**Template for description of application case studies – IBPSA Project 1 WP3.2**

**1. Title and authors**

***-Provide a title for the application case study***

…………………………………………………………………………………………………………………………………………………………………

***-Name the authors that are responsible for the case study***

Name/Institution/Country……………………………………………………………………………………………………………………….

Name/Institution/Country………………………………………………………………………………………………………………………. ………………………………………………………………………………………………………………………………………………………………..

**2.**  **General Description:**

***-Formulate a general outline of the case study by including: objective, description of HVAC/district system and main results (if already available)***

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***-What’s the status of the case study?***

On going

Completed

***-Which is the scale of the simulation?***

Component

Building

District

***-Which location (weather file) have you used?***

City/Country………………………………………………………………………

**3.**  **Diagram and picture**

***-Include at least two pictures for your case study:***

1. One diagram showing the layout of the HVAC/district system
2. One picture of Modelica model

**4.** **Thermal zone modeling**

***-How many buildings have you modelled?***

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***-How many thermal zones per building have you modelled? How many in total?***

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***-What’s the complexity of the thermal zone model (Low order / High order)?***

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***-(only for district simulations) Are network and buildings coupled or decoupled?***

Coupled

Decoupled

**5. Modelica libraries and tools:**

***-Which Modelica library have you used? (Keep in mind that IBPSA library is for developers, not for users)***

AixLib

Buildings

BuildingSystems

IDEAS

Other …………………………..

***-Which simulation tools have you used?***

Dymola

OpenModelica

JModelica

Other …………………………..

***-Have you used additional tool, package or automation workflow (e.g. BuildingsPy, StrOBe, Teaser etc.)? If yes, please specify which is the purpose of using the tool***

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***-What’s the simulation run period?***

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***-What’s the computation time?***

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***-Which solver and tolerance have you used?***

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***-Please provide specifications of computer machine***

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**6.** **Were all the needed Modelica components available in the library? Or you had to develop some new models?**

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**7.**  **Is there any specific reason for the use of Modelica instead of other building/district simulations programs?**

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**8.**  **Is there any reference available for the case study? (papers, reports, etc.)**

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