**Response to Comments by Reviewers:**

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|  | **Comments**  | **Response**  |
| Reviewer 1: | Please consider to show some results in sections 3.2 and 3.3 and provide some more details on the coupling schemes used.  | The analysis results and coupling scheme in Section 3.1 are shown as representatives. Those in sections 3.2 and 3.3 will be shown in the poster presentation. |
|  | Do you use implicit, semi-implicit or explicit coupling? Do you apply further algorithms like IQN-ILS to stabilize the coupling? Which interfaces are being coupled typically and why? | The following sentence has been added in Section 2.“Algorithms for coupling stability will be considered to introduce in the future.” |
| Reviewer 2: | in Arkadia-Design, is the coupling algorithm (choice of information exchange, time scheme) specified by the user, or does Arkadia-D include facilities to aid or automate this process?  | The following sentence has been added in Section 2.“The numerical analysis option can be selected in the single analysis using 1D code for efficient analysis, the single analysis using CFD code for detailed analysis, and the coupled analysis using 1D and CFD codes.” |
|  | usually, when coupling different codes, a large part of the work consists in the preparation of coherent input data for all the codes. Can Arkadia-Design help with this process? in many cases, users will require different levels of simulations : a "fast level" (system thermal-hydraulics only), a "best-estimate level" (best simulation tools available, but slower), etc. Can Arkadia-Design generate these different "simulations levels" from an initial input specification? | The following sentence has been added in Section 2.“Currently, the user prepares the input for the analysis code to the resolution required by the user, but the goal is that the input generation is aided by the knowledge-base system which is separately developed [1].” |