

# Smart Contract Audit

# **Kleros GTCR**

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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:

<https://github.com/kleros/tcr/blob/9e7046c/contracts/GeneralizedTCR.sol>

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 no Low threat with some other changes in the optimization, readability, typos, and comments section.



## High Threats

1. None

## Medium Threats

1. None

## Low Threats

1. None

## Optimization & Readability

1. [Line 118](#), either change the bool to ``_executed`` and make a subsequent change in the comments in [Line 111](#) & [106](#). Or make the comment change in [Line 111](#) from “Whether the request is executed.” to “Whether the request is resolved.”. The latter seems easy.

## Typo's & Comments

1. Return parameters not mentioned as per NatSpec in functions like ``getContributions``, ``getItemInfo``, etc.
2. [Line 46](#), from “List of status change requests made for the item.” to “List of status change requests made for the item in the form `requests[requestID]`.”
3. [Line 58](#), from “Address of requester and challenger, if any.” to “Address of requester and challenger, if any, in the form `parties[party]`.”
4. [Line 59](#), from “Tracks each round of a dispute.” to “Tracks each round of a dispute in the form `rounds[roundID]`.”
5. [Line 70](#), from “Maps contributors to their contributions for each side.” to “Maps contributors to their contributions for each side in the form `contributions[address][userType]`.”
6. [Line 95, 96](#) to use “in the form” in the comments.
7. [Line 97](#) from “Maps an item's ID to its position in the list.” to “Maps an item's ID to its position in the list in the form `itemIDtoIndex[itemID]`.”

## Suggestions

1. None

