



Italian e-Sports Association

Classification of videogames competitive level
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Document purpose

The purpose of this document is to provide a definition of the concept of video games competitiveness to be used in competitions, both for individual players or teams. This approach offers the possibility of a rapid classification of the competitiveness level of any past, present and future video game.

PART I - DEFINITION AND BASIC CONCEPTS

Introduction

Video games can have countless uses in competitions, therefore it is important to establish a definition of competitiveness and how it can be classified both for video games and the development of further competitive variants.

Competitiveness is the balance of all videogame components such that the characteristic of the game itself have no influence on the competition outcome. In other words, a videogame can be defined competitive when enable to identify uniquely the video-players' ability in a competitive environment.

“The competitiveness of a video game is the balance of all the components such that the game itself has no influence on the outcome of the match.”

Fundamental principles

Three principles determine a videogame competitiveness level: **equality**, **consistency** and **skill**. A competitive videogame must held at the same time these three characteristics to be defined as such. The first principle (**equality**) is that all participants must have equal playing conditions. In other words, none of the participants shall have an advantage due to a specific benefit.

The second principle (**consistency**) reflects the fair distribution of factors involved, whereby every player must have the same opportunities during the entire arc of the match.

The final principle (**skill**) requires that a competitive videogame when it bases its essence on the **skills** of the player. The greater the ability of a videogame to identify the players skill, the more a videogame will appear competitive both in absolute and when compared to other games. Skill distinguishes every videogame and can change between video games as it is linked to different elements. In short, skill is the set of factors that see the interaction between gaming devices in perfect synergy with the game

mechanics, so that a gamer can achieve the goal of the game in less time and / or with more profit than their opponent. In the best competitive video games the highest level of skill are unmeasurable as there are unlimited combinations to win a game.

PART II - COMPETITIVENESS COMPONENTS

Competitiveness components

To determine the competitive level of a videogame, based on the fundamental principles, you have to rely on two equally important factors: **videogame environment** and **videogame peripherals**. A videogame environment is the set of activities developed in a virtual environment obtained from the interaction of a peripheral and the programming code specific to each videogame. The result of this interaction is reproduced through an "output" terminal, usually a screen. Videogaming devices are any "input" terminal that allows you to interact with the virtual environment of a videogame. Therefore both factors, environment and peripherals, equally contribute to determine the competitive level of a videogame because they allow to express the ability of the videogame player.



Game environment

There are infinite possible videogame development environments that results in unlimited gaming variables. These in turn might increase the complexity in defining the competitiveness of each single videogame or category of video games. For this reason we have chosen to group video games into macro-categories in order to limit the increase our ability to manage this aspect.

We have considered a reference cross-cutting element between categories of video games, as the minimum common denominator between them. Different categories of video games can be united by videogame elements which offer a characteristic of reading the rules of the game.

Open map video games

The first element taken into consideration for grouping video games is the virtual area where the game takes place. This area exists only as projection of a virtual environment and has its own physical characteristics. It is commonly referred to as a "game map".

The first set of the ten classification rules is the type of map defined as "open map". By "open map" we mean a virtual environment in which the player, through the variation of the view, can move freely in the gaming environment. Another "open map" element is the strategic and tactical use of the gaming environment during the various phases of the game. In summary an open map can be explored without limit (without being bound to a path, for example) and the different positioning in the map influences the dynamics of the game.

Some categories of open map video games are: first person shooting, third person shooting, real-time strategic and massive online battle arena (MOBA).

PART III - GAME ENVIRONMENTS

Game environment - open map:

Rule	Description
①	Separate deployment area, diametrically opposite with same dimensions. Game map (one cases automatically excludes other): <ol style="list-style-type: none"> <i>symmetrical</i>, any utilities must have a starting position: fixed, not random and symmetrical (equidistant from deployment area); <i>asymmetrical</i>, there must be no access to utilities at the beginning the game, if present in the playing area, must be equidistant with respect to deployment areas in a symmetrical manner. With asymmetrical map, a minimum of 5 matches must be played (always odd numbers and alternating on the side of the field) to determine victory.
②	Game map must be crossing (maximum distance covered) in a time between a minimum of fifty seconds and a maximum of three minutes of real time.
③	Single game must be at most fifty minutes, in real time.
④	No numerical inferiority in case the actions of a player can influence the actions of one or more players/team in play. (two players or two teams with the same number of players)
⑤	No random effects or minimal random effects, such that the effects caused are negligible on the game mechanics.
⑥	No facilitation (assisted aiming) or automation (macro) of the player's activity with respect to the actions that can be performed in the game.
⑦	Game mechanics updated (balancing) no later than once a year. All game mechanics must be documentable (game guides) and it must not be possible to exploit and/or be the victim of any external event such that modifies or limits the possibilities illustrated.
⑧	Game mechanics must express the ability to play in such a way that the best performance in using them is linked to the following characteristics: speed of execution, reaction times, memorization, tactics and strategy.
⑨	Fundamental mechanics, must be unique and known from the beginning of game.
⑩	Recording of actions in play (sequence) or spectator/referee mode [replay possibility].

PART IV - CLASSIFICATION

CLASSIFICATION OF VIDEOGAME COMPETITIVENESS LEVEL

Every single rule proposed in the table "game environment" must be respected in its entirety in order to be considered acquired by a videogame. Each rule acquired gives one point, with the sum of all points being the competitive level for entire videogame.

POINTS	RANKING	DESCRIPTION
10	AAA	It reflects all the characteristics of competitiveness and represents a videogame that expresses the highest competitiveness level. This video games is a reference in the market.
9	AA	Good competitive video game even if in some respects can not achieve the maximum possible. A good competitive video game.
8		
7	A	Adequate competitive level but with several aspects that can be improved. Despite the lack of several points is suitable for competition.
6		
5	BBB	Low competitive level and with different aspects to improve. Not suitable for competitions.
4		
3	BB	Very low competitive level and with many aspects to improve. Not suitable for competitions.
2		
1	B	This video game has almost nothing to do with competitive video games.
0	NC	Not classifiable.

APPENDIX I - GLOSSARY

Actions: capacity to produce variation in the game environment. This capacity come from interaction with peripheral game devices (direct actions) by the player or from a reaction to an action (indirect actions) or from units in play independently (without any action by the player).

video games Category: set of different video games united by common elements.

Effects: any modification to the gaming environment produced by actions and utilities or between the interaction of the two.

Player: who interacts with the peripheral devices in a videogame.

Game mechanics: rules, inside a videogame, that bind in a relationship two or three of the following elements: actions, utilities and effects.

Fundamental mechanics: game mechanics that allows you to complete the purpose of the game.

Memorization: ability of the player to create bonds during the course of a game between any element in game.

Match : single challenge between two players or teams.

Game platform: any type of computer allows the development of video games.

Utility: any element in the game can be used by the player through interaction with the game interface.

Strategy: choices made by a player before and during a game to achieve the goal of the game.

Tactics: the execution of a method to achieve short, medium or long term objectives.

Real time: time measured outside the game environment with a system independent of the game platform.

Reaction time : interval of time for the execution of an action in the contingency of a situation.

Game time : time measured in the game environment.

Speed of execution: time elapsed between one action and the next. A low time between one action and the next indicates high execution speed.

Videogame: computer program that allows you to interact through input devices and produces images and sounds from output devices.