SPL

ADVIESRAPPORT

IT VEILIG
EN SOEPEL GEREGELD

SPL
Amsterdamseweg 54
6814 CP Arnhem

Email info@spl.nl
Algemeen 085 - 40 14 280
Support 085 - 40 14 281

VOORWOORD

Geachte heer/mevrouw,

Op 2 februari 2026 hebben wij bij Voorbeeldklant een inventarisatie uitgevoerd op het gebied van digitale veiligheid. De door uw contactpersoon verstrekte informatie is verwerkt in onze analysemethodiek. Hieruit is dit adviesrapport ontstaan, dat wij graag verder toelichten in een persoonlijk gesprek met een van onze consultants.

Geheimhouding
Door ondertekening verplichten wij ons tot strikte geheimhouding van de verkregen informatie van Voorbeeldklant.

Vrijwaring
SPL draagt de verantwoordelijkheid voor het verwerken van de aangeleverde informatie en de totstandkoming van dit advies, maar kan niet aansprakelijk worden gehouden voor de toetsing van de juistheid en volledigheid van de aangeleverde informatie.

Wanneer een officiële toetsing benodigd is, kan SPL hierin voorzien, eventueel in combinatie met een auditor van de gewenste certificering.

Met vriendelijke groet,

Hartelijke groet,

Youri van Hal
Operationeel directeur

_____

Matthijs van Yren
Partner

_____

INHOUD

SPL ESSENTIALS

Governance

Eindverantwoordelijke cybersecurity	Dhr. Voorbeeld
Functie eindverantwoordelijke cybersecurity	CISO
Naam van de CISO/ISO	Dhr. Voorbeeld

Beleid

Is er beleid rondom cybersecurity	Ja, zie ISMS
Wat is de frequentie voor revisie	Jaarlijks
Wat is de frequentie voor evaluatie	Jaarlijks

Compliance

Moet er worden voldaan aan wet/regelgeving	ja, NIS2
Welke zijn van toepassing	ISO27001 en NIS2
Wanneer was hiervoor de laatste audit	2 februari 2026

Bedrijfsrisico's

Is er een risico inventarisatie beschikbaar	Ja, zie ISMS
Wat is de frequentie voor evaluatie	6 maanden
Wanneer is deze voor het laatst uitgevoerd	2 februari 2026
Is er een incident response plan	Ja, zie ISMS
Is er afgelopen jaar een incident geweest	Nee

Belangrijkste risico's	Kans 1 tot 10	Continuïteitsplan
Datalek patiëntgegevens	6	Ja
Uitval datacenter	3	Nee
Ramsomware	7	Ja

Kritieke bedrijfsprocessen	Proceseigenaar	RTO	RPO	MTD
		X uur	X uur	X uur
		X uur	X uur	X uur
		X uur	X uur	X uur

CIS CRITICAL SECURITY CONTROLS

Center for Internet Security

Het Center for Internet Security (CIS) is opgericht in 2000, met als doel de verbonden wereld veiliger te maken voor mensen, bedrijven en overheden. Deze door de gemeenschap gedreven non-profitorganisatie is verantwoordelijk voor de CIS Controls en CIS Benchmarks, wereldwijd erkende best practices voor het beveiligen van IT-systemen en -gegevens.

CIS leidt een wereldwijde gemeenschap van IT-professionals. Zij houden zich aan de Gedragscode, Leiderschapsprincipes en Gedragsregels van de CIS, in overeenstemming met het samenwerkingsgerichte, onpartijdige, leverancier onafhankelijke operationele model.

CIS Critical Security Controls

De CIS Critical Security Controls (CIS Controls) zijn een voorschrijvende, geprioriteerde en vereenvoudigde reeks van beste practices die gebruikt kunnen worden om de digitale veiligheid in uw organisatie te verbeteren.

De CIS Controls zijn verdeeld in 18 onderwerpen (Controls), met maatregelen (Safeguards) die voornamelijk technisch van aard zijn en toegepast kunnen worden om de risico's te verkleinen. De in totaal 153 maatregelen die toegepast kunnen worden zijn verdeeld in 3 niveaus (Implementation Groups);

- IG1 (beginner)
- IG2 (gevorderde)
- IG3 (expert)

Hieronder de schematische weergave van de CIS Controls. In deze weergave is te zien hoe de 153 maatregelen verdeeld zijn over de 18 onderwerpen.

1. Enterprise Assets 5	7. Vulnerability Management 7	13. Network Monitoring 11
2. Software Assets 7	8. Audit Log Management 12	14. Security Training 9
3. Data Protection 14	9. Email Web Protection 7	15. Service Provider Management 7
4. Secure Configuration 12	10. Malware Defenses 7	16. Application Security 14
5. Account Management 6	11. Data Recovery 4	17. Incident Response 9
6. Access Control 8	12. Network Infrastructure 8	18. Penetration Testing 7

IN TOTAAL 153 MAATREGELEN

ANALYSE METHODIEK

Inventarisatie

Tijdens de inventarisatie hebben we vastgesteld welke beveiligingsmaatregelen momenteel binnen Voorbeeldklant zijn geïmplementeerd. Elke maatregel draagt bij aan de totale score binnen een specifiek beveiligingsonderwerp. De mate waarin een maatregel is geïmplementeerd, bepaalt de toegekende score.

Op basis van deze resultaten berekenen we een totaalscore per beveiligingsonderwerp en per implementatieniveau. Deze scores geven inzicht in de huidige digitale beveiligingsstatus van Voorbeeldklant. Daarnaast maken we inzichtelijk welke aanvullende maatregelen kunnen worden genomen om de algehele beveiligingsscore te verbeteren.

Omdat elke organisatie en IT-omgeving uniek is, stellen onze consultants een persoonlijk advies op maat op. Dit advies is specifiek afgestemd op de situatie van Voorbeeldklant.

De resultaten van de inventarisatie kunnen ook worden gebruikt voor vraagstukken met betrekking tot ISO-certificering, NEN-normen, NIS2-richtlijnen en andere relevante wet- en regelgeving. Indien gewenst, kunnen we een specifieke mapping leveren die de verbanden aantoont tussen de CIS Controls en de betreffende norm of richtlijn. Let op: formele toetsing voor certificering dient altijd te worden uitgevoerd door een gecertificeerde auditor.

SCORE TOTAAL EN SAMENVATTING

Score totaal

Hieronder een overzicht van de gemiddelde score over het totaal, verdeeld in de 3 niveaus waarop de maatregelen toegepast kunnen worden. Dit totaal is een gemiddelde van de score per niveau op alle onderwerpen. De belangrijkste verbeterpunten worden verder toegelicht in het volgende hoofdstuk.
Het totaaloverzicht van de scores is toegevoegd als bijlage van dit adviesvoorstel.

Samenvatting

De afgelopen tijd heeft Voorbeeldklant aanzienlijke vooruitgang geboekt op het gebied van IT. Uit de inventarisatie bleek dat technisch gezien al veel beveiligingsmaatregelen en best practices zijn geïmplementeerd. Procesmatig worden diverse zaken van nature al op de juiste manier uitgevoerd, maar er is nog werk nodig om alles volledig te formaliseren.
Technische maatregelen zijn pas effectief wanneer duidelijk is waarvoor ze zijn bedoeld en hoe hun effectiviteit kan worden gemeten. Dit vereist onder andere een goed overzicht van alle apparatuur, software en accounts. Hoewel Voorbeeldklant tot op zekere hoogte inzicht heeft in deze gegevens, is de informatie momenteel nog te veel versnipperd.

SPL stelt voor om te beginnen met het stroomlijnen en ordenen van dit overzicht. Vanuit daar kan verder worden gebouwd met technische oplossingen die de beveiliging van Voorbeeldklant naar een hoger niveau tillen. De eerste drie stappen om mee te beginnen zijn in het advies verder uitgewerkt.

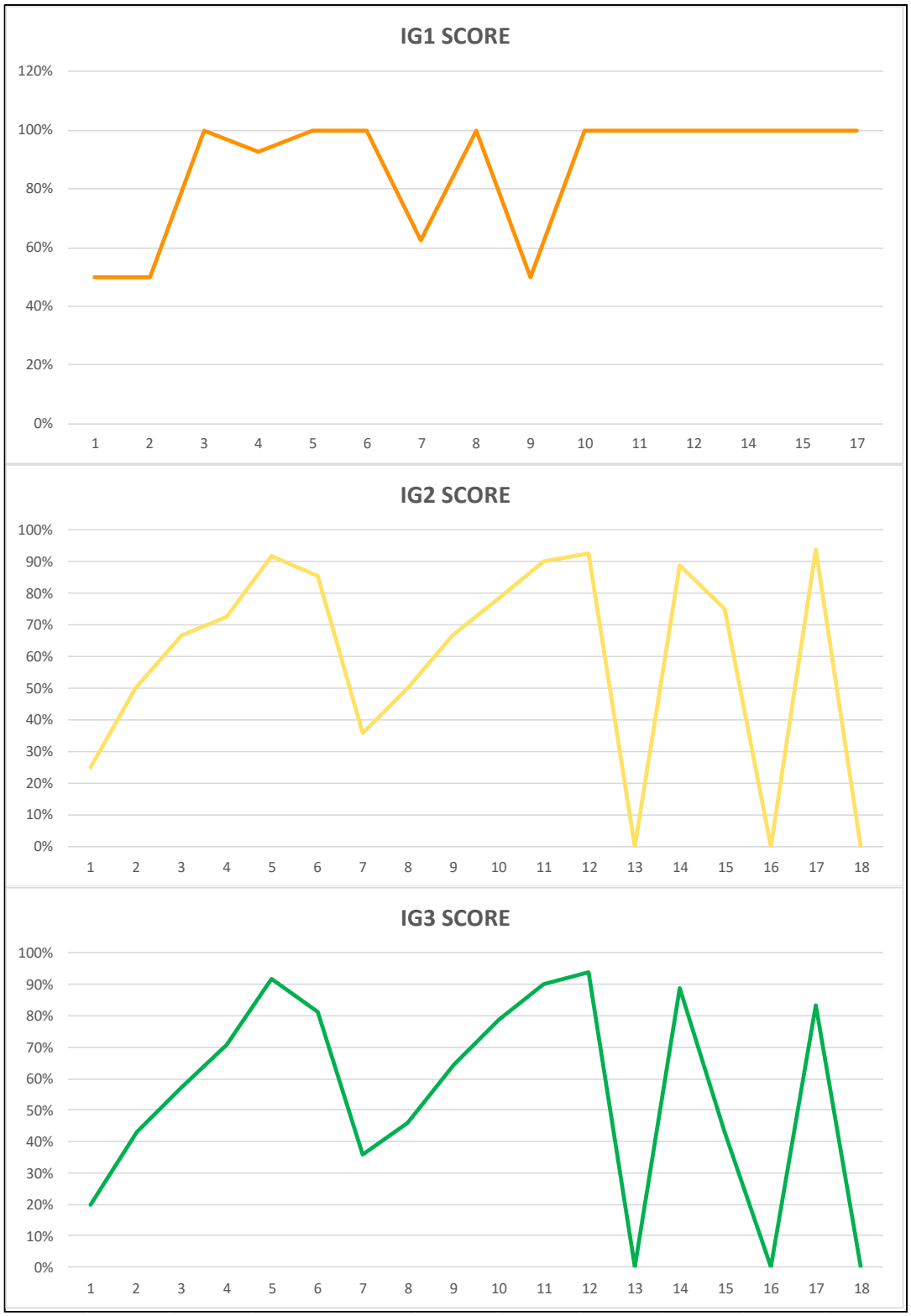
Scorecard

Hieronder de totalen van de behaalde score per onderwerp en niveau inzichtelijk.

HOOFDSTUK	CIS CONTROL	IG1 SCORE	IG2 SCORE	IG3 SCORE
1	**Inventory and Control of Enterprise Assets** Actively manage (inventory, track, and correct) all enterprise assets (end-user devices, including portable and mobile; network devices; non computing/Internet of Things (IoT) devices; and servers) connected to the infrastructure physically, virtually, remotely, and	50%	**25%**	20%
2	**Inventory and Control of Software Assets** Actively manage (inventory, track, and correct) all software (operating systems and applications) on the network so that only authorized software is installed and can execute, and that unauthorized and unmanaged software is found and prevented from installation or execution.	50%	50%	43%
3	**Data Protection** Develop processes and technical controls to identify, classify, securely handle, retain, and dispose of data.	100%	67%	57%
4	**Secure Configuration of Enterprise Assets and Software** Establish and maintain the secure configuration of enterprise assets (end-user devices, including portable and mobile; network devices; non computing/IoT devices; and servers) and software (operating systems and applications).	93%	73%	71%
5	**Account Management** Use processes and tools to assign and manage authorization to credentials for user accounts, including administrator accounts, as well as service accounts, to enterprise assets and software.	100%	92%	92%
6	**Access Control Management** Use processes and tools to create, assign, manage, and revoke access credentials and privileges for user, administrator, and service accounts for enterprise assets and software.	100%	86%	81%
7	**Continuous Vulnerability Management** Develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers. Monitor public and private industry	63%	36%	36%
8	**Audit Log Management** Collect, alert, review, and retain audit logs of events that could help detect, understand, or recover from an attack.	100%	50%	46%
9	**Email and Web Browser Protections** Improve protections and detections of threats from email and web vectors, as these are opportunities for attackers to manipulate human behavior through direct engagement.	50%	67%	64%
10	**Malware Defenses** Prevent or control the installation, spread, and execution of malicious applications, code, or scripts on enterprise assets.	100%	79%	79%
11	**Data Recovery** Establish and maintain data recovery practices sufficient to restore in-scope enterprise assets to a pre-incident and trusted state.	100%	90%	90%
12	**Network Infrastructure Management** Establish, implement, and actively manage (track, report, correct) network devices, in order to prevent attackers from exploiting vulnerable network services and access points.	100%	93%	94%
13	**Network Monitoring and Defense** Operate processes and tooling to establish and maintain comprehensive network monitoring and defense against security threats across the enterprise's network infrastructure and user base.	0%	0%	0%
14	**Security Awareness and Skills Training** Establish and maintain a security awareness program to influence behavior among the workforce to be security conscious and properly skilled to reduce cybersecurity risks to the enterprise.	100%	89%	89%
15	**Service Provider Management** Develop a process to evaluate service providers who hold sensitive data, or are responsible for an enterprise's critical IT platforms or processes, to ensure these providers are protecting those platforms and data appropriately.	100%	75%	43%
16	**Application Software Security** Manage the security life cycle of in-house developed, hosted, or acquired software to prevent, detect, and remediate security weaknesses before they can impact the enterprise.	0%	0%	0%
17	**Incident Response Management** Establish a program to develop and maintain an incident response capability (e.g., policies, plans, procedures, defined roles, training, and communications) to prepare, detect, and quickly respond to an attack.	100%	94%	83%
18	**Penetration Testing** Test the effectiveness and resiliency of enterprise assets through identifying and exploiting weaknesses in controls (people, processes, and technology), and simulating the objectives and actions of an attacker.	0%	0%	0%
	GEMIDDELD	73%	59%	55%

Schematische weergave

Hieronder de schematische weergave van de score per onderwerp op de verschillende niveaus.



PRIORITEITEN

Laagste scores

Hieronder een overzicht van de laagste scores op basis van de CIS Critical Security Controls, voor Implementation Group 1 (IG 1).

Deze score is gebaseerd op het percentage maatregelen wat is toegepast binnen dit onderwerp. Dit wil niet automatisch zeggen dat dit het grootste risico vormt. De weging van grootste risico's wordt meegenomen in het hoofdstuk Adviesvoorstel.

Laagste score

HOOFDSTUK	CIS CONTROL	IG1 SCORE
1	**Inventory and Control of Enterprise Assets** Actively manage (inventory, track, and correct) all enterprise assets (end-user devices, including portable and mobile; network devices; non computing/Internet of Things (IoT) devices; and servers) connected to the infrastructure physically, virtually, remotely, and	50%

Op één na laagste score

HOOFDSTUK	CIS CONTROL	IG1 SCORE
2	**Inventory and Control of Software Assets** Actively manage (inventory, track, and correct) all software (operating systems and applications) on the network so that only authorized software is installed and can execute, and that unauthorized and unmanaged software is found and prevented from installation or execution.	50%

Op twee na laagste score

HOOFDSTUK	CIS CONTROL	IG1 SCORE
7	**Continuous Vulnerability Management** Develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers. Monitor public and private industry	63%

Verbeterpunten

Om de score op bovenstaande onderwerpen te verhogen kunnen de volgende maatregelen worden toegepast;

1	**Inventory and Control of Enterprise Assets** Actively manage (inventory, track, and correct) all enterprise assets (end-user devices, including portable and mobile; network devices; noncomputing/Internet of Things (IoT) devices; and servers) connected to the infrastructure physically, virtually, remotely, and those within cloud environments, to accurately know the totality of assets that need to be monitored and protected within the enterprise. This will also support				
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**
1,1	Establish and Maintain Detailed Enterprise Asset Inventory	**1**	**1**	**1**	Ja
1,2	Address Unauthorized Assets	**1**	**1**	**1**	Nee
1,3	Utilize an Active Discovery Tool		**1**	**1**	Nee

2	**Inventory and Control of Software Assets** Actively manage (inventory, track, and correct) all software (operating systems and applications) on the network so that only authorized software is installed and can execute, and that unauthorized and unmanaged software is found and prevented from installation or execution.				
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**
2,1	Establish and Maintain a Software Inventory	**1**	**1**	**1**	Ja
2,2	Ensure Authorized Software is Currently Supported	**1**	**1**	**1**	Deels
2,3	Address Unauthorized Software	**1**	**1**	**1**	Nee

7	**Continuous Vulnerability Management** Develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers. Monitor public and private industry sources for new threat and vulnerability information.				
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**
7,1	Establish and Maintain a Vulnerability Management Process	**1**	**1**	**1**	Deels
7,2	Establish and Maintain a Remediation Process	**1**	**1**	**1**	Deels
7,3	Perform Automated Operating System Patch Management	**1**	**1**	**1**	Ja
7,4	Perform Automated Application Patch Management	**1**	**1**	**1**	Deels

In de bijlage is de volledige informatie over deze maatregelen te vinden. Door deze maatregelen toe te passen zouden hoofdstuk 1, 2 en 7 naar 100% score gaan.

ADVIESVOORSTEL

In het vorige hoofdstuk zijn de laagste scores en belangrijkste verbeterpunten op basis van de Critical Security Controls naar voren gekomen. Zoals eerder aangegeven zijn dit niet altijd de grootste beveiliging risico's.

Daarnaast kost het implementeren van een specifieke maatregel soms een grotere investering in tijd en geld dan een andere maatregel. Tot slot zijn er ook nog oplossingen te implementeren die invloed hebben op meerdere maatregelen.

Daarom vertalen wij in dit adviesvoorstel de cijfers naar een advies op maat voor Voorbeeldklant, waarin we de volgens ons de logische vervolgstappen toelichten.

Stap 1 – CIS Control 2 (Inventory and Control of Software Assets)

CIS Control 2, net als CIS Control 1, vormt een fundament voor het opzetten van een effectieve beveiliging.
Door inzicht te krijgen in de eigen software, kunnen weloverwogen beslissingen worden genomen. Hoewel er momenteel via Intune een overzicht beschikbaar is, wordt er niets concreets mee gedaan.

SPL adviseert om dit als eerste stap aan te pakken, zodat hierop verder gebouwd kan worden. Dit omvat het opzetten van een software-inventarisatie, het analyseren en beoordelen ervan, het controleren van compliance (is de software up-to-date en ondersteund?), en het aanpakken van ongeautoriseerde software.

Stap 2 – CIS Control 7 (Continuous Vulnerability Management)

Zodra de software-inventaris is vastgelegd en beoordeeld, kunnen geautoriseerde softwarepakketten worden voorzien van automatische patches.
Dit gebeurt al gedeeltelijk via applicaties die beschikbaar gesteld zijn via de appstore, maar voor overige applicaties moet dit nog worden gerealiseerd. Voor applicaties die niet in deze tooling passen, zal een handmatig proces opgezet moeten worden. Daarnaast is het belangrijk om actief kwetsbaarheden aan te pakken.

SPL adviseert hiervoor ook een proces in te richten, logischerwijs door gebruik te maken van de vulnerability detection in Microsoft Defender.

Stap 3 – CIS Control 1 (Inventory and Control of Enterprise Assets)

Tijdens het bezoek bleek er geen volledig overzicht te zijn van alle apparaten die altijd of regelmatig verbinding maken met het netwerk van Voorbeeldklant. Hierdoor is het niet mogelijk om vast te stellen of er ongeautoriseerde apparaten op het netwerk aanwezig zijn. Omdat er ook geen beoordeeld overzicht is van de huidige apparatuur, software en vulnerabilities brengt ongeautoriseerde toegang tot het netwerk extra beveiligingsrisico's met zich mee.

SPL adviseert om hier actie op te ondernemen door bijvoorbeeld een NAC-oplossing te implementeren. Deze oplossing zou het grootste deel van het proces kunnen automatiseren.

BIJLAGE 1 INVENTARISATIE

1	**Inventory and Control of Enterprise Assets** Actively manage (inventory, track, and correct) all enterprise assets (end-user devices, including portable and mobile; network devices; noncomputing/internet of Things (IoT) devices; and servers) connected to the infrastructure physically, virtually, remotely, and those within cloud environments, to accurately know the totality of assets that need to be monitored and protected within the enterprise. This will also support							
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
1,1	Establish and Maintain Detailed Enterprise Asset Inventory	1	1	1	Ja	2	4	5
1,2	Address Unauthorized Assets	1	1	1	Nee			
1,3	Utilize an Active Discovery Tool		1	1	Nee			
1,4	Use Dynamic Host Configuration Protocol (DHCP) Logging to Update Enterprise Asset		1	1	Nee			
1,5	Use a Passive Asset Discovery Tool			1	Nee	1	1	1
2	**Inventory and Control of Software Assets** Actively manage (inventory, track, and correct) all software (operating systems and applications) on the network so that only authorized software is installed and can execute, and that unauthorized and unmanaged software is found and prevented from installation or execution.					50%	25%	20%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
2,1	Establish and Maintain a Software Inventory	1	1	1	Ja	3	6	7
2,2	Ensure Authorized Software is Currently Supported	1	1	1	Deels			
2,3	Address Unauthorized Software	1	1	1	Nee			
2,4	Utilize Automated Software Inventory Tools		1	1	Ja			
2,5	Allowlist Authorized Software		1	1	Deels			
2,6	Allowlist Authorized Libraries		1	1	Nee			
2,7	Allowlist Authorized Scripts			1	Nee	1,5	3	3
3	**Data Protection** Develop processes and technical controls to identify, classify, securely handle, retain, and dispose of data.					50%	50%	43%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
3,1	Establish and Maintain a Data Management Process	1	1	1	Ja	6	12	14
3,2	Establish and Maintain a Data Inventory	1	1	1	Ja			
3,3	Configure Data Access Control Lists	1	1	1	Ja			
3,4	Enforce Data Retention	1	1	1	Ja			
3,5	Securely Dispose of Data	1	1	1	Ja			
3,6	Encrypt Data on End-User Devices	1	1	1	Ja			
3,7	Establish and Maintain a Data Classification Scheme		1	1	Deels			
3,8	Document Data Flows		1	1	Deels			
3,9	Encrypt Data on Removable Media		1	1	Nee			
3.10	Encrypt Sensitive Data in Transit		1	1	Nee			
3,11	Encrypt Sensitive Data at Rest		1	1	Nee			
3,12	Segment Data Processing and Storage Based on Sensitivity		1	1	Ja			
3,13	Deploy a Data Loss Prevention Solution			1	Nee			
3,14	Log Sensitive Data Access			1	Nee	6	8	8
4	**Secure Configuration of Enterprise Assets and Software** Establish and maintain the secure configuration of enterprise assets (end-user devices, including portable and mobile; network devices; noncomputing/IoT devices; and servers) and software (operating systems and applications).					100%	67%	57%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
4,1	Establish and Maintain a Secure Configuration Process	1	1	1	Ja	7	11	12
4,2	Establish and Maintain a Secure Configuration Process for Network Infrastructure	1	1	1	Ja			
4,3	Configure Automatic Session Locking on Enterprise Assets	1	1	1	Ja			
4,4	Implement and Manage a Firewall on Servers	1	1	1	Ja			
4,5	Implement and Manage a Firewall on End-User Devices	1	1	1	Ja			
4,6	Securely Manage Enterprise Assets and Software	1	1	1	Ja			
4,7	Manage Default Accounts on Enterprise Assets and Software	1	1	1	Deels			
4,8	Uninstall or Disable Unnecessary Services on Enterprise Assets and Software		1	1	Nee			
4,9	Configure Trusted DNS Servers on Enterprise Assets		1	1	Nee			
4.10	Enforce Automatic Device Lockout on Portable End-User Devices		1	1	Deels			
4,11	Enforce Remote Wipe Capability on Portable End-User Devices		1	1	Ja			
4,12	Separate Enterprise Workspaces on Mobile End-User Devices			1	Deels	6,5	8	8,5
5	**Account Management** Use processes and tools to assign and manage authorization to credentials for user accounts, including administrator accounts, as well as service					93%	73%	71%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
5,1	Establish and Maintain an Inventory of Accounts	1	1	1	Ja	4	6	6
5,2	Use Unique Passwords	1	1	1	Ja			
5,3	Disable Dormant Accounts	1	1	1	Ja			
5,4	Restrict Administrator Privileges to Dedicated Administrator Accounts	1	1	1	Ja			
5,5	Establish and Maintain an Inventory of Service Accounts		1	1	Deels			
5,6	Centralize accountmanagement		1	1	Ja	4	5,5	5,5
6	**Access Control Management** Use processes and tools to create, assign, manage, and revoke access credentials and privileges for user, administrator, and service accounts for enterprise assets and software.					100%	92%	92%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
6,1	Establish an Access Granting Process	1	1	1	Ja	5	7	8
6,2	Establish an Access Revoking Process	1	1	1	Ja			
6,3	Require MFA for Externally-Exposed Applications	1	1	1	Ja			
6,4	Require MFA for Remote Network Access	1	1	1	Ja			
6,5	Require MFA for Administrative Access	1	1	1	Ja			
6,6	Establish and Maintain an Inventory of Authentication and Authorization Systems		1	1	Nee			
6,7	Centralize Access Control		1	1	Ja			
6,8	Define and Maintain Role-Based Access Control			1	Deels	5	6	6,5

7	**Continuous Vulnerability Management** Develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers. Monitor public and private industry sources for new threat and vulnerability information.					100%	86%	81%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
7,1	Establish and Maintain a Vulnerability Management Process	1	1	1	Deels	4	7	7
7,2	Establish and Maintain a Remediation Process	1	1	1	Deels			
7,3	Perform Automated Operating System Patch Management	1	1	1	Ja			
7,4	Perform Automated Application Patch Management	1	1	1	Deels			
7,5	Perform Automated Vulnerability Scans of Internal Enterprise Assets		1	1	Nee			
7,6	Perform Automated Vulnerability Scans of Externally-Exposed Enterprise Assets		1	1	Nee			
7,7	Remediate Detected Vulnerabilities		1	1	Nee	2,5	2,5	2,5
8	**Audit Log Management** Collect, alert, review, and retain audit logs of events that could help detect, understand, or recover from an attack.					63%	36%	36%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
8,1	Establish and Maintain an Audit Log Management Process	1	1	1	Ja	3	11	12
8,2	Collect Audit Logs	1	1	1	Ja			
8,3	Ensure Adequate Audit Log Storage	1	1	1	Ja			
8,4	Standardize Time Synchronization		1	1	Ja			
8,5	Collect Detailed Audit Logs		1	1	Deels			
8,6	Collect DNS Query Audit Logs		1	1	Nee			
8,7	Collect URL Request Audit Logs		1	1	Nee			
8,8	Collect Command-Line Audit Logs		1	1	Nee			
8,9	Centralize Audit Logs		1	1	Nee			
8.10	Retain Audit Logs		1	1	Nee			
8,11	Conduct Audit Log Reviews		1	1	Ja			
8,12	Collect Service Provider Logs			1	Nee	3	5,5	5,5
9	**Email and Web Browser Protections** Improve protections and detections of threats from email and web vectors, as these are opportunities for attackers to manipulate human behavior through direct engagement.					100%	50%	46%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
9,1	Ensure Use of Only Fully Supported Browsers and Email Clients	1	1	1	Ja	2	6	7
9,2	Use DNS Filtering Services	1	1	1	Onbekend			
9,3	Maintain and Enforce Network-Based URL Filters		1	1	Ja			
9,4	Restrict Unnecessary or Unauthorized Browser and Email Client Extensions		1	1	Nee			
9,5	Implement DMARC		1	1	Ja			
9,6	Block Unnecessary File Types		1	1	Ja			
9,7	Deploy and Maintain Email Server Anti-Malware Protections			1	Deels	1	4	4,5
10	**Malware Defenses** Prevent or control the installation, spread, and execution of malicious applications, code, or scripts on enterprise assets.					50%	67%	64%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
10,1	Deploy and Maintain Anti-Malware Software	1	1	1	Ja	3	7	7
10,2	Configure Automatic Anti-Malware Signature Updates	1	1	1	Ja			
10,3	Disable Autorun and Autoplay for Removable Media	1	1	1	Ja			
10,4	Configure Automatic Anti-Malware Scanning of Removable Media		1	1	Nee			
10,5	Enable Anti-Exploitation Features		1	1	Deels			
10,6	Centrally Manage Anti-Malware Software		1	1	Ja			
10,7	Use Behavior-Based Anti-Malware Software		1	1	Ja	3	5,5	5,5
11	**Data Recovery** Establish and maintain data recovery practices sufficient to restore in-scope enterprise assets to a pre-incident and trusted state.					100%	79%	79%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
11,1	Establish and Maintain a Data Recovery Process	1	1	1	Ja	4	5	5
11,2	Perform Automated Backups	1	1	1	Ja			
11,3	Protect Recovery Data	1	1	1	Ja			
11,4	Establish and Maintain an Isolated Instance of Recovery Data	1	1	1	Ja			
11,5	Test Data Recovery		1	1	Deels	4	4,5	4,5
12	**Network Infrastructure Management** Establish, implement, and actively manage (track, report, correct) network devices, in order to prevent attackers from exploiting vulnerable network services and access points.					100%	90%	90%
Safeguard	**CIS Controls and Safeguards**	**IG1**	**IG2**	**IG3**	**Ingericht**	**IG1**	**IG2**	**IG3**
12,1	Ensure Network Infrastructure is Up-to-Date	1	1	1	Ja	1	7	8
12,2	Establish and Maintain a Secure Network Architecture		1	1	Ja			
12,3	Securely Manage Network Infrastructure		1	1	Ja			
12,4	Establish and Maintain Architecture Diagram(s)		1	1	Ja			
12,5	Centralize Network Authentication, Authorization, and Auditing (AAA)		1	1	Deels			
12,6	Use of Secure Network Management and Communication Protocols		1	1	Ja			
12,7	Ensure Remote Devices Utilize a VPN and are Connecting to an Enterprise's AAA		1	1	Ja			
12,8	Establish and Maintain Dedicated Computing Resources for All Administrative Work			1	Ja	1	6,5	7,5

13 Network Monitoring and Defense

Operate processes and tooling to establish and maintain comprehensive network monitoring and defense against security threats across the enterprise's network infrastructure and user base.

100% 93% 94%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
13,1	Centralize Security Event Alerting		1	1	Nee		6	11
13,2	Deploy a Host-Based Intrusion Detection Solution		1	1	Onbekend			
13,3	Deploy a Network Intrusion Detection Solution		1	1	Onbekend			
13,4	Perform Traffic Filtering Between Network Segments		1	1	Onbekend			
13,5	Manage Access Control for Remote Assets		1	1	Onbekend			
13,6	Collect Network Traffic Flow Logs		1	1	Onbekend			
13,7	Deploy a Host-Based Intrusion Prevention Solution			1	Onbekend			
13,8	Deploy a Network Intrusion Prevention Solution			1	Onbekend			
13,9	Deploy Port-Level Access Control			1	Onbekend			
13,10	Perform Application Layer Filtering			1	Onbekend			
13,11	Tune Security Event Alerting Thresholds			1	Onbekend		0	0

14 Security Awareness and Skills Training

Establish and maintain a security awareness program to influence behavior among the workforce to be security conscious and properly skilled to reduce cybersecurity risks to the enterprise.

0% 0%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
14,1	Establish and Maintain a Security Awareness Program	1	1	1	Ja	8	9	9
14,2	Train Workforce Members to Recognize Social Engineering Attacks	1	1	1	Ja			
14,3	Train Workforce Members on Authentication Best Practices	1	1	1	Ja			
14,4	Train Workforce on Data Handling Best Practices	1	1	1	Ja			
14,5	Train Workforce Members on Causes of Unintentional Data Exposure	1	1	1	Ja			
14,6	Train Workforce Members on Recognizing and Reporting Security Incidents	1	1	1	Ja			
14,7	Train Workforce on How to Identify and Report if Their Enterprise Assets are Missing	1	1	1	Ja			
14,8	Train Workforce on the Dangers of Connecting to and Transmitting Enterprise Data Over	1	1	1	Ja			
14,9	Conduct Role-Specific Security Awareness and Skills Training		1	1	Nee	8	8	8

15 Service Provider Management

Develop a process to evaluate service providers who hold sensitive data, or are responsible for an enterprise's critical IT platforms or processes, to ensure these providers are protecting those platforms and data appropriately.

100% 89% 89%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
15,1	Establish and Maintain an Inventory of Service Providers	1	1	1	Ja	1	4	7
15,2	Establish and Maintain a Service Provider Management Policy		1	1	Deels			
15,3	Classify Service Providers		1	1	Ja			
15,4	Ensure Service Provider Contracts Include Security Requirements		1	1	Deels			
15,5	Assess Service Providers			1	Nee			
15,6	Monitor Service Providers			1	Nee			
15,7	Securely Decommission Service Providers			1	Nee	1	3	3

16 Application Software Security

Manage the security life cycle of in-house developed, hosted, or acquired software to prevent, detect, and remediate security weaknesses before they can impact the enterprise.

100% 75% 43%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
16,1	Establish and Maintain a Secure Application Development Process		1	1	Onbekend		11	14
16,2	Establish and Maintain a Process to Accept and Address Software Vulnerabilities		1	1	Onbekend			
16,3	Perform Root Cause Analysis on Security Vulnerabilities		1	1	Onbekend			
16,4	Establish and Manage an Inventory of Third-Party Software Components		1	1	Onbekend			
16,5	Use Up-to-Date and Trusted Third-Party Software Components		1	1	Onbekend			
16,6	Establish and Maintain a Severity Rating System and Process for Application Vulnerabilities		1	1	Onbekend			
16,7	Use Standard Hardening Configuration Templates for Application Infrastructure		1	1	Onbekend			
16,8	Separate Production and Non-Production Systems		1	1	Onbekend			
16,9	Train Developers in Application Security Concepts and Secure Coding		1	1	Onbekend			
16,10	Apply Secure Design Principles in Application Architectures		1	1	Onbekend			
16,11	Leverage Vetted Modules or Services for Application Security Components		1	1	Onbekend			
16,12	Implement Code-Level Security Checks			1	Onbekend			
16,13	Conduct Application Penetration Testing			1	Onbekend			
16,14	Conduct Threat Modeling			1	Onbekend		0	0

17 Incident Response Management

Establish a program to develop and maintain an incident response capability (e.g., policies, plans, procedures, defined roles, training, and communications) to prepare, detect, and quickly respond to an attack.

0% 0%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
17,1	Designate Personnel to Manage Incident Handling	1	1	1	Ja	3	8	9
17,2	Establish and Maintain Contact Information for Reporting Security Incidents	1	1	1	Ja			
17,3	Establish and Maintain an Enterprise Process for Reporting Incidents	1	1	1	Ja			
17,4	Establish and Maintain an Incident Response Process		1	1	Ja			
17,5	Assign Key Roles and Responsibilities		1	1	Ja			
17,6	Define Mechanisms for Communicating During Incident Response		1	1	Ja			
17,7	Conduct Routine Incident Response Exercises		1	1	Deels			
17,8	Conduct Post-Incident Reviews		1	1	Ja			
17,9	Establish and Maintain Security Incident Thresholds			1	Nee	3	7,5	7,5

18 Penetration Testing

Test the effectiveness and resiliency of enterprise assets through identifying and exploiting weaknesses in controls (people, processes, and technology), and simulating the objectives and actions of an attacker.

100% 94% 83%

Safeguard	CIS Controls and Safeguards	IG1	IG2	IG3	Ingericht	IG1	IG2	IG3
18,1	Establish and Maintain a Penetration Testing Program		1	1	Nee		3	5
18,2	Perform Periodic External Penetration Tests		1	1	Nee			
18,3	Remediate Penetration Test Findings		1	1	Nee			
18,4	Validate Security Measures			1	Nee			
18,5	Perform Periodic Internal Penetration Tests			1	Nee		0	0

BIJLAGE 2 VERBETERPUNTEN IN DETAIL

CONTROL 01 Inventory and Control of Enterprise Assets

NUMBER	TITLE/DESCRIPTION	ASSET TYPE	SECURITY FUNCTION	IG1	IG2	IG3
1.1	**Establish and Maintain Detailed Enterprise Asset Inventory** Establish and maintain an accurate, detailed, and up-to-date inventory of all enterprise assets with the potential to store or process data, to include: end-user devices (including portable and mobile), network devices, non-computing/IoT devices, and servers. Ensure the inventory records the network address (if static), hardware address, machine name, enterprise asset owner, department for each asset, and whether the asset has been approved to connect to the network. For mobile end-user devices, MDM type tools can support this process, where appropriate. This inventory includes assets connected to the infrastructure physically, virtually, remotely, and those within cloud environments. Additionally, it includes assets that are regularly connected to the enterprise's network infrastructure, even if they are not under control of the enterprise. Review and update the inventory of all enterprise assets bi-annually, or more frequently.	Devices	Identify	●	●	●
1.2	**Address Unauthorized Assets** Ensure that a process exists to address unauthorized assets on a weekly basis. The enterprise may choose to remove the asset from the network, deny the asset from connecting remotely to the network, or quarantine the asset.	Devices	Respond	●	●	●

CONTROL 02 Inventory and Control of Software Assets

NUMBER	TITLE/DESCRIPTION	ASSET TYPE	SECURITY FUNCTION	IG1	IG2	IG3
2.1	**Establish and Maintain a Software Inventory** Establish and maintain a detailed inventory of all licensed software installed on enterprise assets. The software inventory must document the title, publisher, initial install/use date, and business purpose for each entry; where appropriate, include the Uniform Resource Locator (URL), app store(s), version(s), deployment mechanism, and decommission date. Review and update the software inventory bi-annually, or more frequently.	Applications	Identify	●	●	●
2.2	**Ensure Authorized Software is Currently Supported** Ensure that only currently supported software is designated as authorized in the software inventory for enterprise assets. If software is unsupported, yet necessary for the fulfillment of the enterprise's mission, document an exception detailing mitigating controls and residual risk acceptance. For any unsupported software without an exception documentation, designate as unauthorized. Review the software list to verify software support at least monthly, or more frequently.	Applications	Identify	●	●	●
2.3	**Address Unauthorized Software** Ensure that unauthorized software is either removed from use on enterprise assets or receives a documented exception. Review monthly, or more frequently.	Applications	Respond	●	●	●

CONTROL 07 Continuous Vulnerability Management

NUMBER	TITLE/DESCRIPTION	ASSET TYPE	SECURITY FUNCTION	IG1	IG2	IG3
7.1	**Establish and Maintain a Vulnerability Management Process** Establish and maintain a documented vulnerability management process for enterprise assets. Review and update documentation annually, or when significant enterprise changes occur that could impact this Safeguard.	Applications	Protect	●	●	●
7.2	**Establish and Maintain a Remediation Process** Establish and maintain a risk-based remediation strategy documented in a remediation process, with monthly, or more frequent, reviews.	Applications	Respond	●	●	●
7.3	**Perform Automated Operating System Patch Management** Perform operating system updates on enterprise assets through automated patch management on a monthly, or more frequent, basis.	Applications	Protect	●	●	●
7.4	**Perform Automated Application Patch Management** Perform application updates on enterprise assets through automated patch management on a monthly, or more frequent, basis.	Applications	Protect	●	●	●