1 Vector Embedded Software Definition SLP/HLP/SIP, Maintenance and Release Types

1.1 Software License Package (SLP)

The SLP includes the license and usage rights (see quotation) for a hardware-independent module (e.g. a COM layer) based on a defined specification.

Depending on the type of module, the software will be based on the following technical specifications:

> AUTOSAR, ASAM, OSEK/VDX, ISO, HIS, etc.

> OEM requirements (for OEM-specific deliveries)

> Customer-specific requirements (optional)

The following work products are licensed by purchase of an SLP:

> The module as source code

> Detailed technical documentation

> Generator plug-in to generate ANSI C code

> Configuration files for convenient configuration with Vector configuration tools

The module will be tested using a component test suite on a standard hardware platform (CANoe Emulation). Integration testing on the specific µController and delivery will be performed when a SIP is purchased (see section 1.3).

1.2 Hardware License Package (HLP)

The HLP includes the license and usage rights (see quotation) for a hardware-dependent module (e.g. CAN Driver) and is valid for a combination of compiler (version independent), microcontroller family and relevant hardware (e.g. CAN cell).

Depending on the type of module, the software will be based on the following technical specifications:

> AUTOSAR, ASAM, OSEK, ISO, HIS, etc.

> OEM requirements (for OEM-specific deliveries)

> Customer-specific requirements (optional)

> Specification of microcontroller and compiler

The following work products are licensed by purchase of an HLP:

> The module as source code

> Detailed technical documentation

> Generator plug-in to generate ANSI C code

> Configuration files for convenient configuration with Vector configuration tools.

The module will be tested using a component test suite on a derivative of the microcontroller family which is defined by Vector. Integration testing on the specific µController and delivery will be performed when a SIP is purchased (see section 1.3).

1.3 Software Integration Package (SIP)

The SIP includes integration, test, release and delivery of the modules that are licensed by an SLP and/or an HLP.

To perform integration and closely test the customer's use case, the following must be defined in accordance with the customer:

> Microcontroller derivative

> Compiler, compiler version, and compiler options

> Use case (e.g. number of CAN channels)

> Car manufacturer (regarding communication description, pre-configuration…)

For each SIP, all delivered work products will be added to a configuration management system, thus allowing redeliveries for a minimum of 10 years (excluding the Beta SIP).

1.4 Mini SIP

The Mini SIP includes the delivery of individual modules. The software is tested on module level. The delivery is not tested on the target hardware and compiler. But Vector provides remedy of defects if they are based on defined processor and compiler mentioned in the quote.

1.5 SIP Types

1.5.1 Beta SIP

A Beta SIP can only be ordered in combination with a Production SIP. Depending on the agreement with the customer, the software may include the complete or reduced functionality. The software is only preliminary integrated and tested. The usage of a Beta SIP for serial production is prohibited. The Beta SIP software may only be used for test purposes. Vector grants no warranty and/or liability to the extent permitted by law or statute.

1.5.2 Production SIP

A Production SIP is a package which includes the release for serial production.

1.5.3 Update SIP

An Update SIP is a package which replaces a previous Production SIP. An Update SIP is necessary if an additional delivery is needed because of modified requirements (compiler version, options, functionality, etc.). The delivery will be performed according to the existing contractual agreement and must be scheduled with Vector.

1.5.4 Prototype SIP

A Prototype SIP is a special package which may only be purchased by a Tier 1. The use is limited to a defined application area, e.g. prototyping. The software is only preliminary

integrated and tested. The SIP is only available for platforms which are already supported by Vector. License packages (HLP, SLP) are not necessary. An upgrade to a Production SIP is only possible if identical technical features are used and the Prototype SIP is not older than one year. Vector grants no warranty and/or liability to the extent permitted by law or statute.

1.5.5 Overview SIP Types

The following table lists the scope of services, deliverables and release types for each SIP Type

	SIP Type / Mini SIP	Beta SIP	Production SIP	Update SIP	Prototype SIP
Scope of Services	Integration and test of selected modules	■	■	■	■
	Delivery	■	■	■	■
	Remedy of defects		■	■	
Deliverables	Software (Source or object code dependent on the contractual agreement - NDA)	■	■	■	■
	Documentation	■[1]	■	■	■[1]
	Test report		■[4]	■	
	Demo application	■[2]	■[2,4]		
Release Types[3]	Beta Release	■			
	Pre Release	■			■
	Final Release		■	■	
	Serial Production Release		■	■	

[1] The documentation is not necessarily complete

[2] Depends on the package

[3] Release Types are described in detail on page 5

[4] Not part of the Mini SIP

Table 1-1   Overview SIP Types

1.6 Maintenance

Maintenance of Vector Embedded Software is available for the SLP, HLP and SIP. Maintenance generally includes bug-fixing.

> **Note**
> Only the latest delivered version will be maintained.

1.6.1 SLP Maintenance

The maintenance of the SLP includes the adaptation of the appropriate working products (components, documentation, generators …). The SLP Maintenance includes:

> Adaptations caused by "minor" or "patch"-version modifications of the related AUTOSAR specification. In case of new functions, the extension of the licensed functionality has to be discussed with Vector.

> Adaptations caused by comparable changes of other specifications based on Vector's assessment.

> Registered RfCs for the AUTOSAR Specification are included as far as they are required by the OEM.

Deliveries are not included as part of SLP maintenance; they are part of SIP maintenance.

The SLP maintenance period begins with the first delivery.

1.6.2 HLP Maintenance

The maintenance of the HLP includes the adaptation of the appropriate work products (components, documentation, generators …). The HLP maintenance includes:

> Adaptations caused by "minor" or "patch"-version modifications of the related AUTOSAR specification. In case of new functions, the extension of the licensed functionality has to be discussed with Vector.

> Adaptation caused by comparable changes of other specifications based on Vector's assessment.

> Adaptation caused by minor hardware changes based on Vector's assessment.

> The implementation of simple workarounds for hardware issues.

Deliveries are not included as part of HLP maintenance; they are part of the SIP maintenance.

The HLP maintenance period begins with the first delivery.

1.6.3 SIP Maintenance

The SIP Standard Maintenance includes:

> Reporting about known issues ("Active Issue Reporting").

> One delivery per year (Update SIP or update of a Beta SIP)

> **Note**
> This update will be delivered on request !

> If a bug-fix delivery should be needed on short notice such a delivery would be performed without a comprehensive test. In this case the status of the delivery would be Beta Release or Pre Release (see Release Types in chapter 1.7).
> A Production Release has to be scheduled with Vector separately.

The SIP maintenance period starts with the first delivery of the product (Beta SIP or Production SIP).

In addition to the SIP Standard Maintenance, Vector offers SIP Extended Maintenance and SIP Production Maintenance.

SIP Extended Maintenance contains the same features as SIP Standard Maintenance. It includes one further delivery per year (Update SIP or Beta SIP).

SIP Production Maintenance only includes reporting about known issues ("Active Issue Reporting"). But Vector provides remedy of defects in case of high or critical issues. SIP Production Maintenance requires Standard or Extended Maintenance for more than 2 years.

1.6.4   Differentiation of warranty versus maintenance

The table shows the scope of services depending on validity of warranty and/or maintenance:

	SIP Maintenance running	SIP Maintenance expired
Warranty period running	Bugfixing ✔	Bugfixing ✔
	Issue reporting ✔	Issue reporting ✔
Warranty period expired	Bugfixing ✔	Bugfixing ✘
	Issue reporting ✔	Issue reporting ✘

Table 1-2   Scope of services

1.7   Release Types

The release type gives information about the scope of function, quality and application field restrictions of the delivered software. The release type depends on the delivered Software Integration Package and is defined in the delivery description.

1.7.1   Beta Release

The functionality of the software is incomplete and the modules are only tested partly. The development process is not fully implemented and the usage of a Beta Release delivery for serial production is prohibited.

1.7.2   Pre Release

The functionality of the software is complete, but the modules are only being tested partly. The development process is not fully implemented and the usage of a Pre Release delivery for serial production is prohibited.

1.7.3   Final Release

The software covers the complete functionality and the modules are being fully tested. The development process is completely implemented, but the usage of a Final Release delivery for serial production is prohibited.

1.7.4   Serial Production Release

The software covers the complete functionality and the modules are being fully tested. The development process is completely implemented and the usage for serial production is allowed.