



A3 Wounding System

ALTERNATIVE INJURY SYSTEM (AIS)
BY PSYCHOBASTARD



Version: 30072018

Content

Content	1
1. Manual instructions	2
1.1 GENERAL INFORMATION	2
1.2 QUICK INSTALLATION	3
1.3 ADVANCED INSTALLATION AND INFORMATION	3
1.4 SETUP FILE	4
2. Editing and Scripting	6
2.1 VARIABLES	6
2.2 FUNCTIONS	6
3. Usage of AIS	7
3.1 STABILIZE & REVIVE	7
3.2 TRANSPORTATION OF INJURED UNITS	8
3.3 AI HANDLING AND AIS	10
4. About AIS	10
4.1 LIST OF FEATURES	10
4.2 CREDITS	11
4.3 LICENSE & DISCLAIMER	11
4.4 MEDIA AND FEEDBACK	12



1. Manual instructions

The first chapter will teach you how to implement the AIS script package. Read it if you are a mission builder and want to include AIS script package into your own mission. If you are a player and want to understand how to use AIS in the best way, jump to chapter 3.

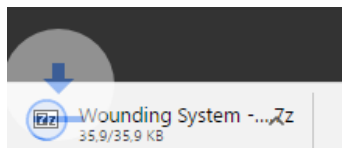
1.1 GENERAL INFORMATION

AIS Revive is the abbreviation for “Alternative Injury System” and has its roots back in the beginning of Arma 2. Back then, there was an early vanilla wounding module which gave the initial input and ideas for *BonInf’s AIS in Arma 2. At the beginning of Arma3 it was a simple port from Arma 2, which has grown up to its own new system and went into deal with the specific advantages and problems of Arma 3.

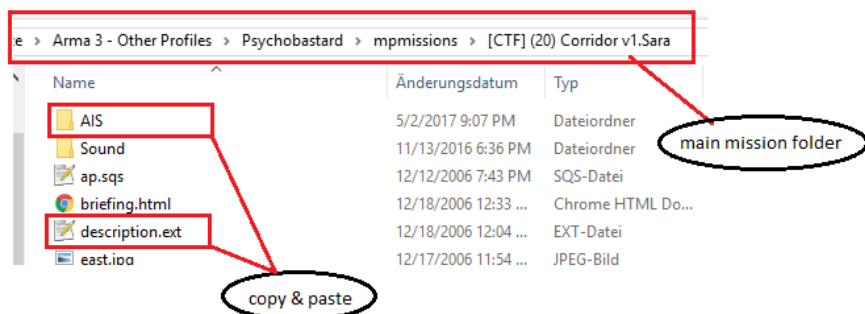
The special and outstanding thing of this revive system is the fact, that a player or AI unit doesn’t die before they fall in a state of agony. Most other revive systems out there let the player die and after a regular respawn beam him back to his last position, where from then on he will be lying on the ground and wait for a revive. This system is different as it will not let you die. And this will bring the big possibility to use it also in single player missions as well as in no-respawn missions. Furthermore it brings some other nice features like crawling and acting in a restricted way within your current environment while you are in unconscious mode or the support by AI soldiers. For a full list of features read chapter “4.1 features”.

1.2 QUICK INSTALLATION

Make sure you have downloaded the latest version of AIS Revive, unpack the downloaded file. (f.e. with 7zip or Winzip)



Copy and paste the folder "AIS" to your mission's main root folder



Copy and paste the description.ext code into yours (or c&p the whole description.ext)

```
1. //-----
2. //-----AIS INJURY-----
3. //-----
4. class CfgFunctions {
5.     #include "AIS\cfgFunctions.hpp"
6. };
7. #include "AIS\Effects\BarDlg.hpp"
8. //-----
```

That was it! For a simple setup of the AIS jump to chapter 1.4 and read about the included setup file. Make sure you didn't have enabled another revive system (f.e. vanilla revive) at the same time. This will end up in various errors in both revive systems.

1.3 ADVANCED INSTALLATION AND INFORMATION

The whole initialization runs through the file *AIS\cfgFunctions.hpp*. In some missions there is already a *cfgFunctions* class present. This can be in the *description.ext* itself or somewhere else in the mission directory. If it is the case, simply copy only line 5 (see picture above) into this existing class. For more information's about *cfgFunctions* read the BI-wiki.

Line 7 is the necessary definition for the status bar dialog. It can also be moved to another central location if needed.

The initialization of the AIS is done completely during the pre- and post-initialization phase of the mission. This means you can deal with it in some way of scripting during the moment the normal *init.sqf*

is processed. The same is valid for commands and functions which you would like to include in the init of units in editor will work from mission start with no restrictions.

ACE3 Support: AIS can't work at the same time with any other revive or medic system. But it compatible with ACE3 in a limited way, as it will automatically detect if ACE3 is running. If this is the case, AIS Revive will shut itself down and won't initialize. You, as mission designer, mustn't care about the fact that some people out there use ACE and some not. AIS will not cause some ACE3 features to break down and will only be active if no ACE3 is detected.

1.4 SETUP FILE

The setup file is located in the AIS folder: *missionFolder \ AIS \ AIS_SETUP.sqf*

To change the behavior of AIS Revive simply edit the parameter in the setup file. Every parameter has it's own description to help understanding what it is for and how to change the parameter. The setup file is split into three parts: "Main Settings", Optional Settings" and "Visual Settings". The first category has a strong influence on the gameplay and visuals doesn't have a real impact to the gameplay.

At this point the most important "Main Settings" have a detailed explanation.

AIS_REVIVE_INIT_UNITS	=	"allPlayers"	(Standard – every player)
	=	"allPlayables"	(every player and playables)
	=	"allUnits"	(every (!) unit on the map, not recommended)
	=	"allUnitsBLUFOR"	(every unit on side Blufor)
	=	"allUnitsOPFOR"	(every unit on side Opfor)
	=	"allUnitsINDFOR"	(every unit on side Resistance)
	=	"allUnitsCIVILIAN"	(every unit on side Civilian)

Definition of which units receive an automatic initialization from the beginning of the mission. Add one of the given input STRING. Remember, what is important for your mission? Which units really need the revive option? The more units receive the revive-init, the more scripts are running in your mission! (Save performance) I really recommend to use it only on your own group. ("allPlayers" or "allPlayables"). Moreover, each player will start the initialization every time, regardless which option is selected.

AIS_MEDICAL_EDUCATION	=	0	(Everybody is able to revive)
	=	1	(Everybody with a First Aid Kit or Medikit)
	=	2	(Only medics are able to revive)

Definition which units are able to revive each other. Add one of the given input numbers. Zero is more casual gameplay style while two is focused on stronger team play. This parameter has no effect on the ability to stabilize (stop bleeding out) injured units. Everyone can stabilize the injured units at any time.

AIS_REVIVE_GUARANTY	=	TRUE	(too much damage make you unconscious)
	=	FALSE	(critical hits or damage can kill you instant)

Definition if it is possible to instantly or fall in unconscious every time, regardless how strong the damage was. Add a BOOL. If this parameter is set to false, it is possible to die instantly without having the chance to be stabilized or revived by other units. A critical hit is mostly a head shoot or a strong explosion near the unit. This parameter give you the possibility to bring much more realistic gameplay in your mission and make it harder to solve the tasks.

AIS_MEDEVAC_STATIONS = [] (empty array - disabled)
 = [[Obj1, 10] , [Obj2]] (stacked array, define medevac object and
 radius)

Define one or more objects as a medevac station. Add a stacked ARRAY with an object and an optional number radius. The object can be a vehicle or a building like a tent or container or whatever. The number is optional (standard 10 meters) and defines the radius around the object, where the revive action will show up. Make sure the object is existing! If not you can add it later during the game. (See chapter 2) Take notice that AI units are able to heal everywhere, regardless if this feature is enabled. This feature isn't forced for AI for some game breaking reasons, because AI is simply too stupid to evacuate a unit to a special point to perform a revive action. Keep this in mind as mission designer.

Attention! If your revive object gets killed or destroyed, you have no chance to revive any longer. Make sure you have an available Medevac object at any time if you want to use this feature.

Attention! Again! If you add a Medevac station later during the game, the rule for revive is change! Before you add a Medevac station you can revive at every position. Afterwards only at Medevac positions.

2. Editing and Scripting

AIS Revive will make available the most important variables and functions to handle AIS in scripts for mission designers and scripters. This is most helpful if you want to handle AIS in generic missions or when it is important to (re)-initialize spawned units or objects.

2.1 VARIABLES

Variables you can set:

```
_unit setVariable ["AIS_noReviveInit", true]
```

Exclude this unit from AIS initialization

```
_unit setVariable ["AIS_noBleedOut", true]
```

Unit won't bleed out. (f.e. story units)

Variables you can ask for:

```
_unit getVariable ["AIS_unconscious", false]
```

Return TRUE if unit is unconscious

```
_unit getVariable ["AIS_stabilized", false]
```

Return TRUE if unit is stabilized

2.2 FUNCTIONS

```
[_unit] call AIS_System_fnc_setUnconscious
```

Set unit in unconscious mode. Make sure unit was initialized by AIS before.

```
[_unit] call AIS_System_fnc_loadAIS
```

Initialization for a unit during the mission flow. (Spawned AI units' f.e.)

```
[obj,10] call AIS_System_fnc_addMedevacObj
```

Set object/vehicle as medevac station during mission flow. The number is the radius around the medevac where the revive action will pop up. (Optional) Important if a medevac vehicle was respawned or is spawning first time during the mission.

The following example shows how you can add a spawned unit to the AIS Revive System. In this case I would like to spawn an injured AI which won't bleed out, for story reasons:

```
1 _unit = group player createUnit ["SoldierWB", position player, [], 0, "FORM"];
2 [_unit] call AIS_System_fnc_loadAIS;
3 _unit setVariable ["AIS_noBleedOut", true];
4 [_unit] call AIS_System_fnc_setUnconscious;
```

You do not really need to care about locality issues. Just make sure to set variables or call a function only where the unit is local.

3. Usage of AIS

The procedure remains simple every time you use it. First you have to stabilize a unit and as second step you can revive the injured unit. What this means the following chapter will you explain a bit more detailed. Most information's are also in the mission briefing readable.

3.1 STABILIZE & REVIVE

To stabilize a unit means you will stop the heavy bleeding of the unit. If a unit is stabilized his death-counter will stop and the unit can't bleed out to death.

The following picture will show you the action menu. You only have the option to drag or stabilize the unit. The revive actions appears only for stabilized units. Every unit can stabilize each other. The 3D icon above the unit can show you the status of the injured unit. In this case the unit is still bleeding. (Blood drop in the icon)



After a unit is stabilized the revive action appear and you can start to revive the injured unit. In some cases only a medic can revive injured, you need medic equipment in your inventory to perform a revive action or revive is only at special points possible (field hospitals). Who is able to revive depends on the mission settings which mostly are set by the mission designer. Read the mission briefing to find out who is able to revive.

In the picture below you can see that the icon doesn't show the blood drop any longer. Also the revive action is available.



Remark: The duration of the stabilize and revive process depends on variable factors. You can interrupt the process every time by press **ESC** button.



In some cases a medic has to heal a revived unit as, it depends on mission settings, if auto healing is available.

3.2 TRANSPORTATION OF INJURED UNITS

There are three different ways to transport or evacuate an injured unit.

DRAW – start to drag a unit simply by select “*drag*” via action menu. The best way if you have to pull an injured into the next cover.

CARRY – if you already are dragging a unit the next action entry “*carry*” will appear. Choose this method of transportation if you want to transport the injured unit over a longer distance. You have to stay in a secure area to load the injured unit on your shoulders because it takes time to perform the action.



LOAD INJURED – this is the fastest method of transportation. The “*load injured*” action will appear if you drag or carry an injured with you near a vehicle and target the vehicle. The injured will be loaded into the vehicle if enough space is available. Use this method of transportation if you want to evacuate a unit to a field hospital far away. (Stabilize the unit before transporting it!) To unload the unit, target the vehicle and choose “*unload injured*” from the action menu.



3.3 AI HANDLING AND AIS

First of all: if an AI unit will help you depends on mission settings and what the mission designer has set up! In the most cases your own AI group members will help you. But it's also possible to receive help from other AI soldiers of your side when they are close (within 200 meters) to your position.

At this point I will explain some simple rules of AI revive behavior to better understand how it should work:

- If the group leader of a group is a human and is not unconscious, he has to command other AI's to revive other units. As long as a leader is a human player the AI will wait for his command to prevent some stupid movements. (f.e. run into enemy fire)
- Occasionally AI will automatically look for unconscious units nearby. If you want to receive help from AI units a bit faster, press the **H** button to call for HELP.
- If a medic is present, not the closest unit but instead the medic will help you.
- AI only performs a revive action, without a stabilize action, regardless where they are. They can also revive you if revive is set to only be possible at med-evac points. Otherwise it could be a game breaker.



4. About AIS

4.1 LIST OF FEATURES

- Fully AI compatible revive system
- Fully SP/MP, HC and JIP compatible
- Teamswitch compatible
- Setup file to change easy the behavior of the revive system
- A lot of options to choose between arcade or a more realistically usage of medics
- Option to select a realistic damage handling (die immediately by heavy explosions f.e.)
- Injury state without dying immediately
- Compatible for missions without respawn
- drag, carry, drop and load injury units
- Option to change damage tolerance
- A lot of visual effects and discreet information's around the gameplay
- Unconscious units are able to roll on their jelly and perform simple actions
- Most time consumption actions are visualized and can be aborted if needed
- Markers and HUD show injury units on the map (if wanted)

4.2 CREDITS

BonInf*	- for the first multiplayer compatible version (Arma 2)
Bohemia Interactive	- for the design idea (Wounding module Arma 2)
Allwarren	- for his feedback, help and some fixes
Lukio	- for his text revisions and translations
NetFusion	- for the way of handling with interactions
ACE3 Team	- for damage handling of dropped units
CBA Team	- for some functions
Community	- for important feedback to help me improve the whole package

4.3 LICENSE & DISCLAIMER



You are free:

to Share — to copy, distribute and transmit the work

to Remix — to adapt the work

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following conditions:

Attribution — You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

Noncommercial — You may not use this work for commercial purposes.

Share Alike — If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one.

Creative Commons may be contacted at <http://creativecommons.org/>.

4.4 MEDIA AND FEEDBACK

Your feedback is welcome. Best way is to visit the BI forum topic:

<https://forums.bistudio.com/forums/topic/161291-a3-wounding-system-ais-by-psycho/>

You can find some media coverage at my YouTube channel:

<https://www.youtube.com/playlist?list=PLyVfKzZXHxRCtp2TRDDL9Exv9dS4orlKe>

