

Seer Market Resolution Policy

General Rules

Purpose

This Policy outlines the rules applicable to Seer prediction market questions, with one main purpose:

Ensuring that Seer markets questions are resolved correctly

Invalid markets: The following markets must resolve as **INVALID**:

1. **Relative dates:** Questions with relative dates.

Invalid: Who will be the president of the United States in 6 months? ("in 6 months depends on the current time").

2. **Moral questions:** Questions about moral values and not facts.

Invalid: "Is it ethical to eat meat?".

3. **Invalid answers:** Questions in which none of the answers are valid.

Invalid: In a categorical market, "Which city will have more habitants by 2026-01-01 00:00 UTC?" with the outcomes "Africa" and "Europe".

4. **Multiple answers:** Questions in which multiple answers are valid, unless the question is part of a multicategorical market.

Invalid: in a categorical market, "Who will be the Time person of the year 1937?" with answers "Chiang Kai-shek" and "Soong Mei-ling" (they got the prize jointly).

5. **Prohibited markets:** The market must not directly incentivize immoral violent actions (such as murder, rape or unjust imprisonment) which could likely be performed by any participant.

Invalid: Will Donald Trump be alive on 01/12/2021? (Anyone could bet on "No" and kill him for a guaranteed profit. Anyone could bet on "Yes" to effectively put a bounty on his head).

Detailed Rules




Definitions

General





- **Category:** the thematic subject matter of a market, such as, sports or politics.
- **Market description:** the information included at the moment of creation of the market, such as the question, the market type, the opening date, the images, category, the outcomes and the tokens representing them.
- **Opening Date:** The moment when the question becomes available for resolution.
- **Market Resolution:** the act of answering the market's question

Market Types

- **Categorical Markets:** questions with outcomes that are divided into distinct options, where the answer is one specific option. *Example:*

	Which candidate will win the 2024 United States presidential election? <small>📅 Opening at November 6 2024, 00:00</small>
	#1 Joe Biden 0%
	#2 Donald Trump 0%

- **Multicategorical Markets:** questions with outcomes that are divided into distinct options, where the answer may be one or multiple options. *Example:*

	Which teams will advance to the finals of the 2024 Champions League? <small>📅 Opening at May 8 2024, 18:30</small>
	#1 PSG 0%
	#2 Bayern Munich 0%
	#3 Real Madrid 0%

- **Scalar Markets:** questions with two outcomes that represent a minimum (“lower”) and a maximum (“upper”) range of a continuous scale, where the answer is represented by a numerical value that can fall either within or outside the margins determined by the outcomes. *Example:*

What will be the inflation rate in Argentina for 2024	
Opening at January 14 2025, 21:00	
#1 Lower than 10 %	0%
#2 Higher than 500 %	0%

- **Multiscalar Markets:** questions with outcomes that are measured on multiple continuous scales, where each outcome has its own question and an answer represented by a numerical value. *Example:*

How many seats will each party get in the 2024 EU elections?"	
Show questions	
#1 EPP Group	0%
#2 Renew	0%
#3 S&D	0%

Answered Too Soon

The following markets must resolve as **ANSWERED TOO SOON**:

1. **Early answers:** If the outcome of the market is not known by the time the answer is submitted.

Valid: "Will Bochum win against Stuttgart in the Bundesliga match on January 20, 2024?"
The match was delayed by 40 minutes, and by the opening date, the outcome was still unknown since the match was still in progress. However, an answer was submitted after the match concluded, and the result became known.

Answered too soon: "Which team will win the football World Cup 2022 final?" with 18/12/2022 at 16:30 UTC as an opening date, and the answer "Argentina" was provided at 16:35 UTC. However, due to a tie at the end of regular play (90 minutes), the match was extended by an additional 30 minutes. Therefore, even though Argentina eventually won the match, the outcome was not yet known when the answer was submitted.

Invalid Markets

The following markets must resolve as **INVALID**:

2. **Relative dates:** Questions with relative dates.

Valid: Who will be the president of the United States in 6 months from the opening date? (when the market is created the opening date is determined).

Invalid: Who will be the president of the United States in 6 months? (in 6 months depends on the current time).

3. **Moral questions:** Questions about moral values and not facts.

Valid: Will the total global number of adherents to Islam surpass that of Christianity before 2030-01-01?

Invalid: Is it ethical to eat meat?.

4. **Invalid answers:** Questions in which none of the answers are valid.

Valid: A scalar market with a question "What will be the inflation in the eurozone in 2024?" and outcomes "lower than 1%" and "higher than 10%" is valid even if there is inflation of 5%.

Invalid: A categorical market, "Which movie will win the Best Picture award at the 2024 Oscars Academy Awards?" with outcomes "Barbie" and "Poor Things" (the actual winner was "Oppenheimer").

5. **Multiple outcomes:** Questions in which multiple outcomes are valid, unless the question is part of a multicategorical market or section 20 of this policy applies.

Valid: In a multicategorical market, "What team will reach the semi-finals of Copa America 2021?" with answers "Brazil," "Argentina," "Uruguay," and "Colombia" (all of them except Uruguay reached the semi-finals).

Invalid: in a categorical market, "Who will be the Time person of the year 1937?" with answers "Chiang Kai-shek" and "Soong Mei-ling" (they got the prize jointly).

6. **Repeated outcomes:** Questions in which two or more outcomes are repeated, unless section 21 of this policy applies.

Invalid: In a multicategorical market, "What team will reach the semi-finals of Copa America 2021?" with answers "Brazil," "Argentina," "Arg" (Argentina reached the semi-finals).

7. **Prohibited markets:** Markets that directly incentivize immoral violent (such as murder, rape or unjust imprisonment) actions which could likely be performed by any participant.

Invalid: Will Donald Trump be alive on 01/12/2024? (Anyone could bet on "No" and kill him for a guaranteed profit. Anyone could bet on "Yes" to effectively put a bounty on his head).

Invalid: Will Hera be a victim of swatting in 2024? (Anyone could falsely call the emergency services on him in order to win the bet)

This must not prevent markets:

- Whose topics are violent events not caused by conscious beings.

Valid: How many people will die from COVID19 in 2024? (Viruses don't use prediction markets).

- Whose main source of uncertainty is not related to a potential violent action.

Valid: Will Trump win the 2020 US presidential election? (The main source of uncertainty is the vote of US citizens, not a potential murder of a presidential candidate).

- Which could give an incentive only to specific participants to commit an immoral violent action, but are in practice unlikely.

Valid: Will the US be engaged in a military conflict with a UN member state in 2024? (It's unlikely for the US to declare war in order to win a bet on this market).
Valid: Will Derek Chauvin go to jail for the murder of George Floyd? (It's unlikely that the jurors would collude to make a wrong verdict in order to win this market).

Default assumptions

In order to avoid insufficiently precise markets to resolve as invalid, unless stated otherwise in the market description, the following assumptions must be made:

8. **Standard time:** All dates default to UTC with the 24h clock.

Example: "Will Ethereum 2.0 be launched before 2030-01-01?" must be interpreted as "Will Ethereum 2.0 be launched before 2030-01-01 00:00 UTC?".

9. **Date format:** Dates using "/" are assumed to be written in the DD/MM/YYYY or DD/MM/YY format, unless the context of the market description clearly suggests otherwise. In case centuries are omitted (DD/MM/YY), centuries are assumed to be the same as the opening date.

Example: "Will Ethereum 2.0 be launched before 02/01/30?" will be interpreted as "Will Ethereum 2.0 be launched before January 2, 2030" (assuming the opening date is in the 21st century).

Example: The question "Who will win the presidential election in Taiwan on 01/13/24?" will be interpreted as referring to the winner of the Taiwan election on January 13th, 2024, considering that the opening date is set to January 14th 2024, there is no 13th month, and the presidential election in Taiwan is scheduled for that exact date.

10. **Number format:** When using numbers in the question or outcomes, the symbol "." is assumed to be a decimal separator and the "," symbol as a thousand separator, unless the context of the market description clearly suggests otherwise.

Example: "Will the population of Japan exceed 200.000.000 people by the end of 2030?" must be interpreted as 200 million. If we were to interpret "200.000.000" as "200" (considering "." as a decimal separator), it would imply that we are asking if the population of Tokyo will exceed 200 people by the end of 2030. Given that Japan is one of the most populous countries in the world, with millions of residents, the correct interpretation is 200 million people.

11. **Default date:** If no specific event date is given in a question, it is assumed that the opening date will be considered the event date.

Example: "Will there be a human living on Mars?" With an opening date of 01/01/2030 will

be interpreted as "Will there be a human living on Mars on 01/01/2030?".

12. **Entities:** Entities are assumed to reference the most obvious entity with that name, taking the context of the market description into account.

Example: "Will Michael Jordan receive the 2021 Turing award?" refers to the computer scientist Michael I. Jordan whereas "How many points will Michael Jordan score in the FIBA Americas Championship?" refers to Michael J. Jordan, the basketball player.

13. **Units:** In case units are omitted, they are assumed to be the units which are the most often used in this particular situation.

Example: "Will a NFT be sold for more than one million in 2021?" will be interpreted as "Will a NFT be sold for more than 1,000,000 USD in 2021?".

14. **Rounding rule:**

In categorical and multicategorical markets with outcomes that represent numerical values within the same scale, if no specific rounding method is given, values are to be rounded to the nearest proposed value or range, middle toward 0.

Example: In a scalar market with outcomes -100, 0 and 100. 77->100, 50->0, -50 -> 0.

Example: In a scalar market with outcomes A: 0-2, B: 3-5 and C: 6+. 1->A, 8->C, 5.5->B.

Resolving unclear questions

In general, if the market does not break a rule of the Invalid Market section, reasonable efforts should be made to determine its outcome even if the question is not 100% technically perfect and the following rules must be applied:

15. **Objective interpretation:** Markets must be interpreted according to their context, as any average reasonable person would, while disregarding the opinions and motives of the market creator.

Example: "Will there be more than ten thousand deaths caused by Coronavirus in the United States in 2024?" should be interpreted as referring to COVID-19, even if the market's creator publicly states in social media that their goal was to create a market about another Coronavirus called "229E".

16. **Grammar mistakes:** If the market contains some grammar or orthographic errors, it should resolve as if it didn't contain those errors, as long as the meaning of the question is still clear.

Example: "Will Donald Treump win the US presidential election?" should resolve in the same manner as "Will Donald Trump win the US presidential election?".

17. **Incorrect assumptions:** If the question makes an assumption which appears to be incorrect, it should resolve as if this assumption hasn't been made, as long as the meaning of the question is still clear.

Example: "Will Vitalik tweet about Seer by Wednesday, July 7, 2024?" with July 8th as a resolution date should resolve in the same manner as "Will Vitalik tweet about Seer by July 7, 2024?", even if July 7, 2024 is actually a Sunday.

Example: "Will president Kim Jong-un publicly announce a direct military action against the US?" should resolve in the same manner as "Will Kim Jong-un publicly announce a direct military action against the US?" even if Kim Jong-un is the supreme leader of North Korea but not its president (the official president of North Korea is Kim Il-sung despite him being dead).

18. **Sources of truth:** If the market doesn't mention a specific source, the most credible outcome must be reported. In order to determine the credibility of an outcome, the quantity of sources and their credibility are to be taken into account. Credibility of sources and of outcomes must be assessed according to facts, not unproven beliefs.

Example: "Will extraterrestrial lifeforms visit planet earth?" will resolve to No, unless a number of credible sources announce it, despite some people reporting having experienced such encounters.

Example: "How many people will die of COVID-19 in 2024?" should be answered according to numbers reported by renowned health organisations and not according to some public figures claiming COVID-19 to be a hoax.

19. **Equal interpretations:** If a market can have different interpretations, but all those interpretations lead to the same outcome, this outcome must be reported. If no interpretation is clearly more reasonable than the others, the market must be reported as invalid.

Example: "Which party will win the October 2012 Czeck elections?" Should be reported as "Czech Social Democratic Party". Even if there were both senatorial and regional elections at the same date and the election the question refers to is ambiguous, the "Czech Social Democratic Party" won both of them.

Example: "Which party will win the October 2015 Czech elections?" Should be reported as invalid because "Christian and Democratic Union – Czechoslovak People's Party" won the senatorial election but "ANO 2011" won the regional ones.

20. **Multiple outcomes:** In a categorical market, the fact that multiple outcomes could be valid at the same time does not make the question invalid if only one of those outcomes occurs.

Example: "How many seats will the European Pirate Party win in the 2014 European elections?" with answers "0", "1-10" and "10+" will only be invalid if the pirate party wins exactly 10 seats.

21. **Repeated outcomes:** The fact that multiple outcomes are repeated does not make the question invalid if a non-repeated outcome occurs.

Example: In a categorical market, "What team will reach the semi-finals of Copa America 2021?" with answers "Brazil," "Argentina," "Uruguay," and "uruguay" (all of them except Uruguay, which was repeated, reached the semi-finals).

22. **Negative number outcomes:** In scalar and multiscalar markets, if the correct answer is a negative number the answer must be 0.

Example: A Scalar market with a question "What will be the inflation in the United States in

2024?" and outcomes "lower than 1%" and "higher than 10%", if there is deflation (i.e. -1%), then the answer "0" is correct.