 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), and amending Regulation (EC) No 1987/2006 and Council Decision 2007/533/JHA and repealing Regulation (EU) No 1077/2011, OJ L 295, 21.11.2018, p. 99.

6. Usage of VIS: general trends and figures

VIS started operations in 2011 and has been accessible worldwide in all consulates of the Schengen countries since the finalisation of the phased rollout in February 2016. A positive trend in the use of the system was visible between 2017[29] and 2019, with total operations rising from over 268 million operations in 2017 to over 294 million in 2019. Until the beginning of 2020, figures steadily increased over the years (reaching a peak in 2019); while the travel restrictions imposed during the COVID-19 pandemic and the repercussions significantly affected the usage of VIS (Figure 2).

During the reporting period, there was a positive trend in the usage of the system. **VIS operations[30] have been steadily growing again, in particular from 2022; however, we are yet to return to pre-pandemic rates of operations. Total operations reached 81 million in 2021, 152 million in 2022 and 211 million in 2023.**

▼ **Figure 2 – Data stored in VIS 2018 - 2023**
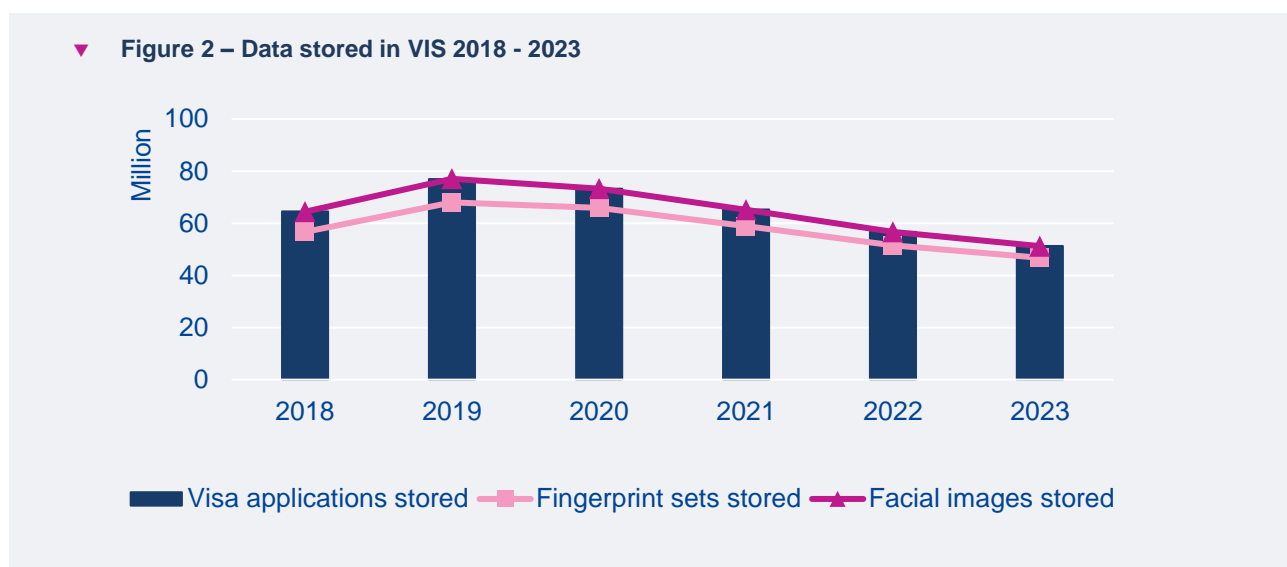
As per Article 23[31], data in VIS, applications and biometrics, are stored for 5 years and are then automatically deleted. Stored visa applications decreased to 62 million at the end of 2021, 57 million at the end of 2022 and 51 million at the end of 2023. Similarly, fingerprints[32] and facial images[33] stored decreased to 47 million and 51 million respectively at the end of 2023. This trend, clearly visible in Figure 3, is explained by taking into consideration the decreased usage in 2020/2021 and the automatic deletion mentioned above.

VIS usage follows seasonal patterns, with peak use usually during the holiday season. This is clearly visible in Figure 3 below showing monthly border operations and the number of visas issued for a period of 4 years (from September 2019 until the end of the reporting period in September 2023). The graph is self-explanatory on the dramatic impact of the events in spring 2020, and the slow recovery trend visible, which started in spring 2021.

In 2023, the peak number of visas issued was reached in June with 951 865, although this was just 52% of the peak of 1.8 million recorded in July 2019. The highest amount of border operations for 2023 was recorded in September with over 1.8 million operations, representing 41% of the figure registered in September 2019 (4.5 million).

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[29] VIS was accessible worldwide for the full year for the first time in 2017.
[30] See footnote 10 for a list of VIS operations.
[31] VIS Regulation.
[32] There are different reasons why fingerprints could not be attached to a visa application: the applicant was exempt from the fingerprinting requirement for legal reasons as per the Visa Code; fingerprint submission was not legally required; or it was physically impossible for the applicant to provide fingerprints, i.e. fingerprints could not be provided.
[33] Facial images are stored in VIS but not used for biometric matching purposes.

Figure 3 - Border operations and issued visas by month (Sep 2019 – Sep 2023)
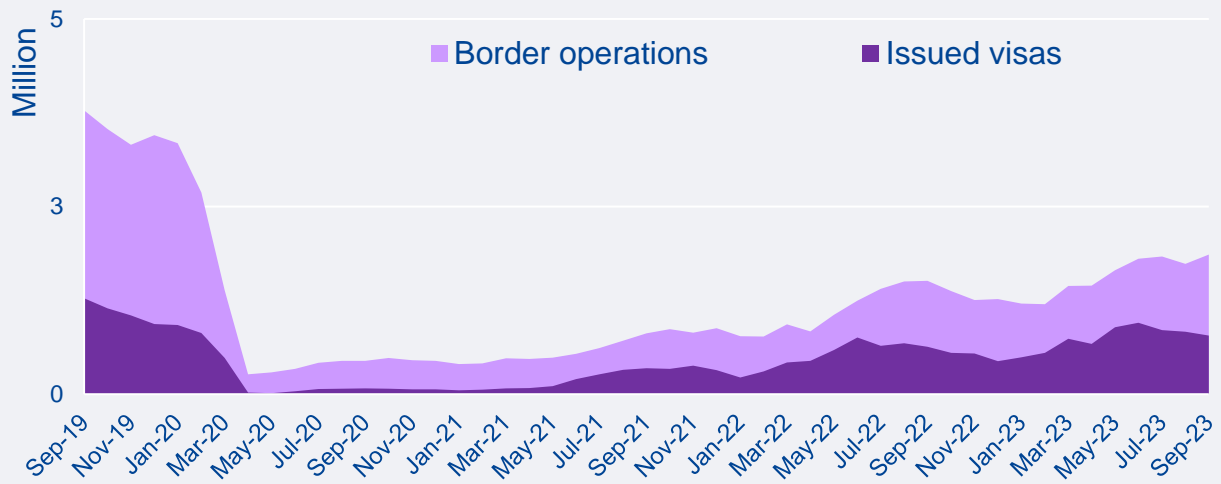
Figure 4 provides an overview of the total VIS operations performed between 2019 and 2023. In 2021, a total of 80 million operations were performed in VIS, an increase of 9% compared to 2020 and a decrease of 73% compared to 2019. In 2022, the total amount of VIS operations almost doubled compared to 2021, reaching 152 million, and tripled in 2023, with almost 211 million (the latter still being 28% less than in 2019). A similar trend was observed for the amount of visa applications and border operations.

The highest demands for Schengen visas in 2022 were lodged from North Africa, the Western Balkans/Turkey, the Gulf Region, and India/Pakistan. Among those, only the North Africa region lodged more than 1 million applications. In 2023, the first three regions remained the same, followed by East Asia, and then India/Pakistan. All five regions lodged more than 1 million applications each.

Figure 4 – VIS operations by year 2019 - 2023
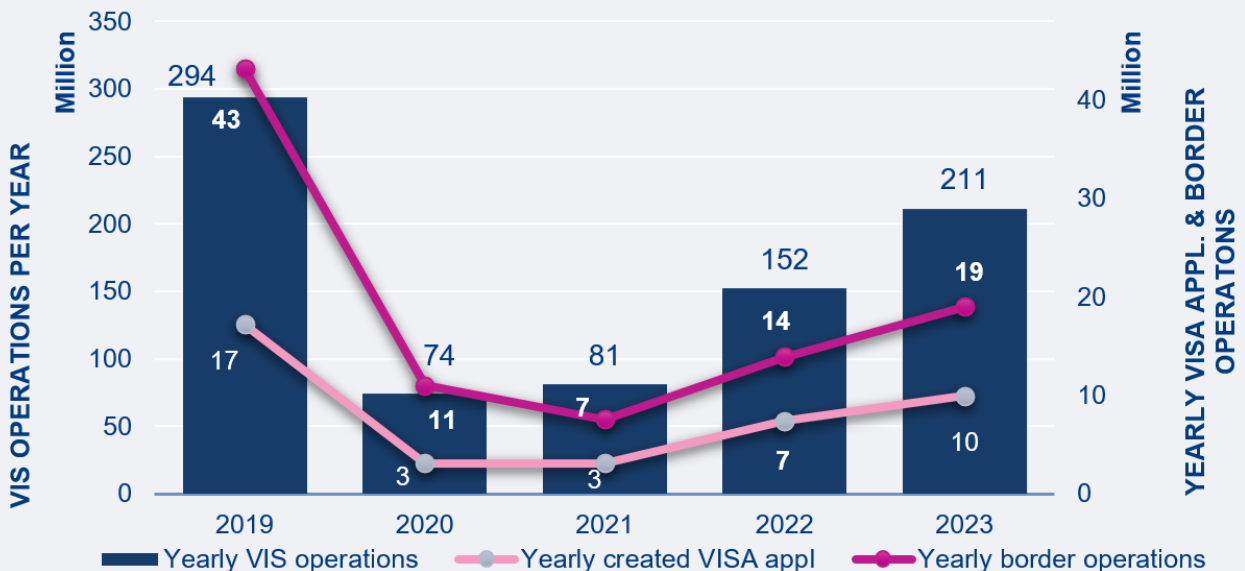
As highlighted above, the positive trend is visible, but still far from the records reached in 2019.

Similar trends were observed for the types of operations presented below. During the reporting period, the volume of alphanumeric searches, biometric searches, and biometric authentications continued to increase, albeit at a different speed, as shown in Figure 5.

▼ Figure 5 – VIS operations by type
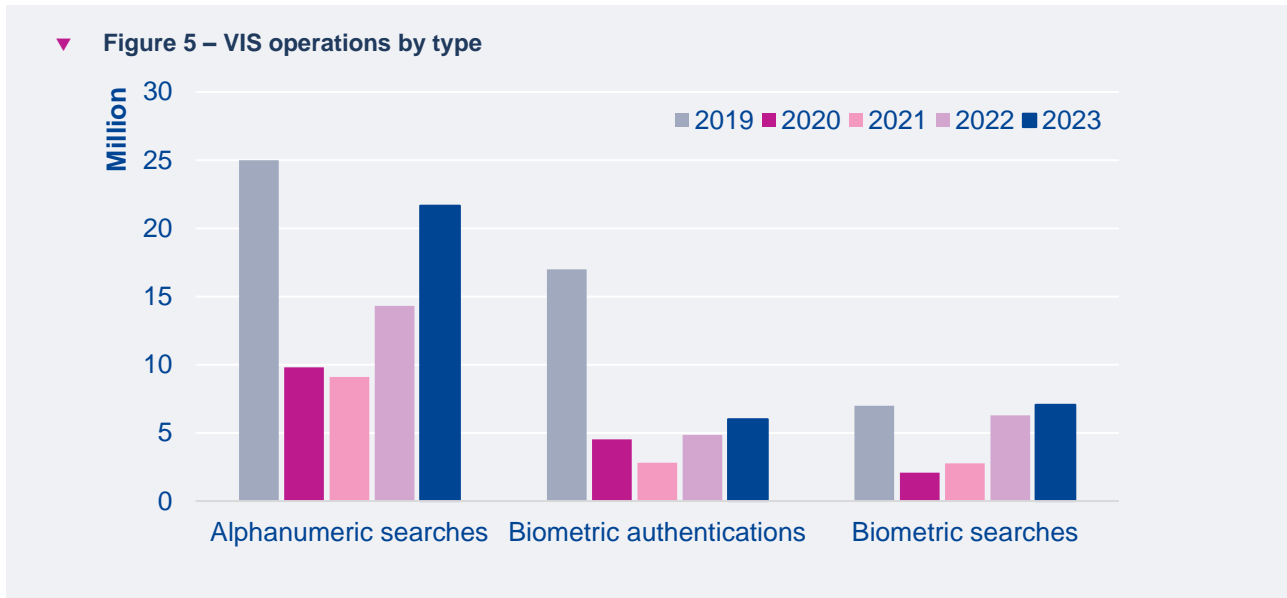
Performance improved throughout the period: alphanumeric searches were performed in 0.38-0.15 seconds, with an expected performance (SLA set at 30 seconds), and biometric authentications performed in 0.87-0.83 seconds on average, against an expected performance of 3 seconds.

Alphanumeric searches
(average performance in seconds; SLA is 30 seconds)

2021: **0.38 sec**
2022: **0.35 sec**
2023: **0.15 sec**

Performed for identification purposes in the different areas (consulates, borders, law enforcement, asylum and immigration authorities within territory).

Biometric authentications
(average performance in seconds; SLA is 3 seconds)

2021: **0.87 sec**
2022: **0.84 sec**
2023: **0.83 sec**

Verification of fingerprint (1FP against the FP linked to the same visa in the database) mainly used at first-line checks at the borders

7. Usage of VIS as reported by Member States

As per Article 50(6) of the VIS Regulation and Article 17(5) of the VIS Decision, Member States have a legal obligation to provide data to eu-LISA to compile the report on the technical functioning of VIS. The data collection, based on an agreed template, was a long and complex exercise. The compilation of data reported by Member States is available in the annex, and a short analysis is presented below.

Usage of VIS by Member States differs substantially. While the extent of the consular network and historical ties determine – amongst other things – the workload of the consular posts, both the number of third-country nationals crossing the external borders and the number of crossing points have a significant impact on the usage of the system for border control purposes.

7.1. Reported usage of VIS as per the VIS Regulation

Member States using VIS during the reporting period provided either a full or a partial set of statistical data for the report. Bulgaria and Romania had read-only access to VIS; accordingly, they provided data on the use of the system at the borders.

As per the data reported by Member States, during the reporting period as represented by Figure 6 below, the majority of operations were conducted at the consulates:

- 45% of the operations were carried out at consular posts: applications registered, visas issued and visas refused;

- 40% of the operations were carried out at the borders: visa verifications and identifications;

- 8% of the operations were carried out for asylum purposes[34]: asylum searches and asylum identifications;

- 7% of the operations were carried out by the competent authorities within the Schengen territory[35]: visa verifications within the territory and identifications within the territory.

▼ **Figure 6 – VIS usage per user group during the reporting period**
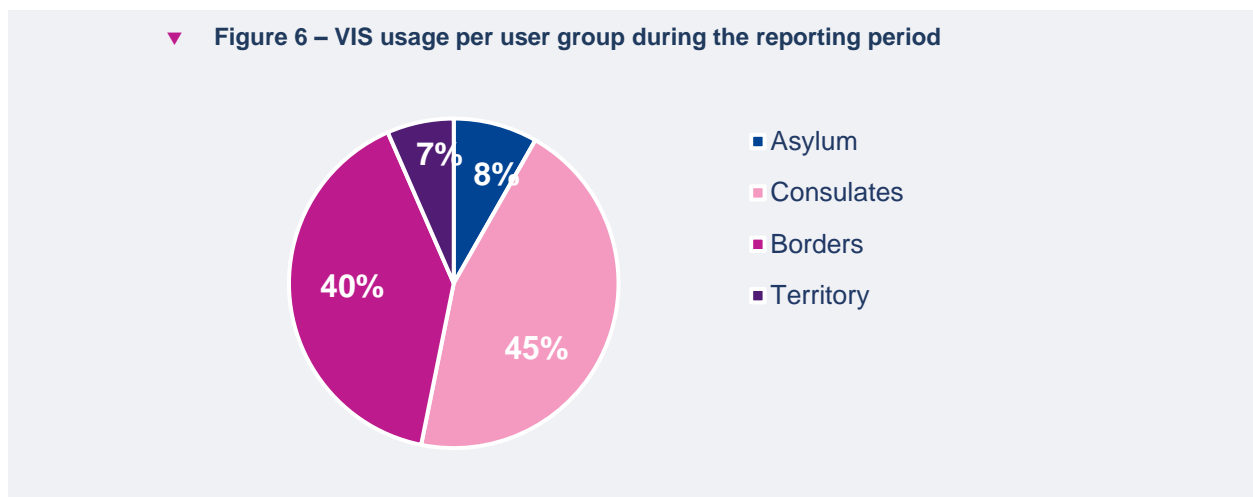
Between October 2021 and the end of September 2023, **over 17 million visa applications** were registered and handled via VIS, resulting in almost 14 million visas issued and over 2.7 million visas refused. All Member States provided data for these categories.

As shown in Figure 7, similar to the previous reporting period, four Member States – France, Germany, Italy and Spain – together handled 64% of all visa applications.

[34] As per Articles 21 and 22 of the VIS Regulation.
[35] As per Articles 19 and 20 of the VIS Regulation.

▼ **Figure 7 – Main VIS users for 'visa applications' as per the data reported**
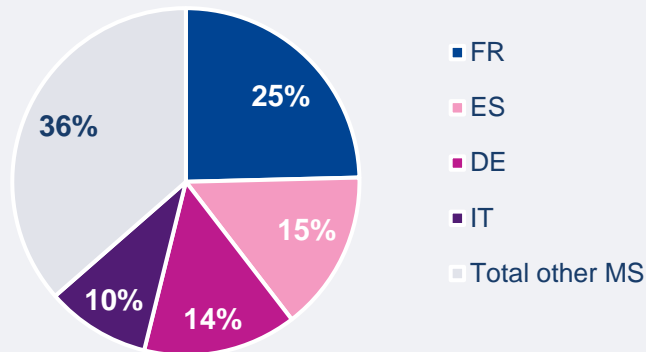
Over 30 million **checks at the external borders** were carried out during the reporting period, the vast majority being first-line checks (over 26 million visa-verification border operation). Five Member States – Bulgaria, France, Germany, Lithuania and Poland – accounted for 47% of all checks reported, as shown in Figure 8. Not all Member States reported data for these categories.

▼ **Figure 8 – Five main users at borders as per the data reported**
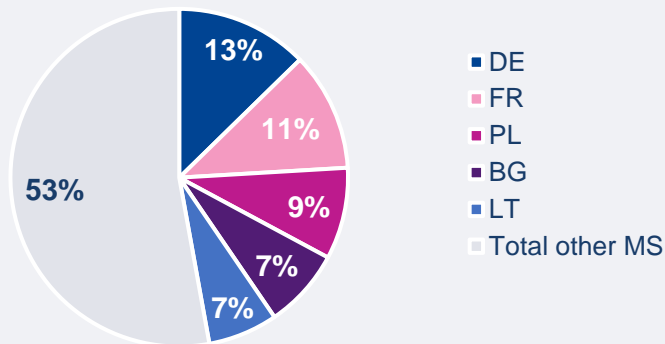
The use of VIS for asylum purposes differed to a great extent among Member States. Nine countries did not provide any figures on usage for those operations: asylum searches, asylum identification, and successful asylum identification.

93% of the **searches for asylum** were reported by four Member States – Austria, Germany, the Netherlands and Sweden. Germany reported the majority of asylum searches for all Member States with 74% of all searches reported, in line with what was reported in the previous reporting period.

▼ **Figure 9 – Main users for asylum searches reported**

VIS REPORT
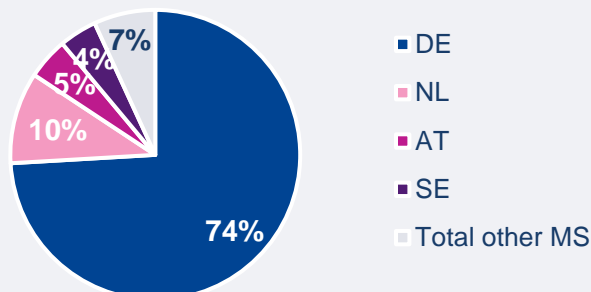
7.2. Reported usage of VIS for law enforcement purposes

Pursuant to the VIS Decision, Member States' designated authorities and Europol have had the right to access VIS for the purpose of the **prevention, detection and investigation of terrorist offences and other serious criminal offences** since 1 September 2013. Europol, as mentioned above, started using VIS in October 2022.

The data collected by Member States on VIS use pursuant to the VIS Decision is very fragmented. 13 Schengen countries – Czechia, Denmark, Estonia, Germany, Luxemburg, Malta, the Netherlands, Portugal, Romania, Slovenia, Slovakia, Sweden and Switzerland – plus Europol reported that they had used VIS for law enforcement purposes during the reporting period. The level of usage and granularity of reporting varied considerably among those countries. Austria used VIS for this purpose, but was unable to provide any data.

As per the data provided, over 31 938 searches were carried out in accordance with the VIS Decision by law enforcement authorities in the above countries and Europol between October 2021 and September 2023.

As shown in Figure 10 below, the majority of searches were reported by four countries: 44% of all searches were reported by Slovakia, followed by Czechia with 15%, Malta with 12% and Germany with 9%.

▼ **Figure 10 – Reported law enforcement searches**
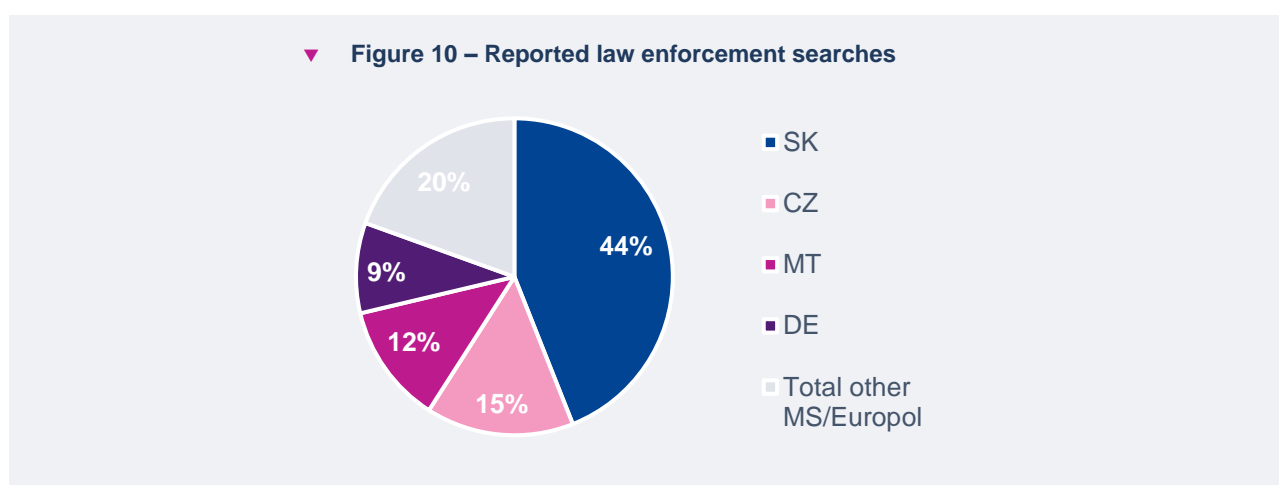
In accordance with Article 4(2) of the VIS Decision, **in an exceptional case of urgency**, the central access point(s) may receive written, electronic or oral requests. In such circumstances, the central access point(s) must **process the request immediately** and **only verify ex post** whether or not all the conditions of Article 5 are fulfilled, including whether or not an exceptional case of urgency existed. The ex post verification must take place without undue delay after the request is processed.

The data reported shows that 130 urgent cases pursuant to Article 4(2) were registered during the reporting period, reported by 3 Member States. 26 of those cases where consider not urgent ex post.

The overview of data reported is available in the Annex.

8. Conclusions

Throughout the reporting period, the availability of the VIS central system was very high – 99.98% in 2021, 99.63% in 2022 and 99.97% in 2023. Similarly, the VIS response time was consistently high – 99.90% in 2021, 99.70% in 2022 and 99.98% in 2023 – proving it to be a very robust and reliable system. The VIS central system met the expectations of Member States and effectively supported business demand, which had started to recover from the COVID-19 period.

By the end of the reporting period, annual VIS operations reached almost 211 million, which is still 28% less than in 2019 (the record year so far), but showed good progress compared to 2021 and 2022. Likewise, the main VIS indicators (visa applications, visas issued and border operations) increased.

The VIS continues to evolve to allow for seamless interoperability with EES by the time the latter enters into operation. In addition, eu-LISA, together with the European Commission and the Member States, is managing a series of projects to fully integrate VIS in the new interoperability architecture for the JHA area, and to implement the new VIS Regulation adopted in July 2021.

Annex

Data reported by Member States on usage of VIS pursuant to the VIS Regulation[36]

	Registered Applications	Registered Applications with Fingerprints	Registered Applications without Fingerprints	Registered Applications without Fingerprints – legal	Registered Applications without Fingerprints – factual	Issued Visas	Refused Visas	Refused Visas per Applicant	Refused Visas – fingerprints could not be provided factually	Visa Verifications Border	Visa Verifications within Territory	Identifications Border	Identifications within Territory	Searches Asylum	Identifications Asylum	Successful Identifications Asylum
Oct-21	427,146	385,595	39,307	17,073	3,094	343,409	63,030	147	4,390	798,756	12,073	52,355	138,925	97,664	58,159	979
Nov-21	478,755	427,869	45,017	19,821	3,526	382,365	82,718	186	6,190	733,569	12,314	56,118	139,962	104,206	59,043	1,137
Dec-21	378,506	340,241	36,601	18,256	2,594	298,458	78,091	334	6,915	742,251	9,179	112,498	137,091	80,019	45,154	1,176
Total 2021	1,284,407	1,153,705	120,925	55,150	9,214	1,024,232	223,839	667	17,495	2,274,576	33,566	220,971	415,978	281,889	162,356	3,292
Jan-22	294,978	266,369	25,761	12,047	2,421	226,774	67,504	350	4,988	641,010	10,358	106,395	159,034	74,609	39,202	1,277
Feb-22	395,058	354,961	35,100	16,389	2,935	308,637	75,663	538	5,595	654,192	9,968	104,646	151,505	76,382	37,677	1,088
Mar-22	545,155	482,886	57,171	27,684	3,845	425,162	98,983	727	7,627	776,206	13,756	134,455	232,399	178,942	134,038	1,500
Apr-22	582,356	524,479	58,358	27,490	3,391	461,885	91,524	604	6,392	718,519	10,677	113,690	155,609	206,564	170,994	1,217
May-22	747,125	665,282	73,970	37,839	4,808	612,390	105,700	621	7,469	919,917	10,804	138,953	171,925	245,307	204,301	1,374
Jun-22	909,473	800,425	103,624	53,775	6,815	760,688	126,032	768	10,587	1,097,091	11,577	134,428	176,297	223,624	185,595	1,321
Jul-22	749,414	661,525	85,016	46,345	4,873	629,733	110,692	804	10,374	1,332,775	13,442	56,505	159,606	204,776	165,147	1,200
Aug-22	810,652	729,785	75,791	39,227	5,087	677,452	119,599	820	10,675	1,358,039	15,369	132,863	190,930	217,205	169,417	1,790
Sep-22	754,309	684,903	65,422	29,848	4,389	606,847	133,836	804	9,489	1,329,036	15,623	146,813	214,203	209,240	157,353	1,821
Oct-22	678,469	607,102	67,138	28,049	3,990	541,025	133,089	964	10,211	1,205,054	16,353	158,736	243,343	201,204	145,769	1,910
Nov-22	674,402	603,687	67,850	31,061	4,576	528,720	132,373	1,360	10,251	1,076,304	16,152	146,890	211,345	182,711	122,145	1,715
Dec-22	552,617	498,971	52,869	25,756	3,384	418,432	108,635	1,162	9,205	1,175,187	13,063	208,586	175,650	150,306	100,792	1,411
Total 2022	7,694,008	6,880,375	768,070	375,510	50,514	6,197,745	1,303,630	9,522	102,863	12,283,330	157,142	1,582,960	2,241,846	2,170,870	1,632,430	17,624
Jan-23	613,897	561,517	50,390	24,801	3,552	494,071	118,065	1,129	8,238	999,208	15,713	182,997	191,295	142,641	84,455	1,778
Feb-23	684,973	631,884	55,131	28,308	3,981	558,343	117,521	1,252	7,984	944,692	11,398	240,713	183,202	121,562	71,513	1,535
Mar-23	899,438	824,506	77,638	41,151	6,012	746,055	137,439	1,309	10,465	1,128,678	14,929	287,228	207,018	130,512	75,410	1,430
Apr-23	827,563	762,323	70,363	37,186	5,629	688,947	116,197	1,103	8,371	1,148,405	13,213	277,161	194,766	107,372	61,821	1,309
May-23	1,081,009	980,590	100,217	56,161	6,949	906,728	139,920	1,202	10,343	1,302,533	9,581	296,469	192,420	124,696	73,586	1,430
Jun-23	1,066,150	955,678	107,352	60,942	6,140	917,244	139,076	1,615	11,506	1,592,259	9,436	188,541	234,675	134,719	78,121	1,578
Jul-23	983,069	887,002	94,494	56,138	5,476	842,505	132,660	1,533	11,199	1,548,067	8,390	161,668	259,638	136,583	80,583	1,531
Aug-23	999,600	926,687	72,361	40,621	5,191	824,110	138,826	1,476	11,099	1,495,882	8,117	211,133	249,267	148,115	90,503	1,652
Sep-23	883,412	828,887	54,049	30,383	4,179	747,899	135,475	1,930	9,033	1,609,195	8,236	207,428	251,659	165,761	106,384	1,327
Total 2023	8,039,111	7,359,074	681,995	375,691	47,109	6,725,902	1,175,179	12,549	88,238	11,768,919	99,013	2,053,338	1,963,940	1,211,961	722,376	13,570
Grand total	17,017,526	15,393,154	1,570,990	806,351	106,837	13,947,879	2,702,648	22,738	208,596	26,326,825	289,721	3,857,269	4,621,764	3,664,720	2,517,162	34,486

[36] Similar to the previous reporting period, data for *Refused visas per applicant* was reported by 11 Member States, whereas data for *Successful identifications asylum* was provided by 7 Member States. France provided limited data: no data was provided for Registered Applications without Fingerprints – legal, Registered Applications without Fingerprints – factual, Refused Visas per applicant, Refused Visas – fingerprints could not be provided factually, Visa Verifications within Territory, Identifications Border, Identifications within Territory, Searches Asylum, Identifications Asylum, or Successful Identifications Asylum.

Reported usage of VIS for law enforcement purposes

	Use of Article 4(2)		Number of all searches
	Number of urgent cases	Number of 4(2) where ex-post no urgency	
Oct-21	9	1	1,141
Nov-21	4	0	489
Dec-21	3	1	935
Total 2021	16	2	2,565
Jan-22	5	0	2,290
Feb-22	8	0	1,310
Mar-22	4	0	1,531
Apr-22	3	0	1,233
May-22	16	0	1,569
Jun-22	6	0	809
Jul-22	0	0	551
Aug-22	5	0	734
Sep-22	20	6	1,076
Oct-22	0	1	1,152
Nov-22	11	0	861
Dec-22	2	1	839
Total 2022	80	8	13,955
Jan-23	2	8	1,895
Feb-23	14	8	1,274
Mar-23	2	0	1,437
Apr-23	1	0	1,314
May-23	4	0	2,211
Jun-23	3	0	1,935
Jul-23	2	0	1,741
Aug-23	5	0	1,882
Sep-23	1	0	1,729
Total 2023	34	16	15,418
Grand total	130	26	31,938