# **AV Simulation**

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# **SYSTEM**

# Warranty and Maintenance Conditions

## **TABLE OF CONTENTS**

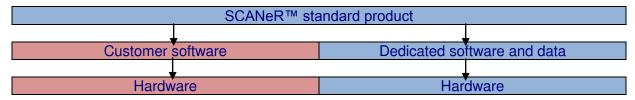
1	IN	ITRODUCTION	3
2	R	EFERENCE DOCUMENTS	4
3	W	/ARRANTY	4
	3.1 3.2 3.3 3.4	DEFINITION CONDITIONS REMOTE ASSISTANCE EXCLUSIONS	4 4 5
	3.5 3.6	CUSTOMER COMMITMENT  DEDICATED SOFTWARE AND DATA WARRANTY	5 6
4	S	TANDARD MAINTENANCE	7
	4.1 4.2 4.3 4.4 4.5	DEFINITION CONDITIONS REMOTE ASSISTANCE EXCLUSIONS CUSTOMER COMMITMENT	7 7 8
	4.6	DEDICATED SOFTWARE AND DATA MAINTENANCE	8
5	P	REVENTIVE MAINTENANCE (OPTIONAL SERVICE)1	0
6	S	OFTWARE UPGRADE INSTALLATION (OPTIONAL SERVICE)	11

#### 1 INTRODUCTION

This document applies to all AV Simulation deliveries, excepted for SCANeR™ standard product, which is covered by a specific document (see [DR1] SCANeR™ Warranty and Maintenance Conditions).

AV Simulation deliveries (hereafter named "SYSTEM") are covered by the Warranty. This warranty is available at no extra cost. When the warranty period expires, the customer can subscribe to a Maintenance Service. Two additional options are possible: "Preventive maintenance" and "Software upgrade installation".

The following drawing shows the overall organization of a classical SIMULATOR SYSTEM:



Blue colored blocks are provided by AV Simulation.

Orange colored blocks are provided by customer.

The maintenance plan is summarized in the following planning:

Sta	Warranty period	Maintenance period
	(12 months)	(if subscribed)
SCANeR™ standard product	Covered by SCANeR™ contract [DR1] (chapter 2: Warranty)	Covered by SCANeR™ contract [DR1] (chapter 3: Maintenance)
Bug tracker access	YES	YES
Hotline access	Optional	YES
Minor versions	YES	YES
Major versions	Optional	YES
Hardware and dedicated software and data delivered by AV Simulation	Covered by this contract (chapter 3: Warranty)	Covered by this contract (chapter 4: Maintenance)
Remote assistance & diagnosis	YES	YES
Faulty hardware replacement	YES	Charged
Onsite intervention	Charged	Charged
Dedicated software and data bug fixing	YES	YES
Preventive maintenance visit	Optional service (chapter 5)	Optional service (chapter 5)
Software upgrade installation on site	Optional service (chapter 6)	Optional service (chapter 6)
Hardware provided by customer	Not covered	Not covered
Software provided by customer	Not covered	Not covered

Start is the beginning of the warranty period, which can be triggered by different events, like for example product delivery or SAT (Site Acceptance Test). The beginning and duration of the warranty period will be notified to the customer by AV Simulation.

#### 2 REFERENCE DOCUMENTS

[DR1] **DCS-20150304-V1.1-A** "SCANeR™ Warranty and Maintenance Conditions"

#### 3 WARRANTY

This chapter applies to hardware and dedicated software and data deliveries.

AV Simulation standard software warranty is described in the chapter 2 of the document [DR1] SCANeR™ Warranty and Maintenance Conditions.

#### 3.1 Definition

AV Simulation warrants that all the equipment supplied shall be new, of proper materials and skillful workmanship and shall be free from defects. This guarantee covers hardware and dedicated software and data deliveries.

The warranty period shall be 12 months after the Site Acceptance Test, however not later than 24 months after Delivery, whichever is the earlier.

AV Simulation's liability for warranty is subject to Purchaser having adhered to all applicable conditions, procedures and instructions for shipment, storage, maintenance and use and excludes damages to the contract equipment caused by normal wear and tear or by misuse.

In case of defects during the warranty period, AV Simulation may at its own discretion, either remedy the defect or deliver a defect free product. The warranty period for repaired and or replaced products shall be 12 months after putting into operation, however not later than 24 months after the delivery of the respective product, whichever is the earlier.

Further claims in respect of defects, in particular contractual or non-contractual claims for damages other than those affecting the products themselves, such as, however not limited to, loss of production or loss of profit, are explicitly excluded, unless implied under substantive law.

#### 3.2 Conditions

During the 12 months warranty period:

- Assistance and diagnosis are included,
- Faulty hardware part will be repaired or replaced free of charge when sent to AV Simulation: transport to AV Simulation is at customer's expense, transport from AV Simulation is at AV Simulation's expense,
- No provision is made for onsite intervention: if necessary, it will be charged to customer.

The range of use of the SYSTEM is defined in the different documents delivered by AV Simulation: the technical offer, the specification documents and the user manual. The conformance of the SYSTEM is validated by the customer during the site acceptance test. Using the SYSTEM outside its range of use is not covered by this contract.

#### 3.3 Remote assistance

During the warranty period, the customer can contact AV Simulation for assistance by phone, email and using remote control, on weekdays from 9 am to 6 pm CET. This hotline will be

performed in English or French language. This hotline may be closed up to fifteen days during the year in addition to French bank holidays. The customer is notified of the closing days at the beginning of the year.

The customer shall designate a competent person authorized to call the hotline. This person shall be one of the persons trained by AV Simulation in the frame of its activities and should have an adequate level in English or French language.

Based on its knowledge of the SYSTEM, AV Simulation will guide the customer through the troubleshooting process. AV Simulation will try its best to diagnose the problem remotely. In the event of a defect which could not be analyzed on the phone or through remote control, AV Simulation will propose to the customer to visit the SYSTEM to complete the diagnosis. This intervention will be charged to the customer.

As soon as a defect has been analyzed, if it is caused by a hardware issue under coverage, AV Simulation commits to repair or exchange the faulty hardware part. Transport to AV Simulation is at customer's expense, transport from AV Simulation is at AV Simulation's expense. If the replacement operation needs an intervention on the SYSTEM, the customer can take the replacement operation service in charge or can be ordered to AV Simulation or request a quote to AV Simulation. In the first case, AV Simulation can help the customer remotely. At the end of the operation, the customer must send an intervention report. In the second case, the defect will be fixed by AV Simulation people or original supplier representatives or subcontractor representatives according to AV Simulation's decision. The time for repair will be evaluated after the diagnosis would have been made.

AV Simulation technical support is reserved to defect troubleshooting for the products delivered to the CLIENT at the time of establishment of the contract. AV Simulation reserves the right to decline any other kind of request.

#### 3.4 Exclusions

Are not covered in respect of the warranty following defects:

- Not transmitted to AV Simulation before the end of the contract,
- Non-reproducible.
- Not attributable to the delivery.
- Not attributable to the delivery services.
- Due to a modification of the operating environment (hardware, software or data),
- Due to a modification by the customer and not accepted by AV Simulation,
- Resulting from deterioration accidental or intentional,
- Due to a non-compliant use of the delivery,
- Due to an environment outside of the specified ranges (electrical, thermal, electromagnetic, vibration, humidity...).

Warranty ceases in the event of modification to the supply by the CLIENT or a third party without written consent of AV Simulation.

Intervention due to a defect reported by the customer, not attributable to the AV Simulation's delivery, will be charged according to AV Simulation's daily rate for technical assistance in addition to travel and accommodation expenses.

#### 3.5 Customer commitment

- Make the basic maintenance of the SYSTEM according to the maintenance manual supplied by AV Simulation,
- Replace consumable items when needed (paper, cartridges, batteries, UPS, projector lamps...),

 Give access to the SYSTEM site so that AV Simulation personnel can perform any required intervention.

The basic maintenance is made by the customer. Basic maintenance is a list of simple actions necessary for the good operating conditions of the SYSTEM that can be made on easy to access parts, without specific tools and without security risks. These simple actions are described in the maintenance manual.

#### 3.6 Dedicated software and data warranty

If the SYSTEM hardware is designed according to customer specific requirements or if it is a modified AV Simulation product, it is then supplied with dedicated software modules and data (that means, software modules and data not part of a standard AV Simulation product). To keep the SYSTEM in working condition, these dedicated software modules and data are covered by the warranty.

Possible issues that may arise are for example:

- Software defect.
- Incompatibility with a new hardware,
- Incompatibility with the environment (operating system, third party software),
- Mismatch with a new SCANeR™ version.

Since dedicated software modules and data are not part of the SCANeR™ standard product, they must be maintained on a user case by case basis. This is the reason why the warranty of this specific software and data is covered by the SYSTEM warranty contract, not by the SCANeR™ warranty contract.

For example, the warranty of an acquisition module developed specifically for a cockpit is part of the SYSTEM warranty. This module handles the communication between the SYSTEM hardware and the SCANeR™ software. It also handles the security functions if existing.

The warranty conditions are the following:

Gravity	Diagnostic	Correction
Blocking	2 days	1 week
Major	5 days	1 month
Minor	-	-

AV Simulation commits to and guarantees maximum time of correction as defined above. Delivery of dedicated software and data update is independent of SCANeR™ update.

#### 4 STANDARD MAINTENANCE

This chapter applies to hardware and dedicated software and data.

AV Simulation standard software maintenance is described in the chapter 3 of [DR1] SCANeR™ Warranty and Maintenance Conditions.

#### 4.1 Definition

The maintenance contract applies only to parts supplied by AV Simulation to the customer. If the SYSTEM configuration has changed since the original delivery, the price of the maintenance contract will be updated to take the new hardware into account.

If the maintenance contract is not subscribed at the end of the warranty period, or if it is not renewed at the end of the maintenance period, AV Simulation might be obliged to discontinue this service.

#### 4.2 Conditions

During the maintenance period:

- Assistance and diagnosis are included,
- Repairs and hardware parts are charged to the customer,
- No provision is made for onsite intervention: if necessary, it will be charged to customer.

The range of use of the SYSTEM is defined in the different documents delivered by AV Simulation: the technical offer, the specification documents and the user manual. The conformance of the SYSTEM is validated by the customer during the site acceptance test. Using the SYSTEM outside its range of use is not covered by this contract.

#### 4.3 Remote assistance

During the maintenance period, the customer can contact AV Simulation for assistance by phone, email and using remote control, on weekdays from 9 am to 6 pm CET. This hotline will be performed in English or French language. This hotline may be closed up to fifteen days during the year in addition to French bank holidays. The customer is notified of the closing days at the beginning of the year.

The customer shall designate a competent person authorized to call the hotline. This person shall be one of the persons trained by AV Simulation in the frame of its activities and should have an adequate level in English or French language.

Based on its knowledge of the SYSTEM, AV Simulation will guide the customer through the troubleshooting process. AV Simulation will try its best to diagnose the problem remotely. In the event of a defect which could not be analyzed on the phone or through remote control, AV Simulation will propose to the customer to visit the SYSTEM to complete the diagnosis. This intervention will be charged to the customer.

As soon as a defect has been analyzed, if it is caused by a hardware issue under coverage, AV Simulation commits to provide a workaround solution if possible, or to provide a quotation for repair. The customer can take the replacement operation in charge or can order it to AV Simulation. In the first case, AV Simulation can help the customer remotely. At the end of the operation, the customer must send an intervention report. The time for repair will be evaluated after the diagnosis has been made.

AV Simulation technical support is reserved to defect troubleshooting for the products delivered to the CLIENT at the time of establishment of the contract. AV Simulation reserves the right to decline any other kind of request.

#### 4.4 Exclusions

Are not covered in respect of the maintenance following defects:

- Not transmitted to AV Simulation before the end of the contract,
- Non-reproducible,
- Not attributable to the delivery,
- Not attributable to the delivery services,
- Due to a modification of the operating environment (hardware, software or data),
- Due to a modification by the customer and not accepted by AV Simulation.
- Resulting from deterioration accidental or intentional,
- Due to a non-compliant use of the delivery,
- Due to an environment outside of the specified ranges (electrical, thermal, electromagnetic, vibration, humidity...).

Maintenance ceases in the event of modification to the supply by the CLIENT or a third party without written consent of AV Simulation.

Intervention due to a defect reported by the customer, not attributable to the AV Simulation's delivery, will be charged according to AV Simulation's daily rate for technical assistance in addition to travel and accommodation expenses.

#### 4.5 Customer commitment

- Make the basic maintenance of the SYSTEM according to the maintenance manual supplied by AV Simulation,
- Replace consumable items when needed (paper, cartridges, batteries, UPS, projector lamps ...),
- Give access to the SYSTEM site so that AV Simulation personnel can perform any required intervention.

The basic maintenance is made by the customer. Basic maintenance is a list of simple actions necessary for the good operating conditions of the SYSTEM that can be made on easy to access parts, without specific tools and without security risks. These simple actions are described in the maintenance manual.

#### 4.6 Dedicated software and data maintenance

If the SYSTEM hardware is designed according to customer specific requirements or if it is a modified AV Simulation product, it is then supplied with dedicated software modules and data (that means, software modules and data not part of a standard AV Simulation product). To keep the SYSTEM in working condition, these dedicated software modules and data should be maintained.

Possible issues that may arise are for example:

- Software defect.
- Incompatibility with a new hardware,
- Incompatibility with the environment (operating system, third party software),
- Mismatch with a new SCANeR™ version.

Since dedicated software modules and data are not part of the SCANeR™ standard product, they must be maintained on a user case by case basis. This is the reason why the maintenance of this specific software and data is covered by the SYSTEM maintenance contract, not by the SCANeR™ maintenance contract.

For example, the maintenance of an acquisition module developed specifically for a cockpit is part of the SYSTEM maintenance. This module handles the communication between the SYSTEM hardware and the SCANeR $^{\text{TM}}$  software. It also handles the security functions if existing.



As long as both SYSTEM maintenance and SCANeR™ maintenance contracts are subscribed, the specific software and data are guaranteed to remain operational with the reference version of SCANeR™.

The maintenance conditions are the following:

Gravity	Diagnostic	Correction
Blocking	2 days	1 week
Major	5 days	1 month
Minor	-	-

AV Simulation commits to and guarantees maximum time of correction as defined above. Delivery of dedicated software and data update is independent of SCANeR™ update.

#### 5 PREVENTIVE MAINTENANCE (OPTIONAL SERVICE)

Note: this service is not included in the standard Warranty nor Maintenance subscription. It is an optional service that must be purchased additionally. It is available during the warranty period. After the warranty period, it requires SYSTEM Standard Maintenance and SCANeR™ maintenance contracts to be purchased.

Once a year during the service period, at a date agreed between AV Simulation and the customer, AV Simulation comes to the customer site to check the SYSTEM.

The following actions will be done:

- Test that the SYSTEM works correctly and is correctly tuned,
- Identify defective hardware,
- Identify hardware that is about to reach its end of life,
- Identify hardware that is obsolete according to requirements of current software version, or that is going to be obsolete in a near future,
- Execute the maintenance actions that cannot be performed by the customer because they need specific tools or knowledge. These actions are described in the Preventive Maintenance Checklist.

At the end of the visit, AV Simulation delivers a report explaining the current state of the SYSTEM and telling which parts are going to be obsolete. AV Simulation commits to give advices to the customer so that he can maintain the SYSTEM in the best working conditions as possible.

If a defect is detected during the visit, AV Simulation commits to provide a diagnosis and a quotation to fix the defect.

The service does not include any spare part or hardware update. The customer is free to refurbish the obsolete hardware or to keep it. However, in case where the customer hardware would not fit the hardware requirement of the software, AV Simulation cannot be made responsible of software misbehavior.

Consumable items are under the responsibility of the customer.

The duration of the preventive maintenance visit is dependent on the SYSTEM hardware complexity. Travel and accommodation expenses are included.

### 6 SOFTWARE UPGRADE INSTALLATION (OPTIONAL SERVICE)

Note: this service is not included in the standard Warranty nor Maintenance subscription. It is an optional service that must be purchased additionally. It is available during the warranty period. After the warranty period, it requires SYSTEM Standard Maintenance and SCANeR™ maintenance contracts to be purchased.

Once a year AV Simulation produces a major update of the SCANeR™ software, containing the functional developments as planned in the Product Roadmap as well as all the compilation of all bug fixes. The SCANeR™ maintenance contract gives access to these major annual updates. However, the installation of updates is not covered by the SCANeR™ maintenance contract.

With the "software upgrade installation" service, AV Simulation extends the SCANeR™ maintenance contract by taking care of the software upgrade installation on the SYSTEM. Once a year during the service period, at a date agreed between AV Simulation and the customer, AV Simulation comes to the customer site to install the latest major release.

The following actions will be done:

- Update licenses,
- Install SCANeR™ software,
- Install other AV Simulation deliveries if under maintenance (acquisition module, 3D database, specific developments),
- Copy and update configuration files,
- Check SCANeR™ with a basic scenario;
- Copy user data,
- Perform the acceptance test if existing.
- 2 days training on the new version.

At the end of the visit, AV Simulation delivers a report on hardware configuration according to the new version requirements, and gives advice on the software use. In case where the customer hardware would not fit the hardware requirement of the new version, AV Simulation cannot be made responsible of software misbehaviour.

The following actions are not covered by this service, they can be the object of a specific order placed before the yearly visit:

- Modification, build and test of developments made by the customer using the SCANeR™ SDK.
- Upgrade of user data (scenarios, road networks, vehicles ...) to be functional with the new version, in case where a technical change in the software would break the compatibility with user data.

The duration of the intervention is dependent on the SYSTEM hardware complexity. Travel and accommodation expenses are included.