The Autonolas Launch Assesment by ApeWorX is located here:
https://github.com/valory-xyz/autonolas-governance/blob/main/audits/Valory%20Review%20Final.pdf

Current repository for the audit:
https://github.com/valory-xyz/autonolas-governance/tree/v0.1.0.pre-audit

Below we address the provided recommendations.

**R1.** OLAS token is now part of the audited repository:
https://github.com/valory-xyz/autonolas-governance

**R2.** OLAS token is now the one that is going to be deployed. There will be no mocking of the token anymore in the future.

**R3.** This is done. Current repository is the first out of three repositories comprising the full Autonolas architecture.

**R4.** Accounted for. The release process is described here:
https://github.com/valory-xyz/autonolas-governance/blob/main/docs/deployment.md

**R5.** This has been studied and documented. Please refer to the token audit folder:
https://github.com/valory-xyz/autonolas-governance/tree/main/audits/token

**R6.** Voting Escrow (veOLAS.sol) was originally ported from two implementations:
https://github.com/curvefi/curve-dao-contracts/blob/master/contracts/VotingEscrow.vy
https://github.com/solidlyexchange/solidly/blob/master/contracts/ve.sol

Since our governance is compound-like Bravo implementation assembled using OpenZeppelin set of contracts, the IVotes interface became a needed part of veOLAS. The possibility of delegating tokens is excluded. At the same time, in order for the veOLAS to be an ERC-20 token, the IERC20 interface was also included, although without a possibility to transfer tokens.

The set of functions that are not meant to be executed revert right away and are listed at the very bottom of the contract.

*Changes due to IVotes interface inheritance.*
In order to satisfy the IVotes interface, the original `totalSupplyAt()` function was renamed into `getPastTotalSupply()` one, leaving the functionality untouched.

For the same reasons, `balanceOfAt()` was renamed into `getPastVotes()` function without any logic change.

One more function to change was **balanceOf()** that became **getVotes()**, also without any logic change.

*Changes dues to IERC20 interface and staking.*
Since staking is going to be part of the overall architecture tokenomics, there is a need to track user account funds locked in the veOLA contract. At the same time, when it comes to staking, those funds cannot be considered in a weighted way as voting power.

For these reasons and to satisfy the IERC20 interface implementation and standard, the **balanceOf()** function of our veOLAS returns a pure locked account balance. The same concerns the **totalSupply()** function. To further account for the staking implementation, **totalSupplyAt()** now gets the total supply in pure overall contract balance for a specific block number.

The original Voting Escrow contract was not keeping a history of pure total supply. Thus, the only variable `balance` was added to the original struct `PointVoting` (`Point` in original Voting Escrow). Its calculation is in line with other variables consistently updated during the major Voting Escrow history snapshot tracker: a **checkpoint()** function call.

*Other changes.*
We have worked on reducing the size of structs that are written in storage. This led to moving some uint256 variables to uint128 and / or uint64. The reasonable limits on those variables not to overflow for a long time are described in detail in comments throughout the code.

Some of the variable names were changed in order to better understand the code. The rest of the functions were basically untouched. However a detailed internal audit of the code allowed us to combine and optimize several functions. A more in depth explanation can be provided upon request.

**R7.** In the current repository we use the npm-installed `@gnosis.pm` folder to get their ABIs for testing purposes only. Those contracts are not part of our workflow. If the auditor refers to the test files importing Gnosis Safe contracts, this is done solely to obtain ABIs accounting for how the hardhat infrastructure works.

**R8.** The tagged version is corresponding to the main branch and is located here: https://github.com/valory-xyz/autonolas-governance/tree/v0.1.0.pre-audit

**R9.** Accounted for.

**R10.** Accounted for.

**R11.** Added as part of the repository.