CC Statistics 2024

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About Us

Applus+ Laboratories is a division of the Applus+ Group that provides testing and certification services from a network of multidisciplinary laboratories in Europe, Asia and North America. Our cybersecurity laboratories support developers of ICT products, components and systems to demonstrate the compliance of applicable requirements and standards in cybersecurity. With our cutting-edge facilities found worldwide, and technical expertise across industries such as aerospace, defense, automotive, payment, identification and telecommunications, our services facilitate market access at the speed of development.

www.appluslaboratories.com | itlabs@applus.com

jtsec joined Applus+ Laboratories in 2022. A cybersecurity lab based in Granada, Spain, deeply involved in standardization committees at European and international level. jtsec specializes in evaluations for EUCC, Common Criteria and Lince schemes, and has developed automated tools that facilitate paperwork activities for developers, consultants, labs and certification bodies. It is also an accredited lab for key industrial and IoT standards.

www.jtsec.es | hello@jtsec.es

Lightship Security joined the Applus+ group in 2022. Founded in Ottawa, Canada, Lightship is an accredited Common Criteria and FIPS 140 laboratory that specializes in accelerating Protection Profile conformance for the NIAP Product Compliant List (PCL). They developed an industry-leading test automation platform that codifies their extensive experience to drive certification results for speed, thoroughness and quality that was previously not possible.

www.lightshipsec.com | info@lightshipsec.com

Connect with us

Cybersecurity Services

jtsec Beyond IT Security (Spain) and Lightship Security (Canada and USA) has recently joined Applus+ Laboratories. Together we offer a wide range of cybersecurity services:

COMMON CRITERIA FASTER & EASIER

Accredited Laboratories

Evaluations up to **EAL 6+**

cPP & NIAP PP evaluations

SOG-IS Technical Domains

Accredited laboratories under the Spanish, Canadian and US Schemes

Automation Tools

CCToolBox: an automation platform for CC documentation generation, evaluation and validation

Greenlight: a conformance automation platform for CC testing

ACCREDITED FOR 20+ CERTIFICATION SCHEMES

FIPS 140-3

NVLAP accredited and recognized by the CMVP.

LINCE & CPSTIC LISTING

Accredited for Lince Evaluations. Support for products listing in the Spanish CPSTIC catalog.

PAYMENT SCHEMES

Accredited by EMVCo, PCI-PTS and other payment schemes. SE, Platforms, Cards, POS & Mobile Apps evaluations

IOT & INDUSTRIAL SCHEMES

Notified Body for the RED directive using the EN 18031 standard

First accredited ETSI EN 303 645 laboratory for consumer IoT.

IECEE CB accredited lab for IEC 62443-4 industrial cybersecurity.

Accredited for SESIP Evaluations for IoT platforms.

Accredited lab for PSA Certified for IoT chips, software and devices.

INDEPENDENT SERVICES

✓ **Vulnerability assessments:** Thread Analysis & Risk Assessment, Design Review (source code included), Vulnerability Analysis & Pen Testing

✓ **Product Life Cycle Evaluation**

✓ **Gap Analysis**

✓ **Site Audits**

Introduction

Why this report?

Historically, the Common Criteria Portal web (https://www.commoncriteriaportal.org) has contained the list of evaluated products. Each Certification Body is responsible for sending each new certified product to the web, along with its Certification Report and Security Target.

All this information is provided on the web, which even provides a Statistics section. This section, however, provides no graphical representation of the numbers and there is room for improvement regarding, for example, the evaluation laboratory, evaluation trends regarding the type of products certified (a categorization is provided, but it does not reflect state-of-art in security products), most used protection profiles, assurance levels chosen to meet the certification and other things, so we thought that an "all-in-one" report would be great for the Common Criteria community!

Throughout the different editions International Common Criteria Conference (ICCC) we have been presenting the corresponding reports and analyzing the data extracted. Last year we showed the report in the ICCC2023 with the talk "2023 CC Statistics Report, Has Common Criteria reached its peak?"

How it is created?

CC Scraper is a python script that analyses automatically the information from the CC portal using OCR capabilities, pdf reading and other features providing a comprehensive statistics report of the CC certifications.

The current version still depends on Common Criteria portal contents, and therefore a mismatch between each CB certified products and the statistics shown in this report may appear if the Certification Bodies do not timely send new updates to the web or the webmaster does not update the product list.

CC Scraper outputs a CSV file from where this report is semi-automatically created.

Contribute!

Feel free to share the results shown in this report, and do not hesitate to tell us any error that you find, we will correct it as soon as possible.

If you want to know a specific statistic or you think that it could be interesting for the community, please share it with us and we will include it in next versions of this report.

Research & Collaboration

At **jtsec- An Applus+ Company**, we have always believed in innovation and collaboration in the field of cybersecurity. We are true experts in the Common Criteria methodology. We have been working for more than 20 years in the methodology. We are former program director of ICCC (International Common Criteria Conference), active editors of the methodology in ISO, only Spanish member of the EUCC Ad-hoc WG (European Common Criteria Scheme) and members of the SCCG being advisors of the European Commission in Cybersecurity Certification.

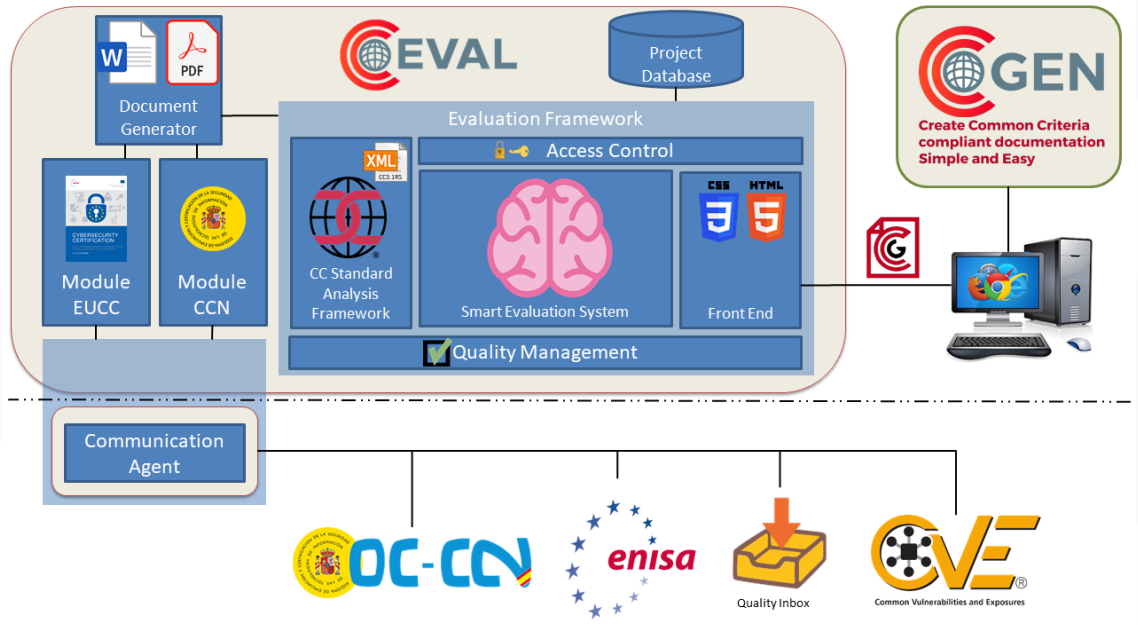
Some of the most important examples of talks related to the CC Methodology are here:

- (EN) ICCC24 [2024], "ICCC24 Using EUCC to meet CRA"
- (EN) ICCC24 [2024], "ICCC24 Statistics Report: Common Criteria Stays Strong"
- (EN) **ICCC23** [2023], "The new cryptographic evaluation methodology created by CCN and how to apply it for Common Criteria"
- (EN) **ICCC23** [2023], "Experiences evaluating cloud services and products"
- (EN) ICCC23 [2023], "2023 CC Statistics Report, Has Common Criteria reached its peak?"
- (EN) **ICCC22** [2022], "Is automation necessary for the CC survival?"
- (EN) **ICCC22** [2022], "CCCAB Tool — making CABs life easy — chapter 2"
- (EN) **ICCC22** [2022], "2022 CC Statistics Report: Will this year beat last year record number of certifications
- (EN) **ICCC21** [2021], "Automating Common Criteria" :
- (EN) **ICCC21** [2021], "2021 CC Statistic Report" :
- (EN) **ICCC21** [2021], "CCCAB tool, Making CABs Life Easy" :
- (EN) **ICCC 2020** [2020], "*Industrial Automation Control Systems Cybersecurity Certification - Chapter II*"
- (EN) **ICCC 2020** [2020], "*2020 Statistics Report. Is the industry surviving to lockdown?*"
- (EN) **ICCC 2020** [2020], "*Towards creating an Extension for Patch Management for ISO_IEC 15408 & 18045*"
- (EN) **18th CCUF Workshop** [2020], "*Creating cPPs with CCGen*" :
- (EN) **Paris - SC 27 / WG3 meeting** [2019], "*Contribution on SP for Evaluation criteria for connected vehicle information security based on ISO/IEC 15408*" :
- (EN) **Paris - SC 27 / WG3 meeting** [2019], "*Patch Management in ISO/IEC15408 & ISO/IEC18045*"
- (ES) **ICCC 2019 Singapur** [2019], "*2019 Statistics Report. What's Happening in the Common Criteria World?*"
- (EN) **International Common Criteria Conference 2019** [2019], "*Industrial Automation Control Systems Cybersecurity Certification Is CC the Answer?*"
- (EN) **XVII International Common Criteria Conference. Amsterdam** [2018], "*Full Common Criteria Statistics Report with CC Scraper*":
- (EN) **XVII International Common Criteria Conference. Amsterdam** [2018], "*Using Common Criteria for procurement - International Procurement Initiatives*"
- (EN) **ICMC18 International Cryptographic Module Conference. Canada** [2018], "*Spanish Catalogue of Qualified Products: A New Way Of Using CC For Procurement*"
- (EN) **Common Criteria Users Forum. Amsterdam** [2018], "*High EALs, Lightweight Certifications, Low EALs, cPPs - European and American View - Do we understand each other?*"
- (EN) **XVI International Common Criteria Conference. UK** [2015], "*Is CC ready to lead the future of mobile Security?*"
- (EN) **XIV International Common Criteria Conference. USA** [2013], "*Lower EALs Evaluations: Are you kidding me?*"
- (EN) **XI International Common Criteria Conference. Turkey** [2010], "*Overflowing attack potential: scoring defence-in-depth*"
- (EN) **XI International Common Criteria Conference. Turkey** [2010], "*Evaluating a watermelon: mitigating the threats through the operational environment*"
- (EN) **X International Common Criteria Conference. Norway** [2009], "*Vulnerability Analysis Taxonomy: Achieving completeness in a systematic way*"
- (EN) **X International Common Criteria Conference. Norway** [2009], "*The public domain and the CEM attack potential mismatch*"

jtsec- An Applus+ Company belongs actively to the following associations:

Other Common Criteria tools

CCScraper is not the only tool for Common Criteria developed by jtsec. We have created **CCToolBox** which is composed of two tools: **CCGen and CCEval**. CCGen allows generating all the CC evidences and CCEval allows jtsec to speed up and smooth the evaluation. CCToolBox is a web-based tool framework using the most advanced state-of-art web technologies.



CCGen:

One of the most problematic issues one may find during the CC documentation creation phase is the constant reappearance of inconsistencies (for example, changing the name of an SFR iteration, the name of an objective or the code of a test). Consultants can lose lot of time, avoiding inconsistencies instead of employ it in creating quality documentation that eases the understanding of the product internals and can pass the evaluation without problems.

With a wizard like Approach, CCGen will guide consultants step by step, taking care of every possible inconsistency in the documentation process, accompanied of expert comments and tips and hints regarding how to easily fulfil the CC standard for a product.

CCEval:

CCEval allows jtsec to write and generate evaluation reports in a very consistent and quick way.

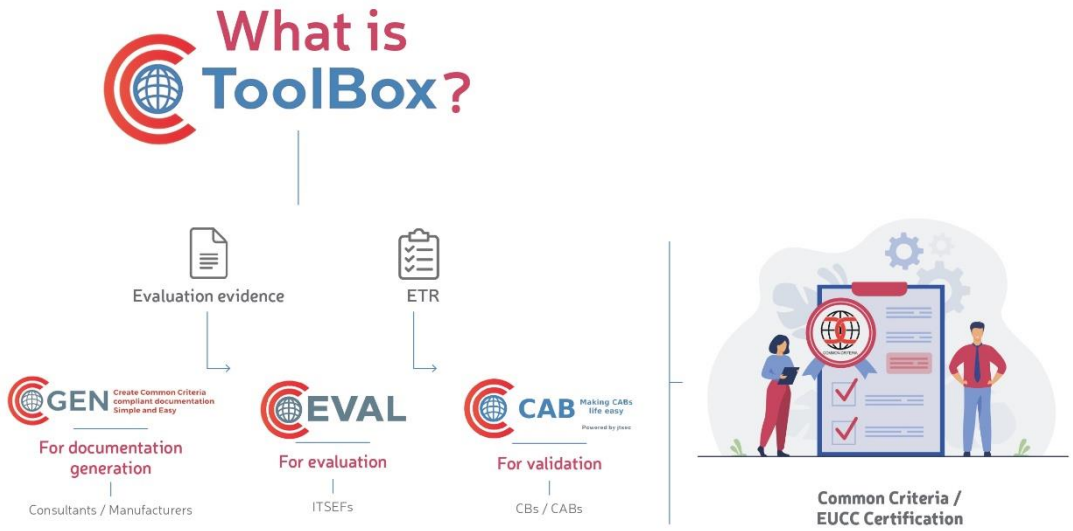
Moreover, if CCGen has generated the documentation, CCEval allows carrying out automatically some evaluation tasks.

This tool is important for two main reasons:

1. Because evaluation reports are validated by the Certification Body and the Appearance of inconsistencies may delay the process in unexpected ways.
2. Because the use of automated tools allows providing the best time-to-market, ensuring that the certification process is always on time.

CCCAB:

CCCAB will allow Common Criteria CABs (Conformity Assessment Bodies) to facilitate the validation and certification process of ICT products, assisting the certifier and reducing the effort and time required in each process. CCCAB is will be key because the workload and specialization required for this type of project means that certification bodies have a high workload per certifying specialist, and the lack of personnel is a major risk for the sector. The development of this tool is funded by the European Commission in the framework of the Connecting Europe Facility (CEF) program. The tool will be released as open source free of charge to all public or private CABs interested in the initiative.



CC Statistics for 2024

These are the statistics on Common Criteria certifications for 2024. CCScrapper has gathered the latest information about Common Criteria certified products and has generated related statistics up to 2024-12-31.

In 2024, **382** products have been certified, while 470 were certified in 2023. These numbers vary from those published solely in commoncriteriaportal.org, since CCScrapper also takes into account those products published in the web portals of Certification Bodies websites.

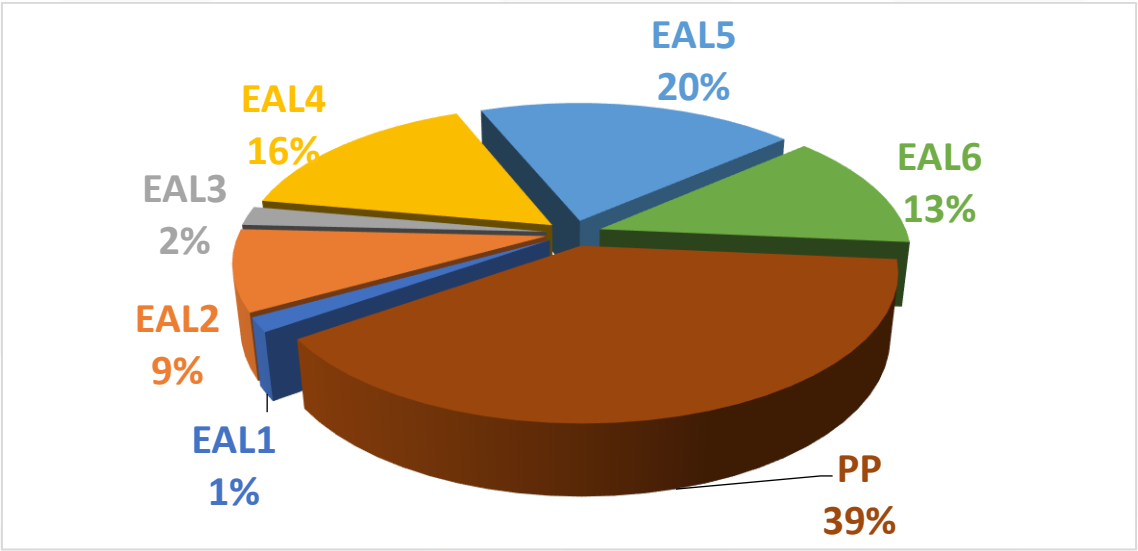
The details on those certifications are provided throughout this report.

Assurance levels

In 2024, 186 high assurance evaluations (EAL4-EAL7) were carried out. Among those, we can find 61 EAL4 evaluations, 75 EAL5 evaluations, 49 EAL6 evaluations and 1 EAL7 evaluations. In total, about 50% of the certifications were high-assurance.

A total of 48 products were certified using low assurance evaluations (EAL1-EAL3), representing around 13% of all the evaluations. The most frequent low assurance EAL was EAL2, with 34 certifications.

On the other hand, the trend to use Protection Profiles on evaluations has been even larger in 2024. Certifications using a Protection Profile with no EAL assigned were very frequent in 2024. In total, 148 products were certified with a Protection Profile without assigned EAL, representing around 39% of all certifications in 2024. EAL7 has been omitted from the graph as it does not reach 1%, representing only 0.26% (1 certified product).

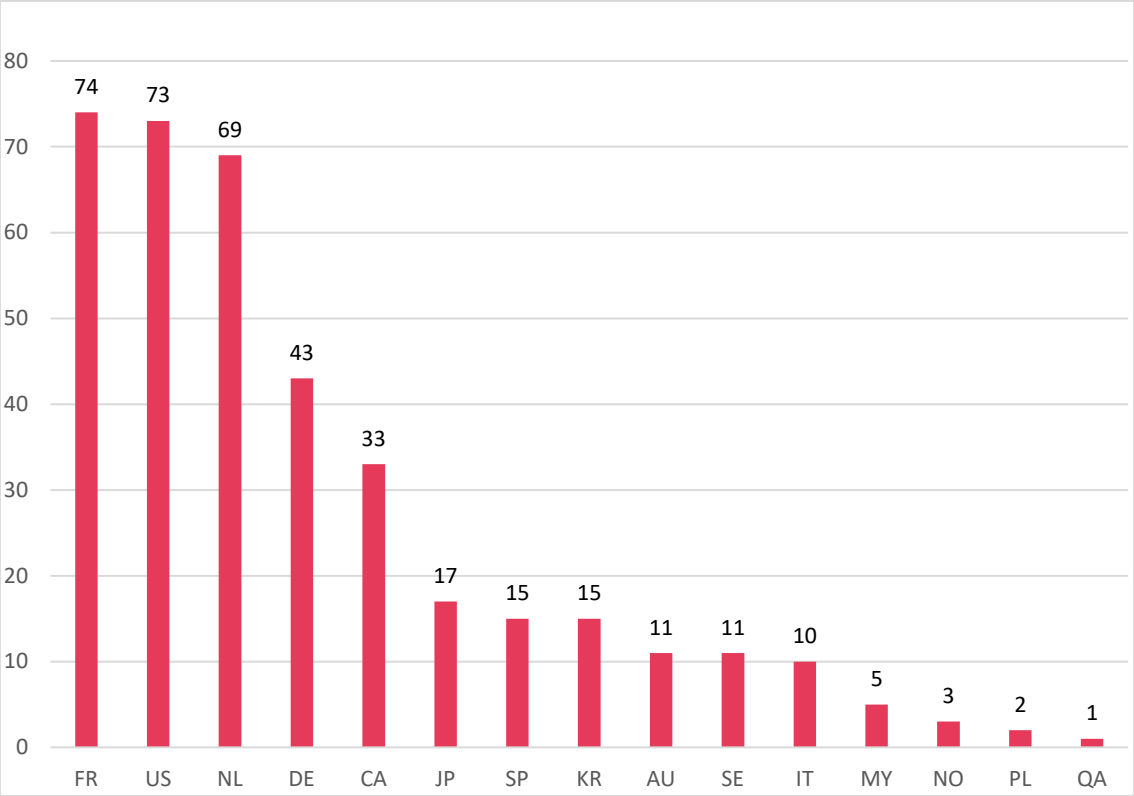


*If a product has been certified under different assurance levels or protection it will be listed in all of them, so the same product could be listed more than once. This fact must be taken into account throughout the report.

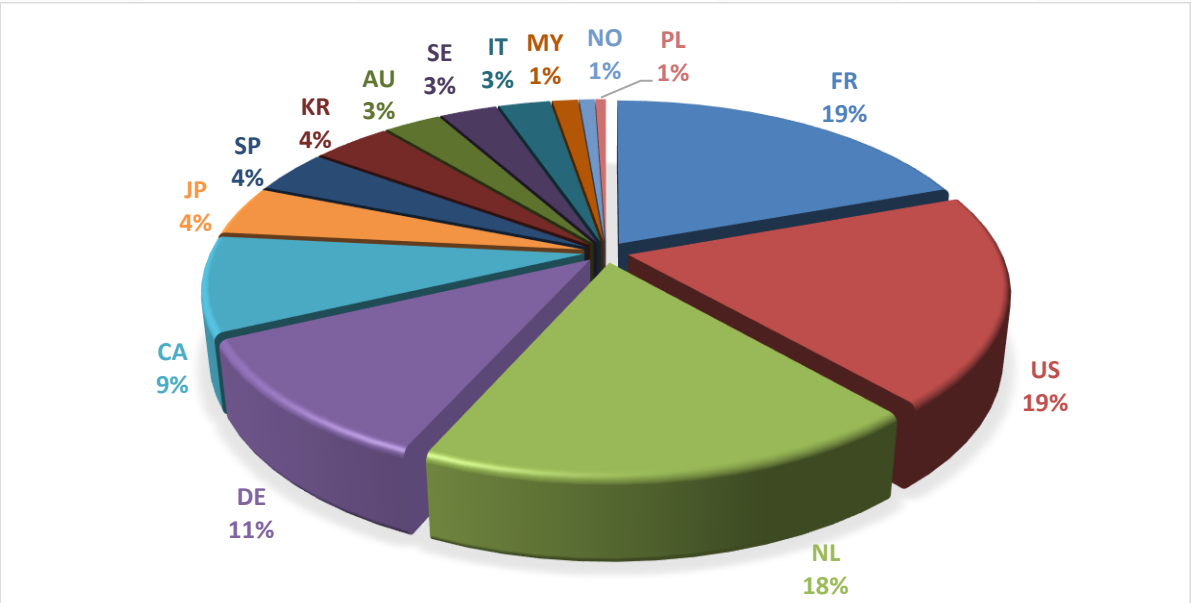
Top Certifying Schemes

The top-three certifying schemes in 2024 were France with 74 products, United States with 73 and Netherlands with 69. In this way, France, United States and Netherlands position themselves as the leading CC certification schemes, with a similar number of certified products.

These are followed by Germany (43), Canada (33), Japan (17), Spain (15) and Korea (15).

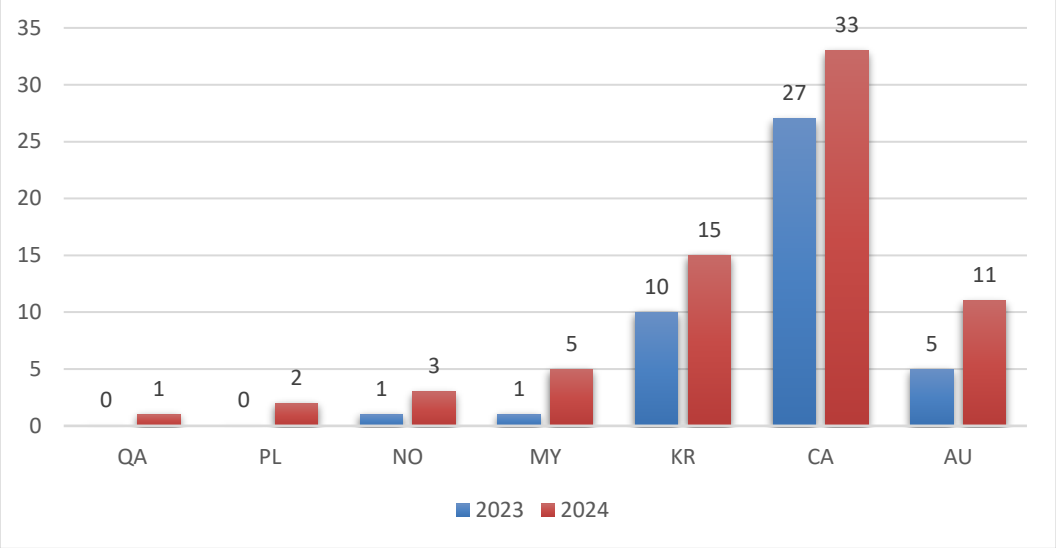


In terms of percentages, Top 3 schemes occupy 56% of the certifications, while the next three schemes collectively represent 24%. Canada climbs to 5th place, surpassing Japan, which now holds the 6th position, tied with Spain and Korea, each with 4% of the certifications. Australia, Sweden and Italy complete the top 10.

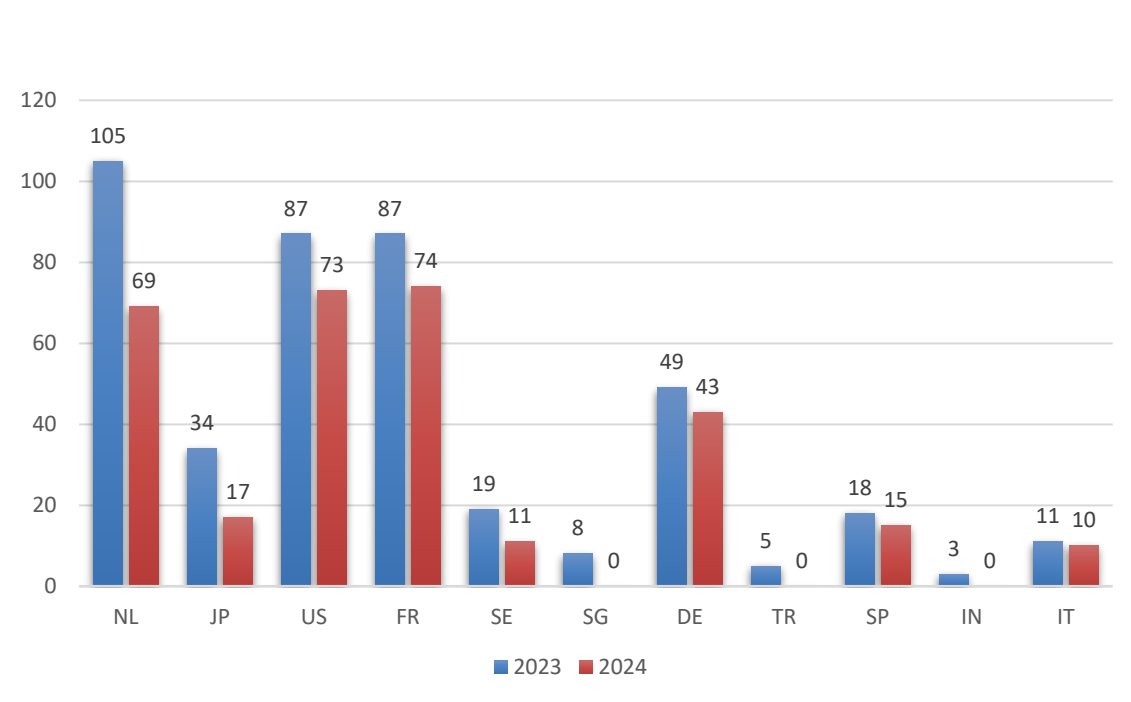


In comparison to the previous year, the countries that have shown a growth in number of certifications are Australia and Canada, which have certified six additional products, Korea, with five more; Malaysia, with four more; and Norway, with two more.

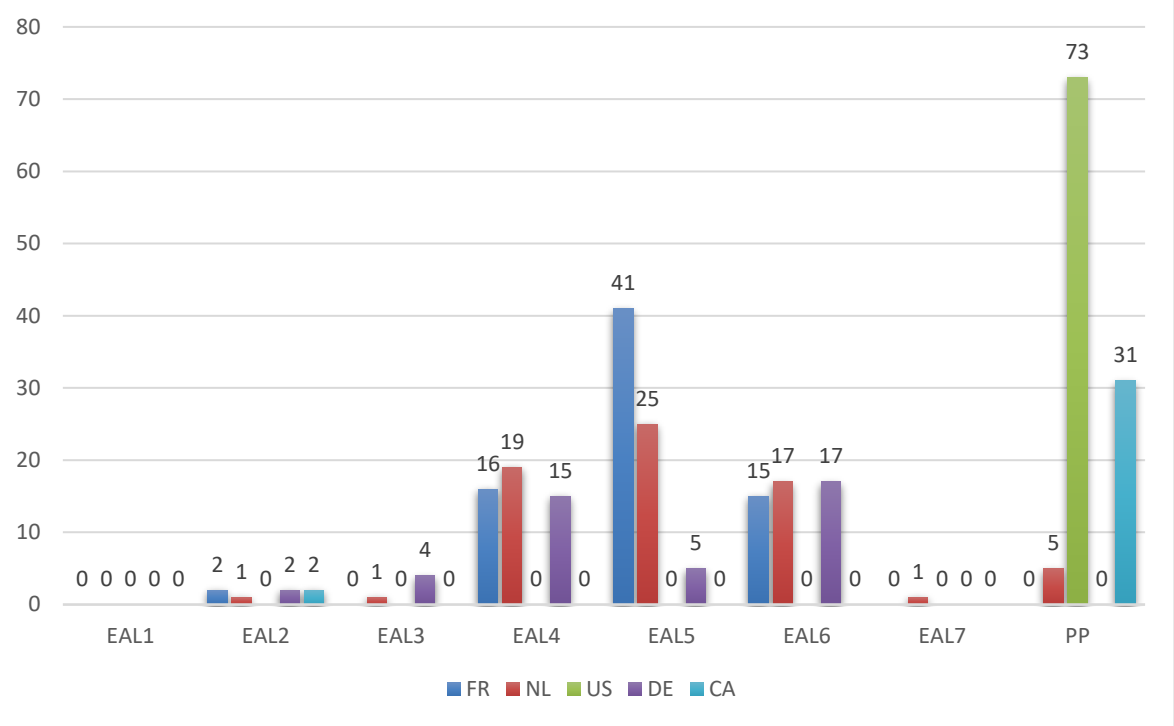
It is worth mentioning that this is the first time that the certification schemes of Poland and Qatar appear in this report.



On the other hand, the schemes that have seen the largest decrease in certifications compared to 2023 are Netherlands (36 fewer), Japan (17 fewer) and United States (14 fewer).



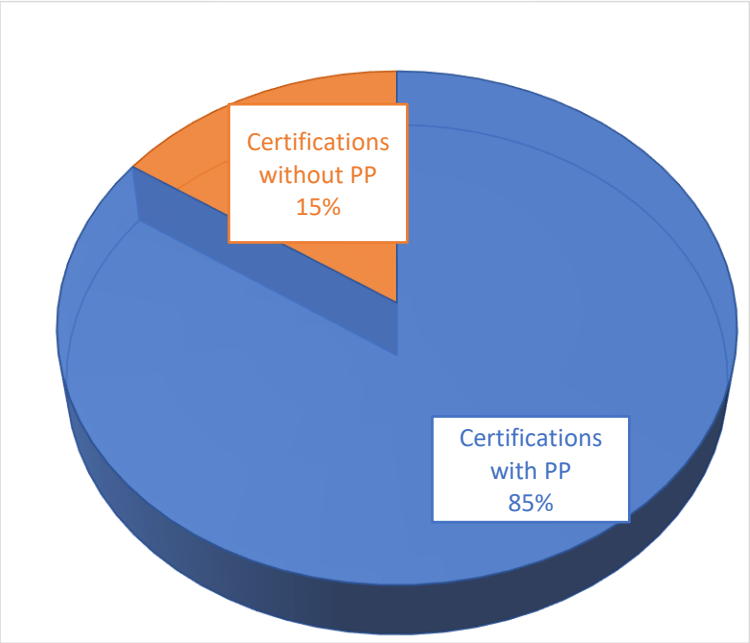
The following graph analyzes the types of certifications issued by the main certification schemes, focusing on the Assurance Level. The data show that the United States and Canada primarily certify products under a Protection Profile. In contrast, high-assurance certifications (EAL4 or higher) are predominantly conducted by the Netherlands, France, and Germany.



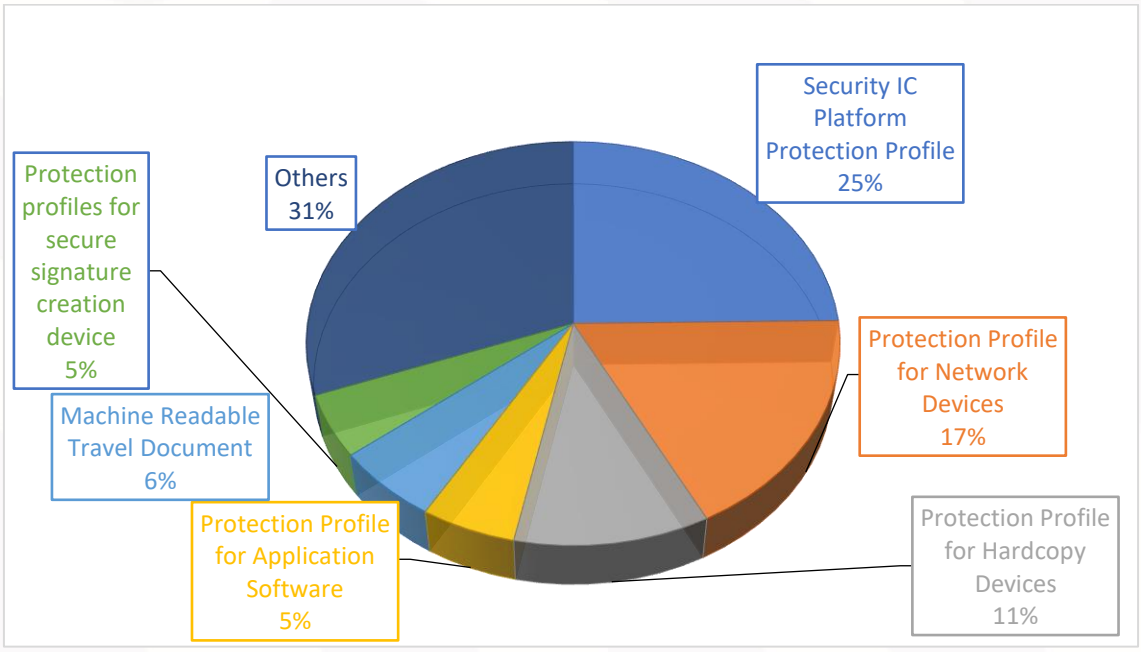
Note: The Netherlands certification scheme has issued three Common Criteria certifications for which no information is available. These certifications appear as 'withheld' on the official website of the Dutch certification body. As no details are provided, these certifications have not been considered in the data presented in this report.

Protection Profiles

In 2024, 323 products out of 382 were certified using a Protection Profile (with or without EAL assigned), representing the 85% of the certifications in that year.

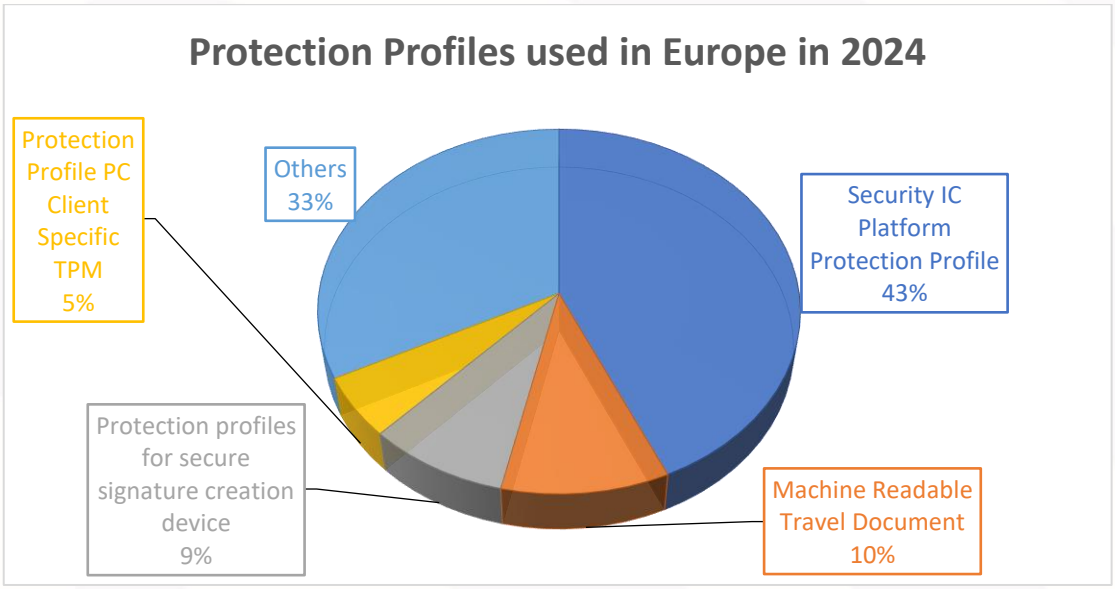


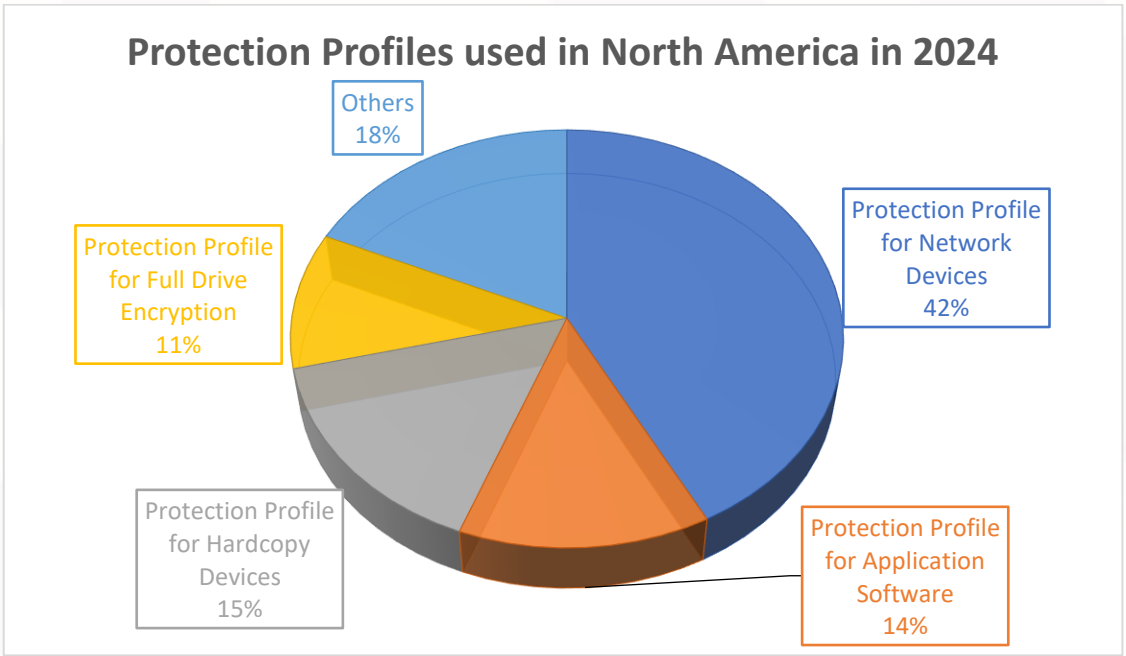
The statistics on the most frequently used Protection Profiles in 2024 highlight the top three: the *Protection Profile for Security IC Platform* (BSI-CC-PP-0084-2014) was the most widely used, with 80 certified products in compliance with it. It is followed by the *Protection Profile for Network Devices*, with a total of 57 certified products, and the *Protection Profile for Hardcopy Devices*, used in 35 certifications. Completing the top five, the *Protection Profile for Machine Readable Travel Document* was used in 19 certifications, while the *Protection Profile for Application Software* was applied to 17 certified products.

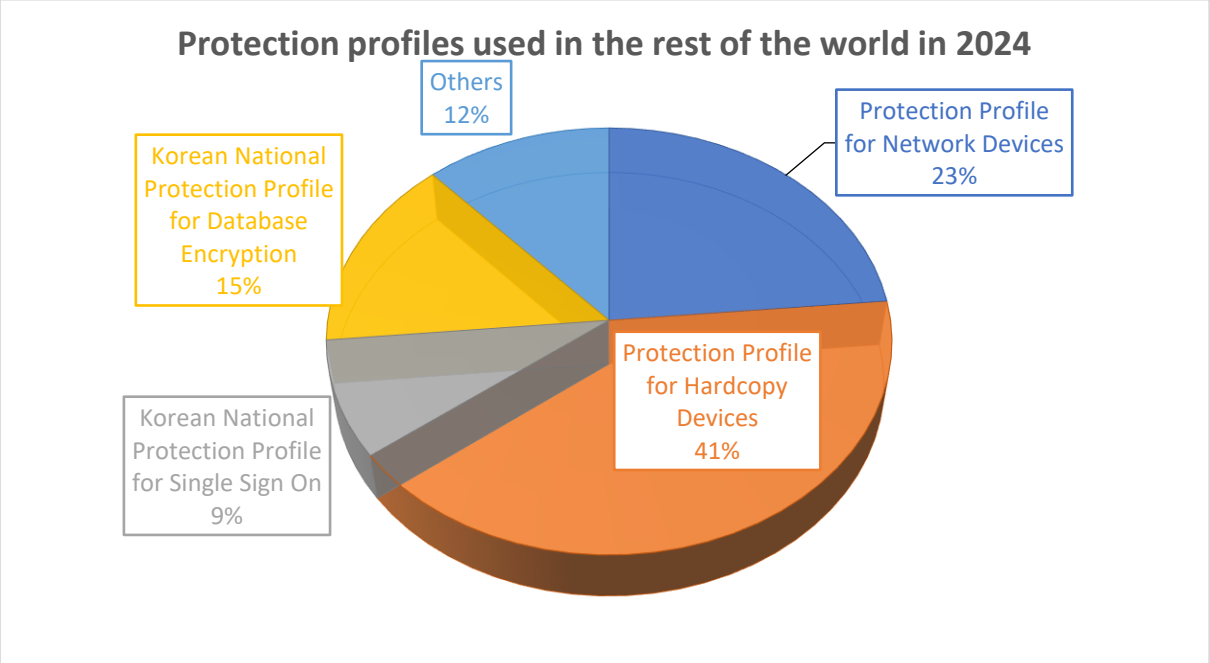


The following graphs illustrate the most frequently used Protection Profiles across different regions: Europe, North America (United States and Canada), and the rest of the world, which includes Asia and Australia.

The results indicate that each region tends to favor specific Protection Profiles. In Europe, 43% of the products certified under a Protection Profile comply with the *Security IC Platform Protection Profile*. In contrast, the trend in the United States and Canada shows a predominant use of the *Protection Profile for Network Devices*, accounting for 42% of certifications. Finally, in Asia and Australia, the most widely used Protection Profile is the *Protection Profile for Hardcopy Devices*, with 41% of certified products falling under this category.

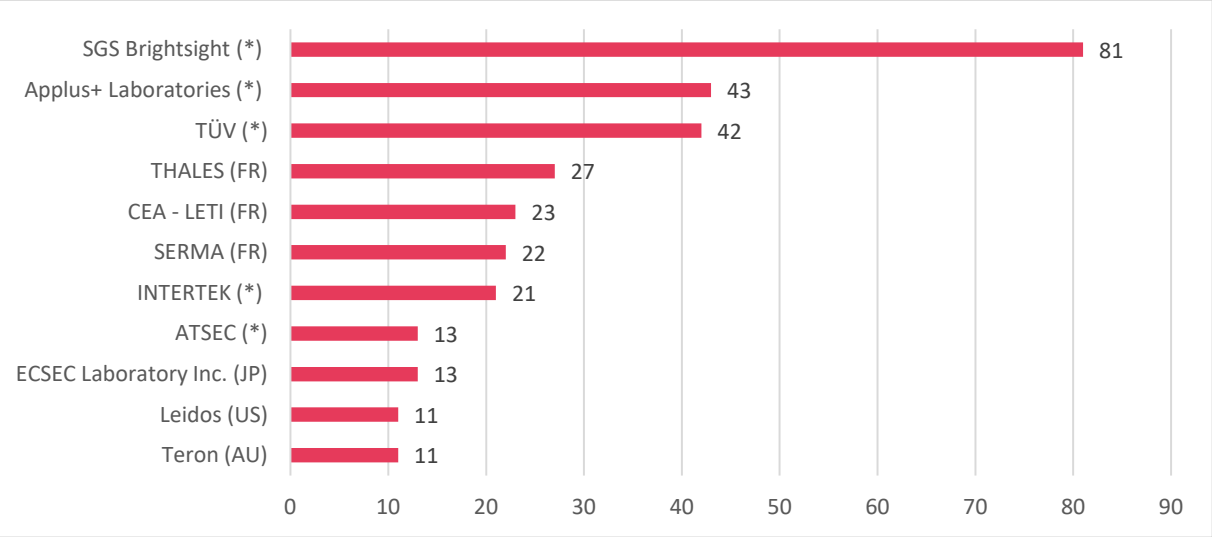






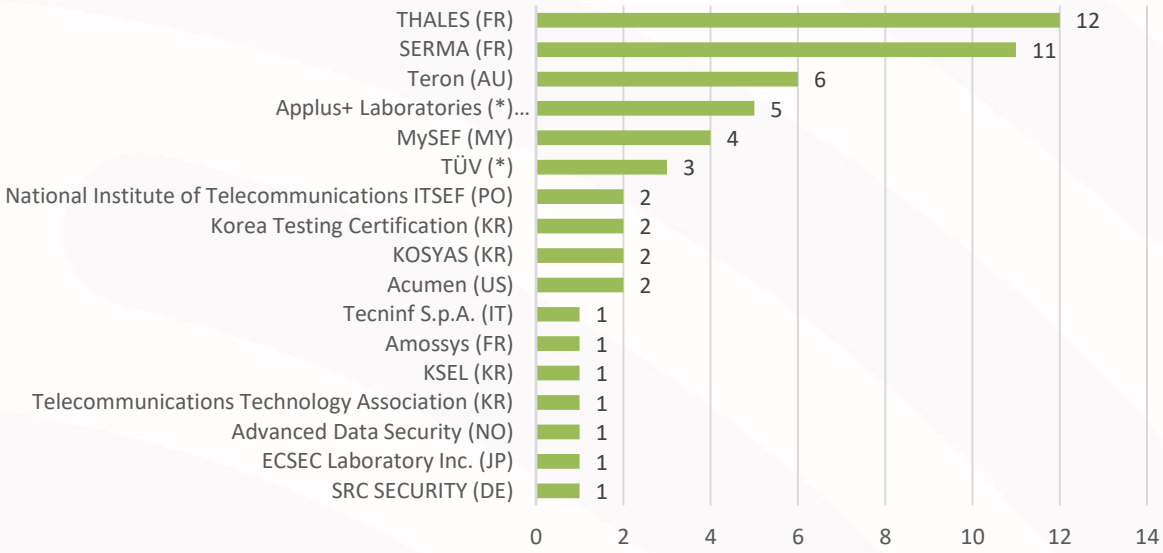
Top evaluation laboratories

The lab that evaluated the most products during 2024 was SGS Brightsight, that took the first place with 81 products evaluated; Applus+ Cybersecurity Labs, that includes Lightship and jtsec (43) is in the second place. TÜV completes the podium with 42 certifications. Thales (27) is in fourth, while CEA-LETI (23), which was in second place last year, has now dropped to fifth place. Serma (22), Intertek (21), ATSEC (13), ECSEC (13), LEIDOS (11) and Teron (11) complete the top 10.



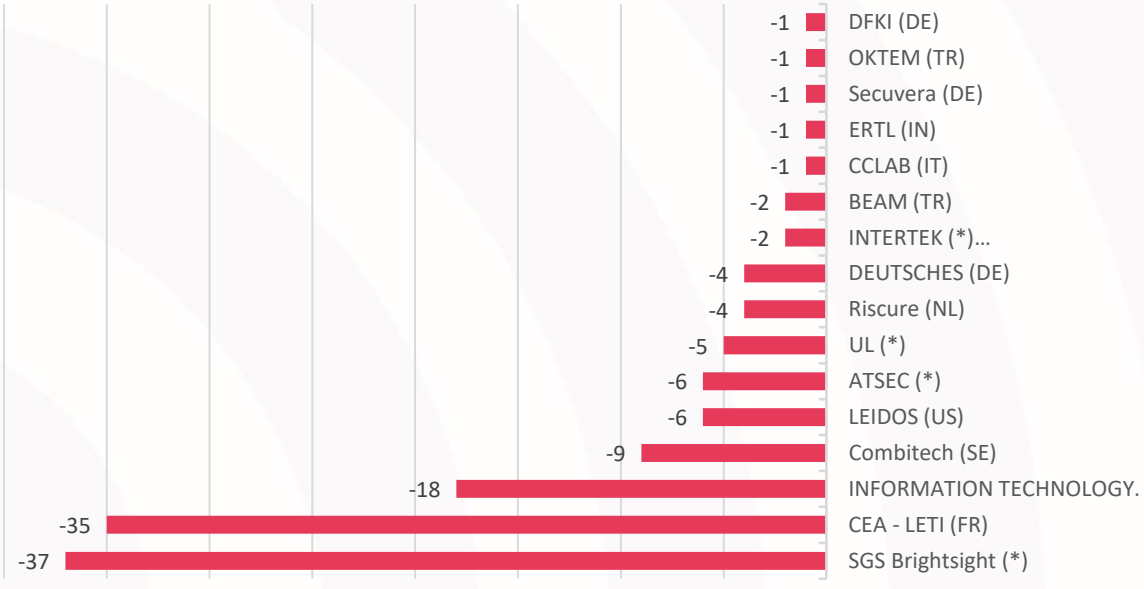
Note: In the graph, laboratories marked with an asterisk (*) indicate that they have sites in different countries. This notation applies to the entire report.

The following graph shows the labs growth, as we can see Thales, Serma and Teron are in the top 3, followed by Applus+ Cybersecurity Labs and MySEF.

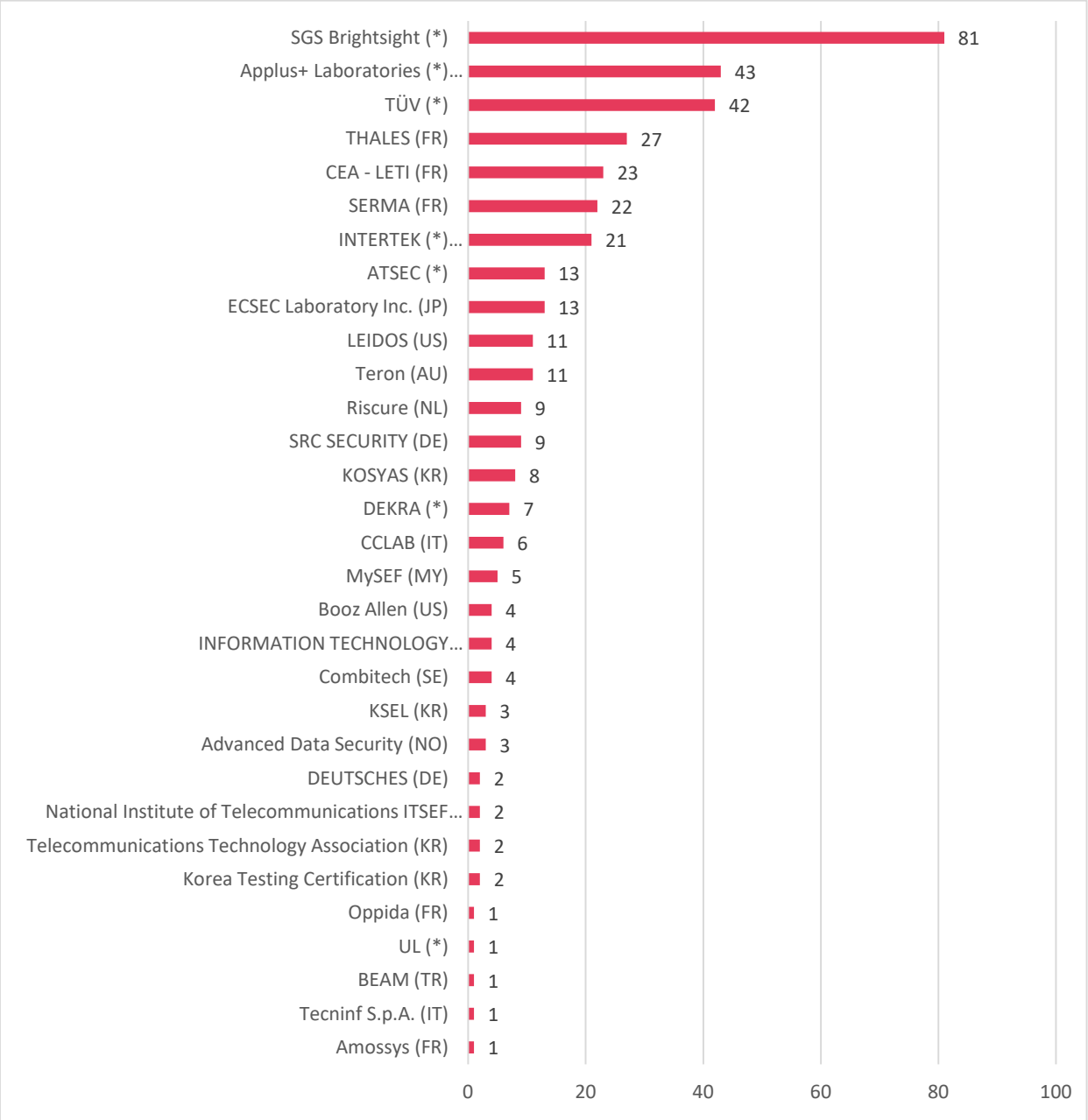


The graph included below shows the reverse trend for those laboratories whose number of certifications has decreased in 2024 compared to 2023.

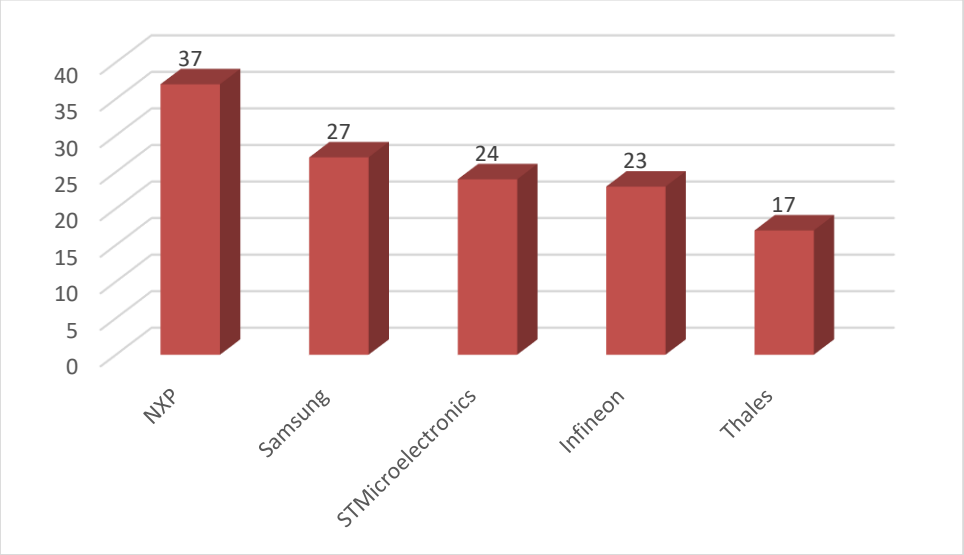
SGS Brightsight has been the laboratory with the steepest decline, followed by CEA - LETI and Information Technology Security Center (ITSC). Combitech has also experienced a significant decline.



Evaluation laboratories in 2024



Top manufacturers

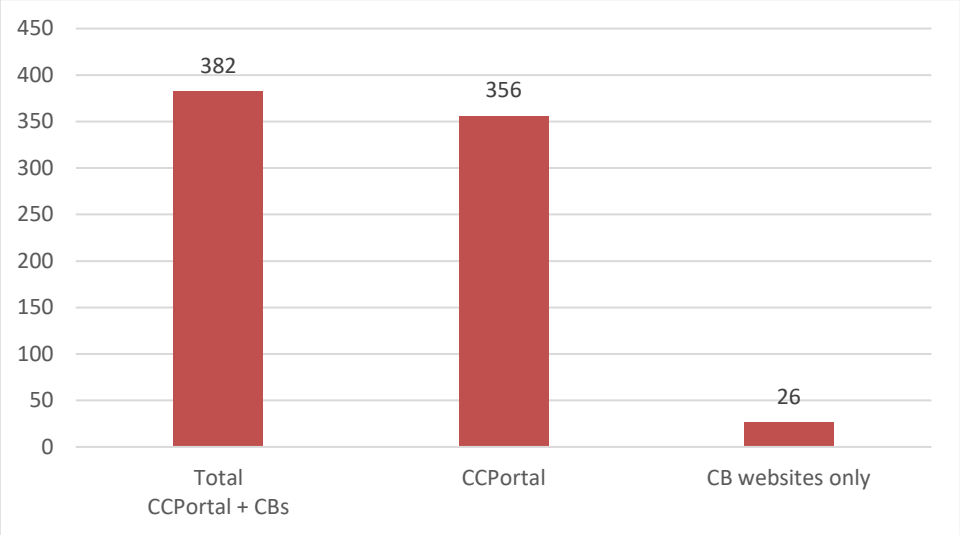


In the manufacturers ladder, we have NXP in first place with 37 certified products. Samsung is in second place with 27 products certified. Completing the podium, we find STMicroelectronics with 24 certified products, followed by Infineon with 23 and Thales with 17.

The next ones in the list, although they are not represented in this chart, we can find Cisco with 13 products and Ricoh with 11 products.

CCScraper statistics vs Common Criteria Portal statistics

CCScrapper has counted 382 products certified in 2024. However, if we check the statistics of Common Criteria Portal, only 356 are reported as certified during 2024. This is because the data gathered by CCScrapper include those products that are also published in the web portals of the different Certification Bodies. 26 products out of 382 were reported only in the websites of the different Certification Bodies and not in commoncriteriaportal.org.



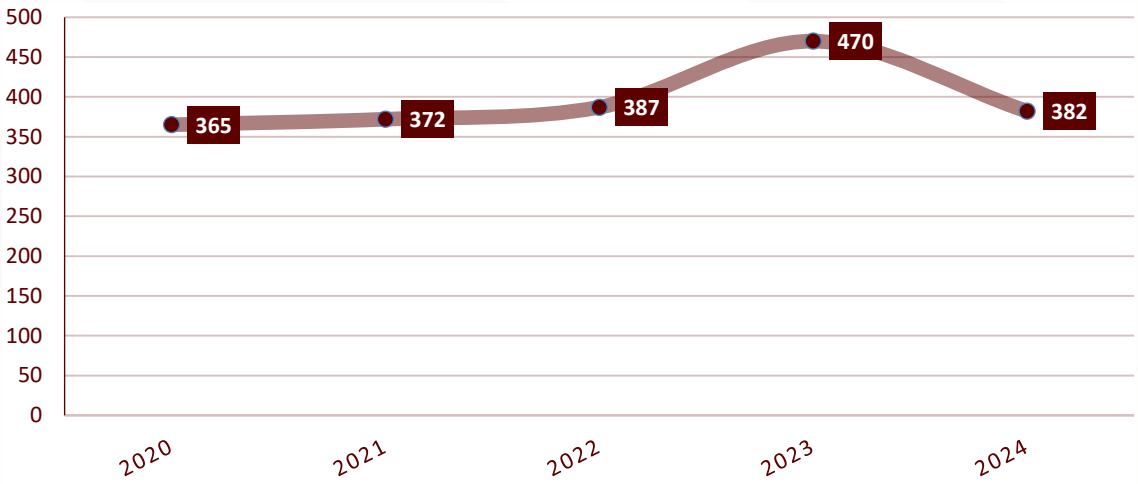
Among them, some products were duplicated, meaning the same product was reported multiple times either in Common Criteria Portal and/or in their respective Certification Body Portal. In Common Criteria Portal, some products are reported multiple times for different categories. This case is not common in the websites of Certification Bodies, nonetheless, one duplicated product was found in one of those websites. CCScrapper takes care of this situation and correlates the duplicated information, in different websites or on the same website, in a smart way.

Historical trends for 5 years

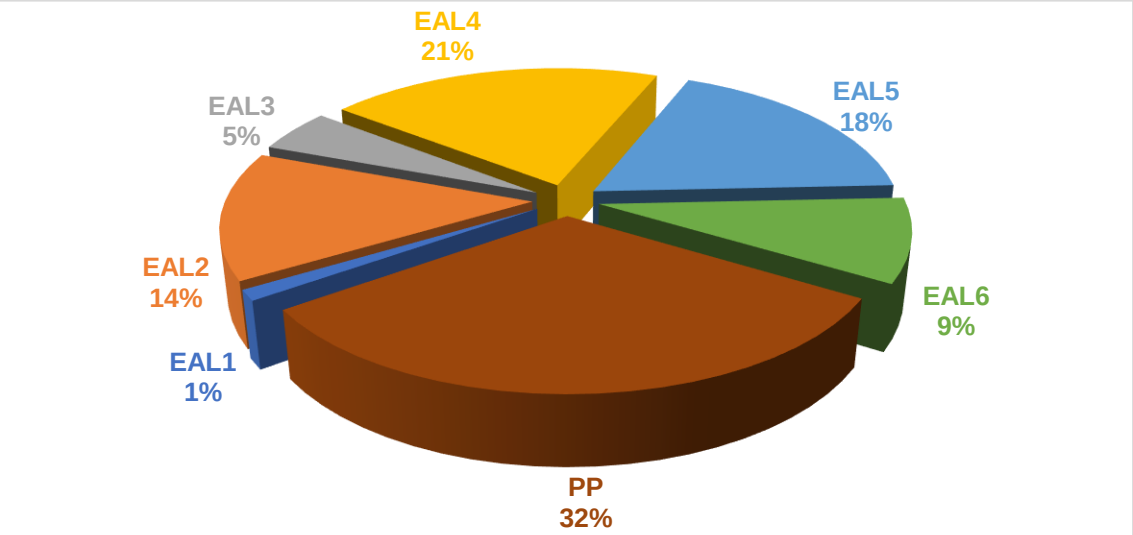
This section contains the trends in the last 5 years of Common Criteria, including products with certificate issued between 2020 and 2024, both included.

As we can see, while the number of certifications experienced a significant increase in 2023, the 2024 results have returned to levels similar to those of 2021 and 2022. This indicates a stabilization rather than a continued upward trend.

Total certified products in the last 5 years



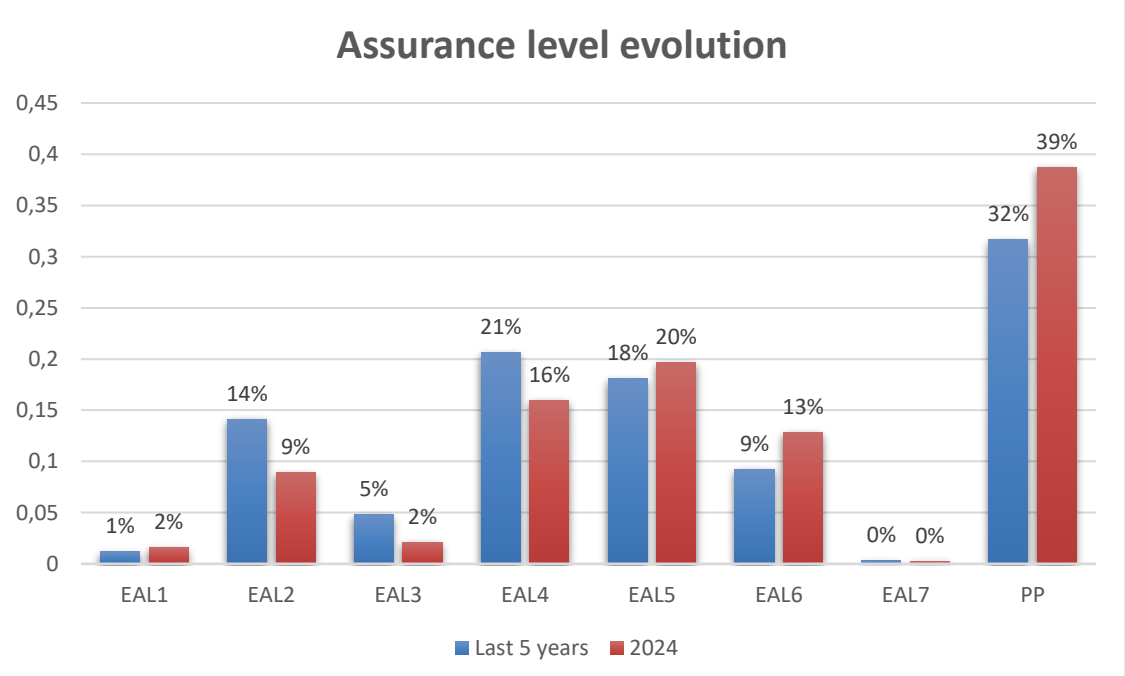
Most used assurance levels in the last 5 years



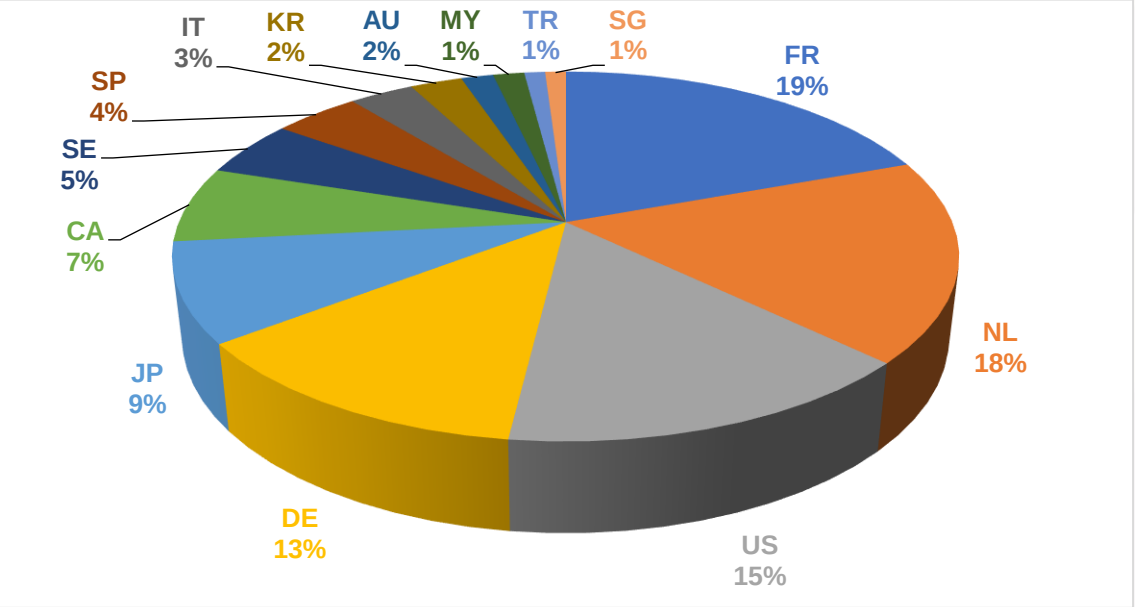
The trend during the last 5 years indicates that about 32% of the products are certified as PP-compliant (with no EAL assigned). Among the low-assurance EALs, EAL2 was the most used, representing 14.13%, while EAL4 remains the most widely used high-assurance EAL, accounting for 20.63%.

When grouping all low-assurance EALs (EAL1 to EAL3), they collectively represent 20.12% of the total, whereas high-assurance EALs are significantly more common, reaching 48.23%, with EAL4 being the most frequently used. Additionally, the number of certifications achieved under a Protection Profile amounts to 31.64%. EAL7 has been omitted from the graph as it does not reach 1%, representing only 0.31% (6 certified products).

Examining the evolution of certified assurance levels in recent years, it is evident that the current trend favors an increasing number of certifications under a Protection Profile. Additionally, there is a rise in certifications at EAL5 and EAL6, while the number of products certified at assurance levels between EAL2 and EAL4 has declined.



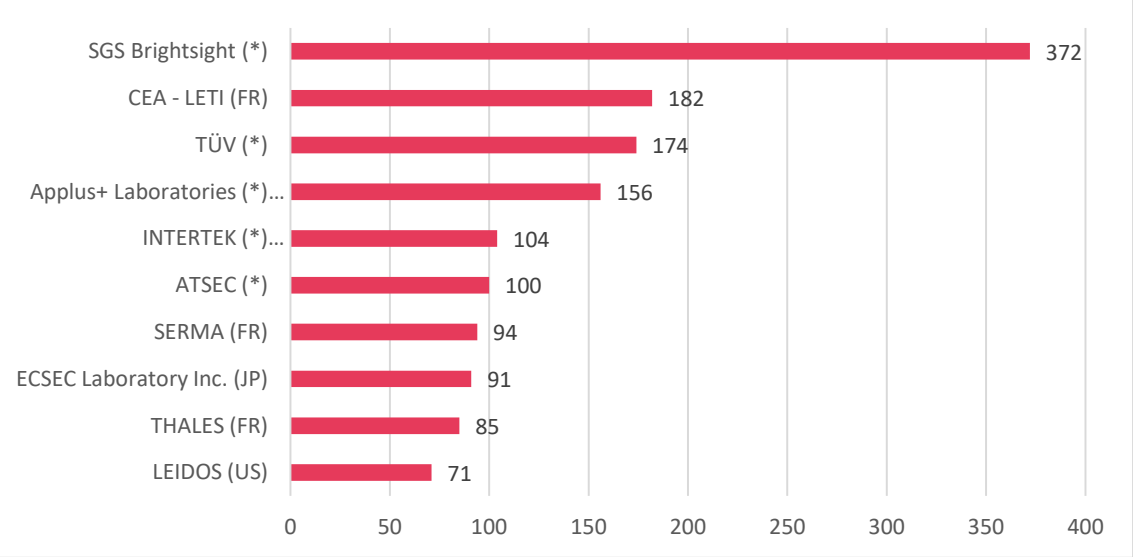
Top certifying schemes in the last 5 years



The French scheme is the one with most certifications during the last 5 years (19% out of total) followed by Netherlands (18%) and United States (15%). Germany (13%) and Japan (9%) completes the top 5. Canada (7%), Sweden (5%), Spain (4%), Italy (3%) and Korea (2%) complete the top 10. After them, we can find the rest of the countries certifying Common Criteria.

Those countries whose number of certifications is less than 1% have been omitted from this chart.

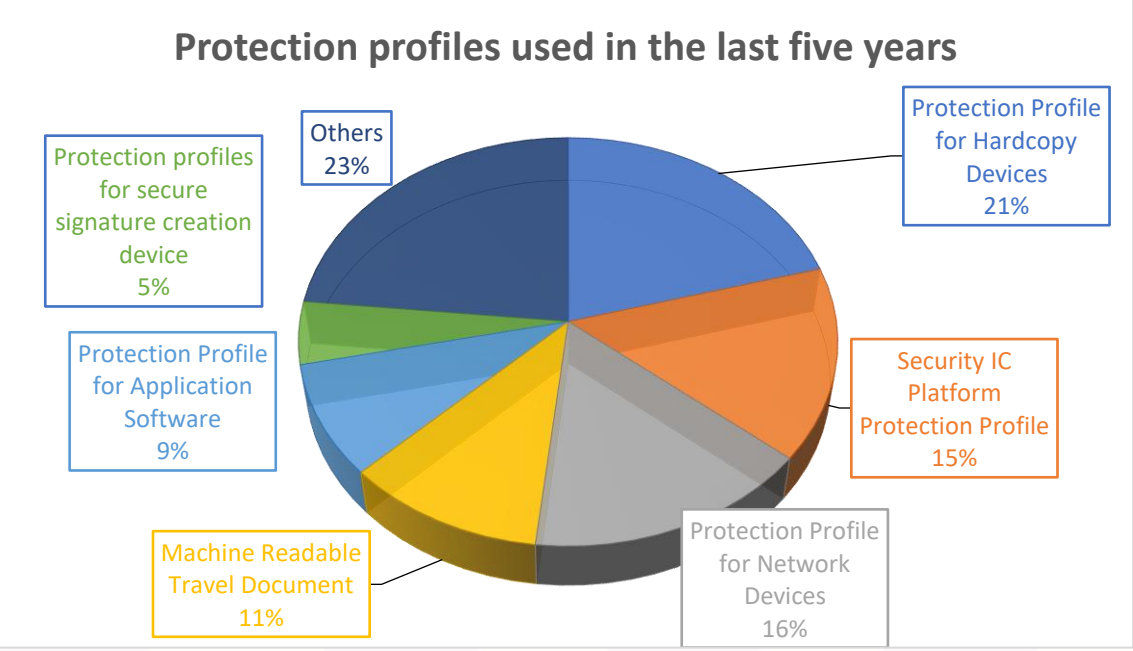
Top laboratories in the last 5 years



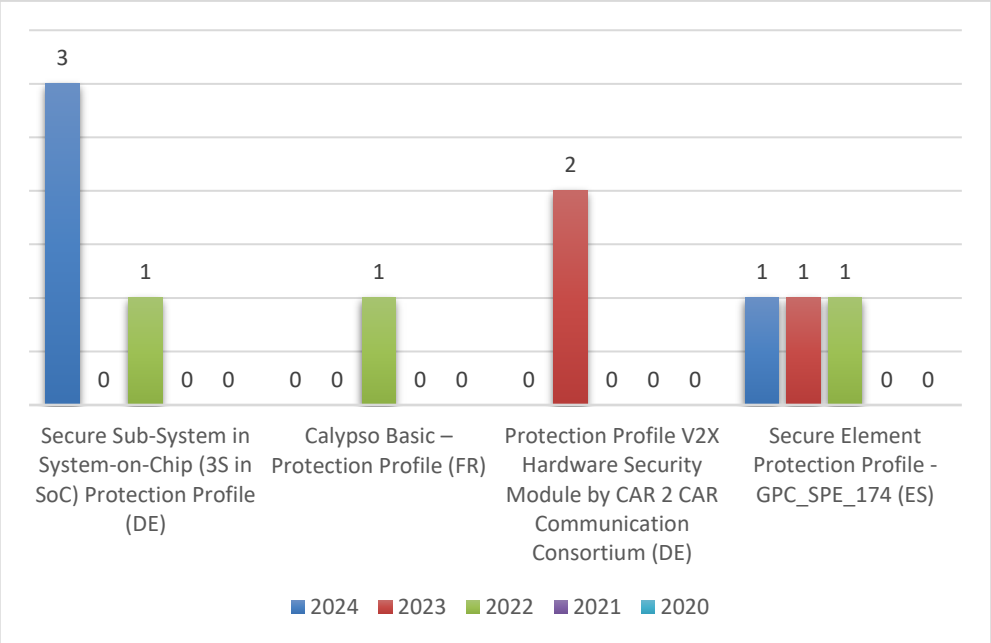
The trend for top laboratories shows SGS Brightsight in the first place, followed by CEA-LETI and TÜV in the podium. Applus+ Cybersecurity labs (that includes Lightship and jtsec) remains in fourth place followed by Intertek, ATSEC, Serma, ECSEC, Thales and Leidos.

Protection profiles in the last 5 years

The following graph presents the most frequently used Protection Profiles worldwide over the past five years, offering a clear view of certification trends during this period. It shows that the most used Protection Profile in this timeframe is the *Protection Profile for Hardcopy Devices*, with 21%, followed by the *Protection Profile for Network Devices* (16%) and the *Security IC Platform Protection Profile* (15%).



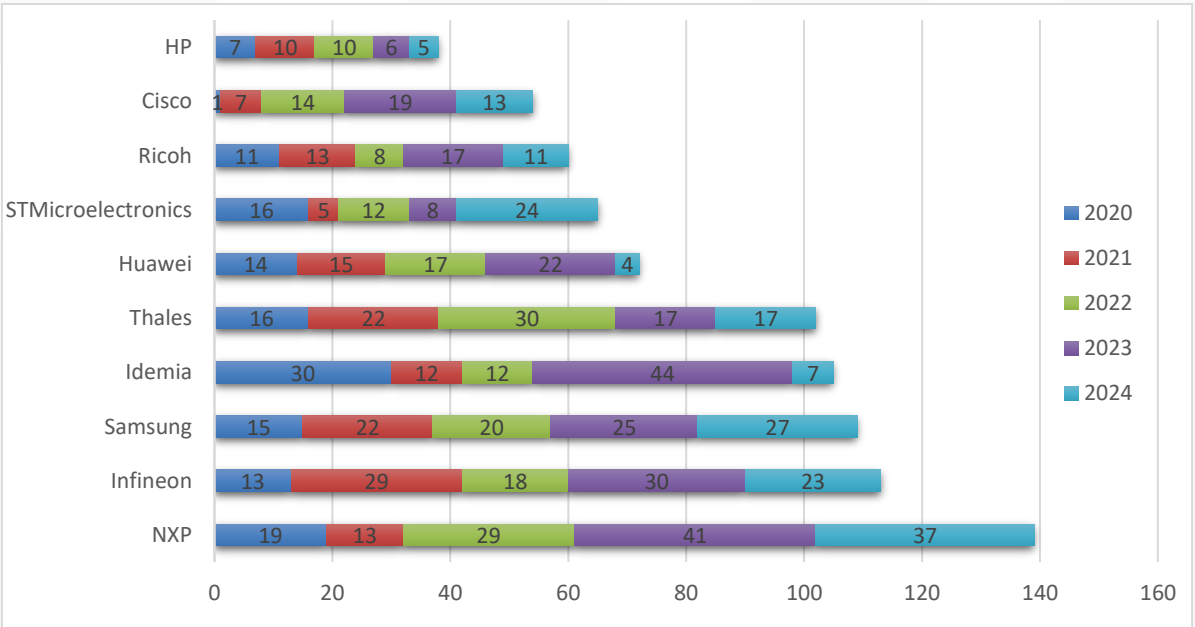
The following graph illustrates the used of newly introduced Protection Profiles, defined as those whose first version was published in 2020 or later. Among these, the most notable profiles are the German Secure Sub-System in System-on-Chip (3S in SoC) Protection Profile, the Spanish Secure Element Protection Profile - GPC_SPE_174, the German V2X Hardware Security Module by CAR 2 CAR Communication Consortium Protection Profile, and the French Calypso Basic Protection Profile.



Top manufacturers

The following graph presents an analysis of the evolution of the leading manufacturers of certified products over the past five years, providing insights into market trends and the positioning of key industry players.

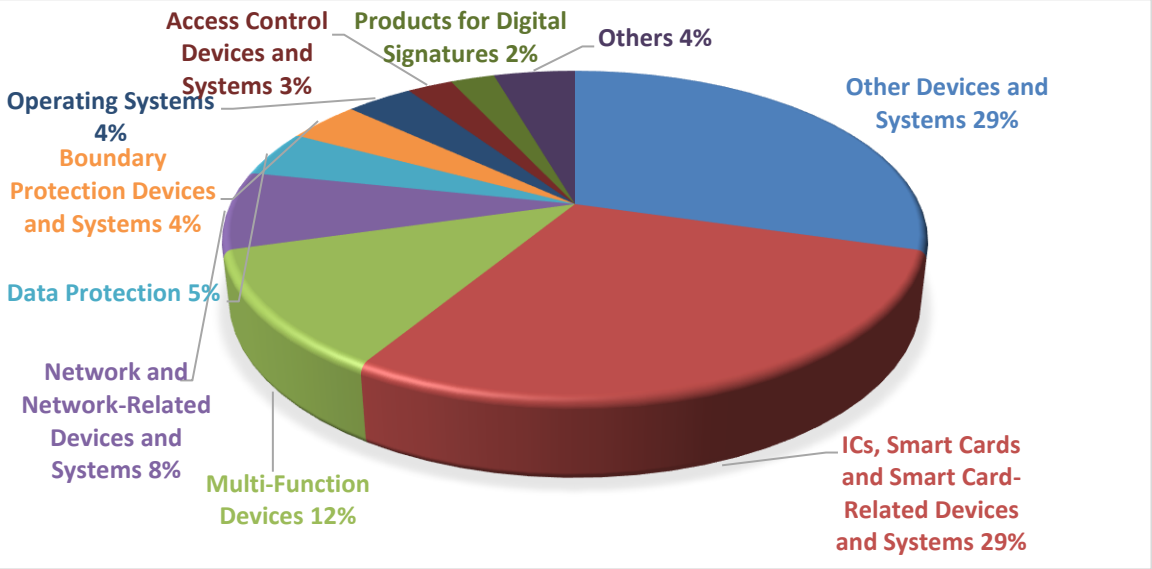
Over this period, NXP has been the top manufacturer, maintaining its position as the leading certifier in 2024. In second place is Infineon, followed closely by Samsung, Idemia, and Thales, which complete the Top 5.



Historical trends

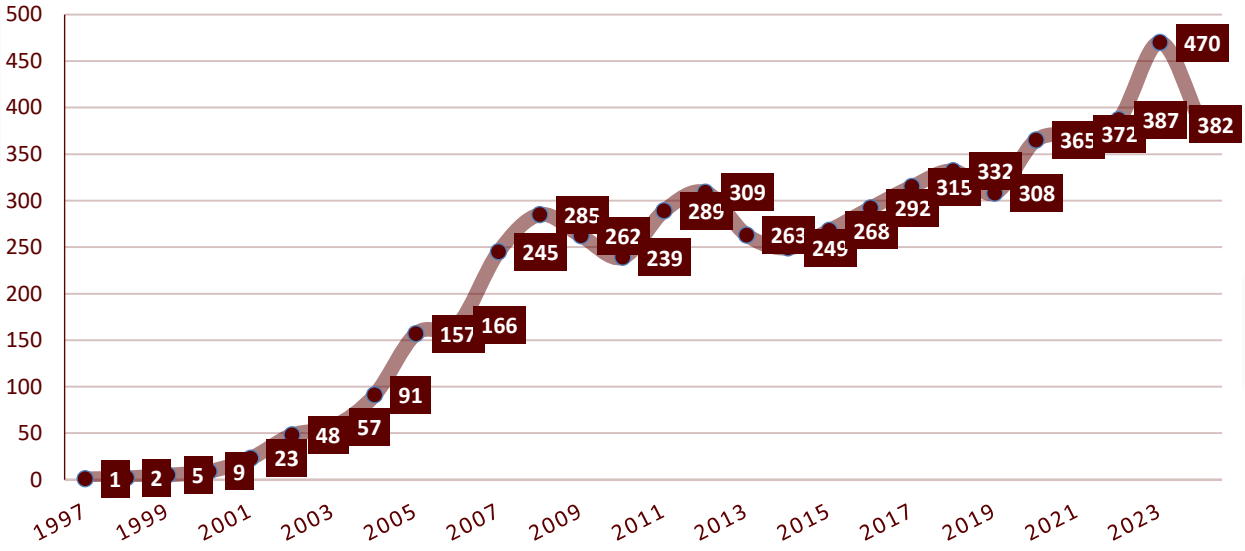
This section contains historical trends from the very beginning of Common Criteria. Archived products (products where the certificate status is no longer valid) are included for the sake of completeness.

Product categories



The most certified categories are *ICs, Smart Cards and Smart Card-Related Devices and Systems* and *Other Devices and Systems*, each representing 29% of the total. Closing the Top 3, *Multi-Function Devices* account for 12% of the certified products.

Total number of certified products by year:



The overall historical trend shows that Common Criteria certifications have generally increased over time, although there have been occasional years with a decline. While 2023 marked the highest number of certifications in history, the results for 2024 indicate a significant drop, bringing figures back to levels similar to those of 2021 and 2022. This suggests that, rather than a continuous upward trend, certification numbers may be stabilizing after several years of growth. However, with the introduction of EUCC certifications in Europe next year, it remains to be seen whether this will drive an increase in certification numbers.