# Smart Contract Audit Linguo

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Note: Some threat levels or headings might be empty if there is no vulnerability/updates/suggestions found.

## Introduction

The contract audited here is/are:

 $\frac{https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/Linguo.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/blob/master/contracts/standard/arbitration/LinguoTok/en.sol/https://github.com/kleros-interaction/linguoTok/en.sol/https://github.com/kleros-interaction/linguoTok$ 

and was shared by Kleros for auditing purposes while working with them.

Based on the audit, we were able to find no High threats, no Medium threat, and 2 Low threat with some other changes in the optimization, readability, typos, and comments section.

# **High Threats**

1. None

### **Medium Threats**

1. None

### **Low Threats**

- submitEvidence() can be used by anyone to submit 100s of fake evidence which
  increases the work of the Jurors. It can be used by someone who wants to hurt Kleros. It
  can be used by the Challenger also, as a reverse psychology method to make the jurors
  frustrated and think that the translator might have done this, as his work might be below
  average. Simple solution, limiting the evidence proposals of each task to only the
  challenger.
- 2. In <u>line 522</u> if the requester does not accept the token transfer, it can lead to DoS situation.

# Optimization & Readability

1. <u>batchRoundWithdraw()</u> can be optimized if we find the iteration limit before the for loop, rather than in the for loop. The below code might help I believe:

```
uint iterateUntil = tasks.rounds.length;
if (_count != 0) { iterateUntil = tasks.rounds.length > (_cursor + _count) ? (_cursor + _count):
tasks.rounds.length; }
```

# Typo's & Comments

1. None

# **Suggestions**

1. None