NDS Conference 2026
Opening Strategy for NDS.Live

15 October 2026

Dr. Martin Pfeifle, NDS Chairman







Navigation Data Standard

Overview: Opening Strategy for NDS.Live

1 **Motivation and Strategy**
Why open NDS.Live · Strategic model

2 Membership Model
Access levels · Fees · Benefits and tools · Value of Gold

3 License Model
Specification and tools · Contributions · License landscape

4 Next Steps
Final review · Announcement · Operational implementation

Adoption Barriers Are Structural, Not Technical

Software-defined vehicles raise expectations: accessibility, ecosystem compatibility, implementation readiness

What we observe

- Adoption perceived as stalling
- Membership chains add overhead
- Gated model hinders SDV collaboration
- Evaluation interest, but little conversion

Why: structural blockers

- High entry friction
- Complex multi-party licensing chains
- Poor fit with open ecosystems
- No easy path from evaluation to production

Target adopters: Selective readers & writers | Integration partners | Service providers | OEMs

→ Opening is an adoption enabler

Keep Membership Value, Add Open Adoption

Key principle: keep what makes membership valuable, add what drives adoption

Lane 1: Consortium Value (today)

- Governance rights in NDS bodies
- Certification and "NDS.Live Certified" mark
- Legal certainty via Member (Cross) License Agreement
- Branding protection and member-grade services

→ **Reasons to become and stay a member**

Details: Part 2 – Membership Model

Lane 2: Open Adoption (new)

- NDS.Live specification openly accessible (CC BY-ND 4.0)
- Selected tools, SDKs/APIs and reference implementations as freeware (MIT-No-Patents License)
- Public support channel and NDS.Live ChatBot

→ **Broader dissemination, easier ecosystem collaboration**

Details: Part 3 – License Model

Overview: Opening Strategy for NDS.Live

1 Motivation and Strategy
Why open NDS.Live · Strategic model

2 **Membership Model**
Access levels · Fees · Benefits and tools · Value of Gold

3 License Model
Specification and tools · Contributions · License landscape

4 Next Steps
Final review · Announcement · Operational implementation

Four Levels of Access

Open Access	Academic Access	Silver	Gold
No membership	Academic use	New: 5.000–20.000 € p.a.	60.000 € / 90.000 € p.a.
Evaluate NDS.Live Commercial use without IP coverage	More tools than Open Access	More tools, support and visibility Commercial use without IP coverage	Today's full membership for strategic and business-critical use with full IP coverage

Access tailored to different needs

- Details of benefits and tool access on the following slides
- The NDS.Live Evaluation License will be retired

Lower Entry Barrier for New Gold Members

Silver: annual fee by company size

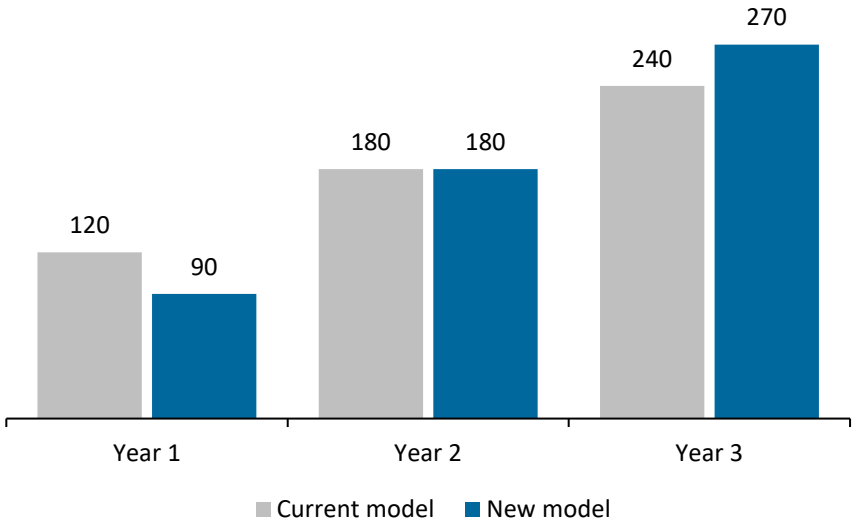
Employees	Annual fee
1–100	5.000 €
101–1.000	10.000 €
From 1.001	20.000 €

Gold

	Annual fee
Existing members	60.000 €
New members	90.000 €
Accession fee	waived (today 60.000 €)

- Existing members automatically become Gold

New Gold member: cumulative fees (in 1.000 €)



- Current model: 60.000 € accession fee plus 60.000 € per year

→ Cheaper in year 1, equal after two years, more income from year 3

Benefits and Entitlements by Access Level

All levels: NDS.Live specification, NDS.Live ChatBot, evaluation map service access, Python SDK, read access to Central Certification Service

	Open Access	Academic Access	Silver	Gold
License / certification	NDS.Live open licenses (no IP coverage, no certification!)			NDS.Classic and NDS.Live certification Member (Cross) License Agreement
Support	Public Slack channel		Private support (email, Slack)	Private enhanced support (Zoom, Teams)
Organizational Bodies	–		General Assembly (all rights) Tooling Board incl. tool CRs Working group participation	Silver rights, plus Voting in WG, VCB and PDG Eligible for TC and SC
Marketing	–	Logo on NDS website Endorsement article	Logo on NDS website Endorsement article NDS.Live Membership / Ecosystem Mark	Silver benefits, plus publishing of sample maps in Developer Portal "NDS.Live Certified" mark

NDS.Live Tool Access by Access Level

NDS.Live

	Open Access	Academic	Silver	Gold
NDS.Live Map Viewer	B	B	B	S, B
NDS.Live Python SDK	S, B	S, B	S, B	S, B
NDS.Live GeoJSON Export	–	B	B	S, B
NDS.Live OpenDRIVE Converter	–	B	–	S, B
NDS.Live Validation Tools	–	–	B	S, B
NDS.Live Certification Tools	–	–	–	S, B
NDS.Live Advanced Services	–	–	–	S, B
NDS SQLite devkit	–	–	S, B	S, B

NDS.Classic: Stays for gold members only

	Gold
NDS.Classic Tools (viewer, DBI)	S, B
NDS.Classic Validation and Certification Tools	S, B
NDS.Classic OpenDRIVE Converter	S, B

S = source code
B = binary

Gold Remains the Core Membership

1

Legal certainty

Member (Cross) License Agreement covers essential IP of all members for certified products

2

Certification

NDS.Classic and NDS.Live certification and the "NDS.Live Certified" mark

3

Influence

Voting rights in working groups, VCB and PDG; eligibility for TC and SC

→ None of these is available in any other class

Protection against downgrading

- Silver is open to non-members only: existing Gold members cannot switch to Silver
- A company leaving Gold, and any affiliated, can join as Silver only after 24 months

Overview: Opening Strategy for NDS.Live

1 Motivation and Strategy
Why open NDS.Live · Strategic model

2 Membership Model
Access levels · Fees · Benefits and tools · Value of Gold

3 **License Model**
Specification and tools · Contributions · License landscape

4 Next Steps
Final review · Announcement · Operational implementation

Open Licenses (Open Access, Academic, Silver)

Two separate licenses: CC BY-ND 4.0 for the specification, MIT-No-Patents License for tools

NDS.Live Specification

CC BY-ND 4.0 (Creative Commons Attribution–NoDerivatives)

- Share and redistribute, also for commercial purposes
- Attribution and link to the license required
- No distribution of modified versions
- Open access license, not open source

→ Broad access while protecting the integrity of the standard and preventing fragmentation

Tools, SDKs/APIs, Reference Implementations

MIT-No-Patents License (default)

- Use, copy, modify, publish, distribute, sublicense and sell
- Copyright license only: no patent rights granted
- Released selectively, depending on membership level
- First candidate: NDS.Live Python SDK

→ Usability and low compliance friction for adopters

Existing members (Gold members): nothing changes

- Member agreements continue; patent licenses only via the Member (Cross) License Agreement

Clean Contributions to NDS.Live Tools

Every external contribution passes four safeguards

1

Identified contributor

No anonymous contributions; identifiable GitHub account, ideally real name or company

2

Signed-off commits

Developer Certificate of Origin: contributor confirms the right to submit and license the code

3

Project license applies

Contributions are deemed submitted under the project license

4

Maintainer review

Full discretion, no obligation to accept; AI-assisted contributions disclosed

→ No unwanted IP enters NDS tools

Contribution Policy (CONTRIBUTING.md) and Developer Certificate of Origin apply to every pull request

Gold Members Unchanged, New Open Lane

Gold MEMBERS: UNCHANGED



NDS Gold Members

Own rights:
IP in NDS Spec.

Member (Cross) License Agreement
Use of NDS.Classic and NDS.Live Spec. incl. each other's IP

Member Software License Agreement
Use of NDS Tools for commercial products

General Contribution Terms
Allows NDS to use contributions to tools

Supplier Contract
Use of individual members' NDS.Live products commercially

NDS e.V.

Own rights:
IP in NDS Spec.
IP in NDS Tools

NEW: OPEN LANE FOR NON-MEMBERS

CC BY-ND 4.0 (spec) and MIT-No-Patents (tools)
Use of NDS.Live Spec. and Tools, no patent grants

Contribution Policy
Allows NDS to use contributions to tools (no unwanted IP injection)

Third parties



Customers of NDS Members



Overview: Opening Strategy for NDS.Live

1 **Motivation and Strategy**
Why open NDS.Live · Strategic model

2 **Membership Model**
Access levels · Fees · Benefits and tools · Value of Gold

3 **License Model**
Specification and tools · Contributions · License landscape

4 **Next Steps**
Final review · Announcement · Operational implementation

Next Steps

Before announcement	15 October 2026	Q4 2026	By end of 2026
Final review	**Announcement**	**Operational implementation**	**Effective**
• Final review of license texts and strategy paper	• NDS Conference, Gothenburg (pending approval of one member)	• Configure systems and access rights for the new access levels • Publish official announcements	• New access and membership model applies to accessions from 2027

Thank you!



Navigation Data Standard