Details points:

Authors should carefully proofread their papers and correct English and typology (double space, coma...) errors. Some very long sentences would also benefit from being cut out to make it easier to read.

Page 3:

<u>L5:</u> "The simulations are built based on the hypotheses that dynamic (near)-real-time impact information." What is the meaning of *near* here?

<u>L9:</u> "Communicate more targeted warnings and emergency guidance messages to help the public understanding..." Specify the type of aimed audience.

<u>L13: "The game design allows the player..." How?</u>

<u>L15: "Through (semi-) realistic "what if" scenarios..." What is the meaning of semi here?</u>

Page 5:

<u>L3:</u> "The learning outcome of ANYCaRE is the improved weather risk-related decision-making for emergency response through modern multi-source inputs." Explain what is a *modern multi-source inputs*; give some examples.

<u>L9</u>: "By observing players' debate and decision-making processes during the simulations the experiment aims ultimately to obtain first conclusions on "if "and "how" improved multi-model (and potentially multi-hazard) outputs, including information on impact-based vulnerability data, can support the decision chain in European warning systems towards better responses." Decompose the sentence and give more explanation on this point.

Page 6:

L1: Table 1 requires more explanation in the text.

<u>L16:</u> "For example, in ANYCaRE game the GMs is responsible, among others, to provide feedback to the players about the hydro-meteorological observations highlighting the relevant safety decisions that should have be taken at each playing round (similar to a weather reporter)." What is the basis for the information that the GM proposes?

Page 7:

<u>L9:</u> "A panel of roles' description to be distributed among the players (randomly or based on their real-life expertise)". This choice of role is important and could be a part of the training/rising awareness strategy; it would be interesting to discuss this point in the paper.

<u>L25:</u> "A Three rounds of decision-making are played successively to simulate the progression of the hazard from its early detection to its landfall." Is it always 3 rounds (whatever the application)? Can you justify this choice?

Page 8:

<u>L3:</u> "Based on the selected emergency activity, the group further agrees if they would provide some generalized advice for safety to the public (e.g., "If inside, move to higher floors", "Be prepared for electricity disruptions") or if they would proceed to more detailed emergency orders in specific area(s) of the territory (e.g., "Evacuate immediately")." Can you give more details on this process?

<u>L15:</u> "Players get a few minutes to become familiar with their role and to introduce it to the rest of the group before the main game simulations start." Is it sufficient (notably for players without expertise in the field)?

<u>L22:</u> "Following this first step, the players have to select (among some pre-established options) the best way to communicate their decisions to the targeted public." How many options? What freedom is left to the players? Can they suggest new options?

Page 9:

<u>L12:</u> "Each round is composed of two trials, one where only existing basic hydro-meteorological forecasts are available and the second where additional more sophisticated decision-support products are provided." The interest of these two trials is only explained later in the text. You should introduce the justification of this game design choice here.

<u>L18:</u> "This time includes 1-2 minutes for the GM to present a short summary of the (hydro-) meteorological situation and consequences of 20 the decisions that have been taken at the previous round." How are evaluated/calculated these consequences?

Page 11:

<u>L1:</u> "In each round, the players receive area-specific information so that they could make distinct safety choices adapted to the predicted hazard in each area of Anywhere City." Why using different areas? What is the impact on the game?

Page 13:

<u>L17</u>: "In particular, in the second trial meteorologists receive model calculations outputs from the "Expert System for Consequence Analysis and Preparing for Emergencies" (ESCAPE) model calculations, and interpret them for the use of civil protection." Are these results pre-calculated or are there live simulations made according to the players' choice? In this case, what is the duration of a simulation?

Page 15:

<u>L17:</u> "To trigger debate rather than winning spirit in the performed experiments, no specific penalties were assigned to the options listed in the worksheets. Instead, in the first round the GMs highlighted the three-fold common goal of the emergency managers to: i) insure citizens' safety and prevent loss of life; ii) prevent disturbances in social life, which make people unhappy and reduce wellness; iii) minimize their expenses for protective measures compared to the actual needs." It is not clear. Can you reformulate/explain this point?

Page 16:

<u>L12:</u> "Players noted their appreciation for the 'stimulating' (6 instances), 'very fun' (4 instances) learning approach experienced in ANYCaRE." On how many instance? Was there also criticism from the players? Why did you choose this type of evaluation rather than an anonymous questionnaire?

Page 17:

<u>L12:</u> "Although, differences between Trial 1 and Trial 2 were not always obvious in terms of the selected emergency activity on the worksheets, in most of the cases, players in the four experiments rated their confidence higher when they passed to Trial 2." Trials 1 and 2 are combined in the same game session. Does that not introduce a bias in the comparison of the two trials? Shouldn't it have been better to make two independent experiments, one with classical information (i.e. trial 1) and the other with advanced information (trial 2)?

The variability between the groups are not discussed; it would be an interesting point.

Page 19:

<u>L4:</u> "In summary, the respondents indicated the following take away messages..." It would have been interesting to compare learning through play with that obtained with traditional methods (e.g. courses).

<u>L23:</u> "To facilitate the representation and relevant intervention of all the roles and their particularities in the debate, it was suggested that very detailed responsibilities and constrains should be assigned to each role at the beginning of the game; allowing the players to set up a common strategy with the other persons playing the same role (8 instances)." Another way to avoid the 'leader effect' is to give each player only part of the information, forcing them to communicate to build a common strategy.

Page 21:

<u>L23:</u> "Adjustments of the current flood game are already considered to prepare experiments for Italian pupils (e.g., between the age of seven to thirteen years old) with the objective of raising awareness on i) the crisis decision-making process and the challenge of school-related decisions, and ii) the appropriate behaviours of students and their parents in case of flash flooding." How?