

Aanvraagformulier 2026

Wet vermindering afdracht loonbelasting en premie voor de volksverzekeringen; S&O-afdrachtvermindering

Aanvraag	Nieuwe aanvraag
Periode	01/01/2026 t/m 31/12/2026
Nummer vorige aanvraag	SO25007237
Naam (statutair)	StellaDev B.V.
KvK-nummer	95062734
RSIN	8669.85.554
Ondernemer IB/VpB	Ja
Ondernemingscode	Besloten vennootschap
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Technologiegebied	computer- en informatiewetenschappen
Boekjaargegevens	
Gegevens over aanvraagjaar	2026
Regiemkeuze	Forfaitair
Aantal werknemers	1
Fiscale Eenheid (VpB)	Nee
Forfaitair uurloon	
Gegevens aanvraagperiode werknemers	
Aantal S&O-medewerkers	1
S&O-uren	1150
Aantal projecten	1
Wordt in het kader van de door u opgevoerde projecten samengewerkt met één of meer partijen?	Nee

Bent u in alle vijf voorgaande jaren inhoudingsplichtige geweest?

Nee

Jaren waarin u inhoudingsplichtige bent geweest?

;,,2024;2025;

Over welke van de vijf voorgaande kalenderjaren is aan u een S&O-verklaring afgegeven?

;,,;2025;

Zijn er activiteiten of een deel van de activiteiten van een andere onderneming overgegaan naar uw onderneming?

Ja

Naam voortgezette onderneming (1)

Stelladev

RSIN

2651.26.642

KvK-nummer

78605466

Werd de onderneming waarvan uw onderneming een voortzetting is, direct of indirect gedreven door een met uw onderneming verbonden venootschap?

Nee

Werd de onderneming of het gedeelte van de onderneming waarvan uw onderneming een voortzetting is, gedreven voor rekening van een natuurlijk persoon die op het moment van aanvragen een aanmerkelijk belang heeft in uw onderneming?

Ja

Zijn voor de aanvrager plus de voorloper van de aanvrager in de jaren 2021 t/m 2025 over 3 of meer jaren S&O-verklaringen afgegeven?

Nee

Naam (statutair)	StellaDev B.V.
Periode	01/01/2026 t/m 31/12/2026
PROJECT	SW2
Projecttitel	AI-Driven Agentic Orchestration Software (AOC-WebAPI)
Type project	Ontwikkelingsproject
Zwaartepunt v/d Ontw.	Technisch nieuw(e) (onderdeel van) programmatuur
Projectnummer	SW2
Startdatum	01/01/2026
S&O-uren	1150

Omschrijving:

This project builds on learnings from Stelladev's 2025 R&D (distributed orchestration, caching, and parallel processing in .NET), but introduces new R&D in agentic AI orchestration.
In this WBSO project, Stelladev will develop agentic AI orchestration software (AOC-WebAPI), that enables deterministic, auditable and reproducible execution of AI-driven workflows.

Several software components will be developed primarily in C# (.NET 10) and Python:

1. Deterministic Execution Engine – ensures reproducible agent workflows through time-boxed, seed-locked execution and cryptographically signed manifests.
2. Capability Router – selects models by evaluating latency, cost, quality and compliance rules.
3. Secure Sandbox Component – executes user-defined tools in isolated environments using micro-VMs and capability tokens, achieving sub-50 ms startup isolation.
4. Hierarchical Planning Module – enables step-wise task planning using local <7B models with retrieval-augmented playbooks and critic validation.
5. Evaluation Component – provides deterministic scoring and statistical drift detection to monitor ongoing accuracy and compliance.

Unlike frameworks such as LangChain, AutoGPT or Semantic Kernel, which rely on non-deterministic external models and cannot guarantee replayability, the AOC-WebAPI provides deterministic execution, policy-aware orchestration and full auditability for enterprise development teams in regulated industries.

Planning:

ontwikkelings-/onderzoeksactiviteiten	vermoedelijke einddatum
1.Deterministic Execution Engine	31/12/2026
2.Capability Router	31/12/2026
3. Secure Sandbox Component	31/12/2026
4. Hierarchical Planning Module	31/12/2026
5. Evaluation Component	31/12/2026

Update project. Vermeld de voortgang van uw SO-werkzaamheden. Zijn er wijzigingen in de oorspronkelijke projectopzet of -planning? Geef dan aan waarom dit het geval is.

Programmatuurvraag Technische Probleem

TC1 lies in developing software that guarantees deterministic execution paths for agentic workflows. Current software orchestrations (e.g. LangChain, Semantic Kernel) fail due to non-deterministic LLM outputs, variable execution orders, and non-replayable state

mutations. TC is to develop an execution layer with byte-identical, verifiable workflows replays without hampering performance.

TC2 is to develop software that selects models under strict latency, cost, quality and compliance constraints. Existing routing relies on heuristics and cannot enforce deterministic constraint satisfaction. TC is to develop routing logic that evaluates competing constraints while avoiding unpredictable behaviour as conditions grow more complex.

TC3 is to develop software that executes untrusted tools inside strict isolation with <50 ms overhead. Currently data leaks and state contamination occur within the API runtime, causing memory corruption risks and cross-tenant leakage. Current sandboxing solutions sacrifice latency for security.

TC4 is to develop software that enables multi-step planning using only local <7B models.

Current local models struggle with task context, valid action sequences and error recovery. TC is to develop a planning mechanism that creates, validates and recovers multi-step action sequences without relying on external LLMs.

Continuation in Programming Languages.

Programmatuurvraag Oplossingsrichting

TS1. Develop a seed-locked, time-boxed execution engine that removes randomness and records all inputs in HMAC event logs, validated through execution manifests. This includes techniques such as timestamp mocking to ensure replayable run behaviour and deterministic outcomes. Technical risk (TR): unavoidable non-determinism (e.g. wall-clock time) may break replay and cause delays.

TS2. Develop a capability-router component that selects the best model by evaluating resource metrics such as latency, cost, quality and compliance. It will include historical performance data to weight scoring metrics, and a fast solver to compute a valid choice within 10 ms. TR: routing speed may become unpredictable as the number of routing conditions grows.

TS3. Develop a secure sandbox component that runs user tools inside pre-warmed gVisor/Firecracker containers, inject code via memory mapping and issue JWT tokens to control resource access. The component will enforce these tokens at the API gateway and ensure isolated execution states. TR: maintaining < 50 ms container overhead while preventing all cross-tenant access during security tests.

Continuation in Programming Languages.

Programmatuurvraag Methoden Technieken

- Languages: C# (.NET 10), Python, SQL,
- Frameworks: ASP.NET Core Web API, ONNX Runtime, Ollama, Semantic Kernel (baseline).
- Infrastructure: Docker, Kubernetes (optional), Redis, MinIO.
- Libraries: Serilog, OpenTelemetry, xUnit, MathNet.Numerics
- Techniques: Constraint satisfaction, HMAC-SHA256 signing, sandbox isolation (gVisor/Firecracker).

Continuation TCs:

TC5 is to develop software that evaluates agent workflows and detects semantic drift, as agent outputs vary in structure and sequence, making them impossible to compare reliably with existing ML scoring methods. Small differences in reasoning steps can hide regressions or falsely appear correct, so the software cannot determine stable success criteria with current techniques.

Continuation Technical Solutions:

TS4. Develop a hierarchical-planning module that breaks tasks into smaller steps, retrieves similar past plans from a semantic playbook, and validates each step. It will compensate for limited capacity of local models and support recovery when models produce incorrect steps. TR: local models may plateau in accuracy, limiting a reliable step-by-step planning.

TS5: Develop an evaluation component that replays workflows against a golden test set, applies exact and semantic scoring, calibrates confidence scores, and detects drift using statistical signals such as CUSUM. It will include deterministic evaluation logic to cope with evolving agent behaviour. TR: subtle output changes may trigger false drift signals.

Programmatuurvraag Ontwikkelen Methoden

The project is technically novel because each component introduces an information-technology working principle that does not exist in existing agents. Deterministic execution requires software that eliminates all sources of non-determinism and produces verifiable, byte-identical replays, something unsupported by existing orchestration runtimes. The capability-router introduces a new method for selecting models based on measurable rules instead of heuristics. The isolation component is aimed to achieve secure execution of untrusted tools at sub-50 ms latency, which no off-the-shelf sandbox can deliver. The hierarchical-planning component enables step-by-step reasoning with limited local models using retrieved subplans and critic validation, a capability absent from current LLM tooling. Finally, automated drift detection for multi-step agent workflows has no standard metrics, requiring the development of deterministic scoring logic from scratch.

These developments carry technical risks for Stelladev: deterministic replay may fail due to hidden non-determinism, routing speed may degrade as constraints grow, isolation may exceed latency targets or fail to guarantee separation, local models may plateau in accuracy, and drift detection may misclassify subtle behavioural changes. These uncertainties show that the project requires new software principles that must be validated through experimentation.

PROJECTENOVERZICHT

Naam (statutair)

StellaDev B.V.

Periode

01/01/2026 t/m 31/12/2026

Projectnummer titel

Geschatte aantal uren

SW2 AI-Driven Agentic Orchestration Software (AOC-WebAPI)

1150

Totalen

1150

FORFAIT ONDERNEMER

Naam (statutair)

StellaDev B.V.

Periode

01/01/2026 t/m 31/12/2026

Totaal Forfait

€ 11.500,00

VERKLARING

Naam (statutair)

StellaDev B.V.

Periode

01/01/2026 t/m 31/12/2026

VERKLARING

Door ondertekening van het aanvraagformulier wordt verklaard dat:

1. de in dit aanvraagformulier vermelde gegevens juist en volledig zijn;
2. De S&O-inhoudsplichtige/S&O-belastingplichtige een administratie bijhoudt volgens de wettelijke bepalingen;
3. hij/zij bevoegd en/of gemachtigd is om deze aanvraag te ondertekenen.