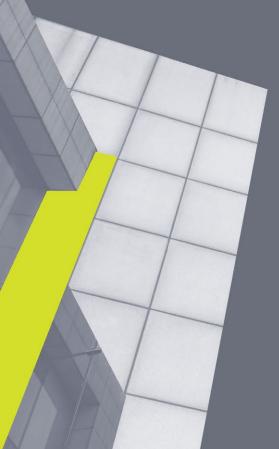# Requirements for BIM

Sample model requirements

1. Requirements for models in original format:

Sample models should be created in authoring tools that will be used for design work in accordance with the information presented in Paragraph 3.6. "Software" of the Pre-Contract BIM Execution Plan (including the stated version of the authoring tool).

Each Lead Designer is required to ensure the development of sample models consisting of:

- Axial grid AB/1-2. Axial intersection point A/1 should be located at the coordinates X;Y;Z=500;500;0. Axis step – 1500 mm in the direction of X axis and 1250 mm in the direction of Y axis;

- Three-dimensional shapes created with the Mass element tool or equal. The dimensions of the cube are 1500(x)x1250(y)x1750(z)mm. The height mark of the three-dimensional shape Z= 750 mm and the geometry of the three-dimensional shape in the top view must coincide with the axial grid;

- A data set named "DATA"* has to be added to the three-dimensional shape and include the following parameters:

Attribute	Description
01 Project part	Specify the parts of the design for which the lead designer will be responsible
02 Lead Designer	Specify the lead designer
03 Date	Specify the sample model creation date and time
04 Authoring tool	Specify information about the authoring tool and its version

*In some authoring tools, it is permissible to not specify the data set name for technical reasons, however it must appear in *.IFC file format.

2. Requirements for models in *.IFC file format

Sample models have to be exported from authoring tools to *.IFC file format without losing the element geometry and the information specified in Paragraph 1 "Sample model requirements".

Note. Some authoring tools do not allow exporting of the axial grid to *.IFC file format. The lack of axial grid in sample models from these authoring tools will not be considered as non-compliance with the requirements.

3. Requirements for the federated model

All created *.IFC file format sample models have to be combined into one federated model and it needs to be verified that their locations coincide and that all the information added to the templates is visible.

4. Deliverables to be submitted

The development of sample models is ensured by the lead designers specified in Paragraph 3.1 of the Pre-Contract BIM Execution Plan. The amount of sample models must be equal to the number of the lead designers specified in Paragraph 3.1 of the Pre-Contract BIM Execution Plan.

When submitting an offer in a procurement tender, the supplier is required to submit the following files:

Deliverable	Description	Ensured by
Sample models in original format	Models developed in the authoring tool containing the information specified in Paragraph 1	Lead designers
Sample models in *.IFC file format	Models exported from the authoring tool in *.IFC file format without losing the location, geometry and added information	Lead designers
Federated model	Model containing information on all sample models, their location, geometry and added information	Supplier's BIM coordinator