ADVANT Beiten

BIM TECHNOLOGIES IN CONSTRUCTION AND CONTRACT LAW IN RUSSIA

BIM Technology (Building Information Modelling) is rapidly taking over the construction industry and opening up new horizons there. Current studies of accumulated experience demonstrate that applying BIM can enable you to reduce significantly the duration and costs of construction projects. However, the advantages of this technology are only unlocked if implemented correctly in contracts between project participants.

Legal aspects of BIM

BIM is a digital representation of the physical and functional characteristics of a facility for the purposes of design, construction, operation and utilisation. It is a digital twin of the building which enables you to design, supervise the construction and operate the building in real time, and also to manage the project at all stages of its life cycle.

Depending on the requirements and goals of the client or legislative instructions (in countries where the application of BIM is mandatory in a specific sector), and also project implementation stages, the actual contents of the BIM model differ, including the time, cost and operating parameters.

The opportunities the BIM technology offers are determined by the range of issues that require legal regulation within the framework of contracts on the design, construction and operation of buildings and the respective management of a project.

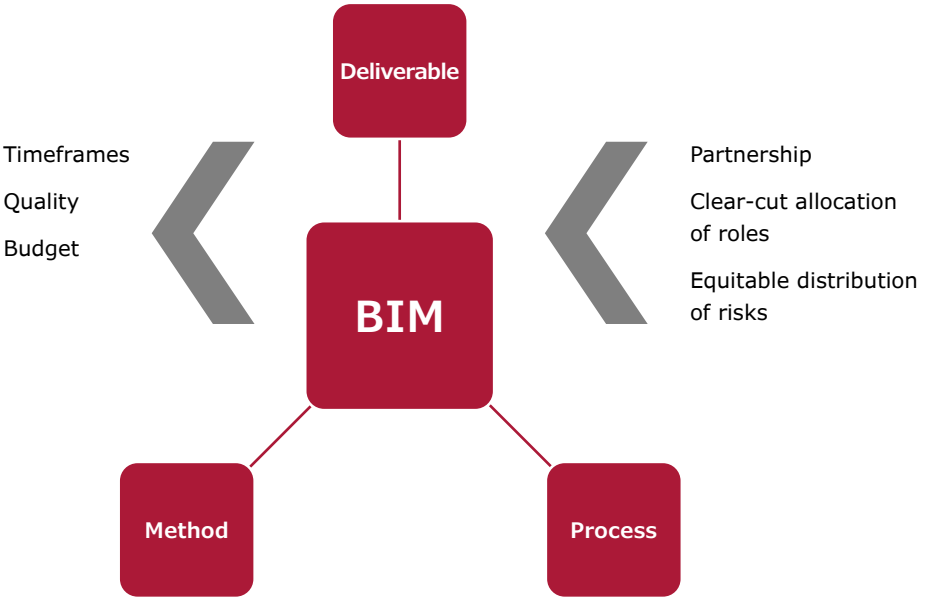
Firstly, the purpose of the use and functionality of the BIM model should be discussed in depth with the client at the stage of the preparation of the design brief and be enshrined in a contract. In this case, the **BIM model is an independent work deliverable** and is subject to legal and contractual regulation in terms of the timeframe for its creation and quality.

Secondly, **BIM is a design method**, which should be standardised in technical regulation, so that all the participants of a project use the same technical terminology when interacting with each other and also with the state authorities. However, in the absence of corresponding technical standards, it is up to the parties to the contract to allocate the technical risks involved in the project.

Thirdly, **BIM is also a project management method**, which implies that all the key participants must be engaged in the design and construction processes to the greatest possible extent (up to the level of key subcontractors and suppliers) and requires the establishment of direct communications among all project participants, in contrast to traditional contractual subordination determined by project functions and the levels of legal liability. It is specifically this high level of cooperation among project participants that is a precondition of the effectiveness of BIM. At the same time, it also gives rise to the majority of legal issues regarding the allocation of project risks.

Fourthly, as BIM “digital twins” coexist with traditional 2D drawings and sketches, **the priority of the documents must be established in the contract.**

Building Information Modelling is reflected in contracts with different legal aspects. The BIM model is an independent work deliverable (together with documents executed in 2D format and the physical volume of the construction). BIM is a method for performing work and providing services, and for organising work processes. This “multifunctionality” of the BIM Technology should be reflected in a contract, and the allocation of project risks in an evolving legal environment should be taken into account.



Impact of BIM on contract structure and risk allocation

The use of BIM is leading to a significant change in traditional concepts on project participants, the functions that they perform and the types of contracts.

New roles with individual functions appear in projects using BIM – the BIM Manager and the BIM Coordinator. The principal difference is that the BIM Manager does not perform design work and is not responsible for its results. The need for such a figure is attributable to the use of complex databases in BIM (under the general name of the Common Data Environment), which must be maintained by a technical specialist. The BIM Coordinator on the other hand integrates design solutions and is the "custodian of the BIM model". As a rule, this function in the project is performed by the chief designer, the project manager or the general contractor.

In international practice both bilateral and multilateral contracts based on partnerships between the parties (alliance contracts) are used in BIM projects. In Australia, for example, such a contract presupposes that the commercial interests of the parties depend on the total profit of the project, and the parties jointly assume the associated risks. The parties also undertake to avoid disputes and resolve any issues that arise amongst themselves, trying to achive the best solution for project implementation. Such a goal is spelled out in the contract as legally binding. In contrast, a number of standard legal terms and conditions that are typical in bilateral contracting agreements are not included in such contracts (for example, resolution of disputes in court).

Other models of alliance contracts are also structured using similar principles – the American Integrated Project Delivery (IPD) and the British Project Partnering Contract (PPC2000).

A separate form of contractual arrangements under BIM projects involves the use of a so-called BIM protocol, in other words, standard terms and conditions on the interaction of project participants are attached to bilateral or alliance contracts that are binding on all the parties. In the United Kingdom, the use of the CIC BIM Protocol (Second Edition 2018) is common practice for all types of standard contracts (JCT, NEC). Implementation of standardised BIM protocols is also becoming a global trend.

Russian law allows for the conclusion of both bilateral and alliance contracts, and also permits the use of standard forms. However, it is highly likely that the lack of standardised documents at national level impedes the extensive implementation of BIM technology protected by law.

The use of BIM is leading to a significant change in traditional concepts on project participants, the functions that they perform and liability. “Cooperation” and “partnership” contract models are now available, with corresponding claim management and conflict regulation mechanisms.

BIM and intellectual property issues

BIM and the specifics of the management processes used in this regard are brought to the forefront when preparing contracts and resolving issues concerning intellectual property.

One key question should be raised: Is the BIM model a copyrighted item as an architectural creation in the form of a digital mock-up? Is a BIM model intrinsically technically creative if created as part of a corresponding computer program in which a number of the parameters are set by technical design standards? It might be worthwhile considering in this respect the position expressed by the RF Supreme Commercial Court that only the architectural element of design documentation is protected. Accordingly, legal protection might be available not for the BIM model as a whole, but only for the architectural solutions embodied therein.

The collective method of creating a BIM model also causes another practical problem – co-authorship and its proof. This implies, in turn, the need for all project participants to grant mutual usage rights, and also raises issues related to the contribution of the authors to the final deliverable - the BIM model.

Another important issue concerns the granting of rights to use the BIM model to the owner of the facility. As the BIM model implies use throughout the entire life cycle of the facility, a precise definition of the scope of use must be given in the respective licence agreement.

In addition, a whole range of unexplored legal risks arise in connection with the use of computer programs to create the BIM model. Who is liable for the quality of the software and corresponding possible losses? The situation becomes even more complex if each contractor works with different software. At the same time, software developers frequently offer its use “as is”, without providing any guarantees. Is such an approach appropriate in instances when the safety of the buildings and structures being designed is at stake?

When using BIM, you have to decide on the specific part of the created BIM model that must be protected as intellectual property, and it must be clear who is the actual author and rights holder of the indicated intellectual property.

Contacts

Falk Tischendorf
Rechtsanwalt | Partner
Head of CIS
ADVANT Beiten
Falk.Tischendorf@advant-beiten.com

Kamil Karibov
Lawyer | Ph.D. | Partner
ADVANT Beiten
Kamil.Karibov@advant-beiten.com

ADVANT Beiten in Russia
Turchaninov Per. 6/2
119034 Moscow
T: +7 495 2329635
www.advant-beiten.com

Our offices

BEIJING
Suite 3130 | 31st floor
South Office Tower
Beijing Kerry Centre
1 Guang Hua Road
Chao Yang District
100020 Beijing, China
beijing@advant-beiten.com
T: +86 10 85298110

BERLIN
Luetzowplatz 10
10785 Berlin
Germany
berlin@advant-beiten.com
T: +49 30 26471-0

BRUSSELS
Avenue Louise 489
1050 Brussels
Belgium
brussels@advant-beiten.com
T: +32 2 6390000

DUSSELDORF
Cecilienallee 7
40474 Dusseldorf
PO Box 30 02 64
40402 Dusseldorf
Germany
dusseldorf@advant-beiten.com
T: +49 211 518989-0

FRANKFURT
Mainzer Landstrasse 36
60325 Frankfurt/Main
Germany
frankfurt@advant-beiten.com
T: +49 69 756095-0

FREIBURG
Heinrich-von-Stephan-Strasse 25
79100 Freiburg im Breisgau
Germany
freiburg@advant-beiten.com
T: +49 761 150984-0

HAMBURG
Neuer Wall 72
20354 Hamburg
Germany
hamburg@advant-beiten.com
T: +49 40 688745-0

MOSCOW
Turchaninov Per. 6/2
119034 Moscow
Russia
moscow@advant-beiten.com
T: +7 495 2329635

MUNICH
Ganghoferstrasse 33
80339 Munich
PO Box 20 03 35
80003 Munich
Germany
munich@advant-beiten.com
T: +49 89 35065-0

Imprint
This publication is issued
by BEITEN BURKHARDT Rechtsanwaltsgesellschaft mbH
Ganghoferstrasse 33, 80339 Munich, Germany
Registered under HR B 155350 at the Regional Court Munich/
VAT Reg. No.: DE811218811
For more information see:
https://www.advant-beiten.com/en/imprint

EDITOR IN CHARGE:
Falk Tischendorf

ADVANT member firm offices:
BEIJING | BERLIN | BRUSSELS | DUSSELDORF
FRANKFURT | FREIBURG | HAMBURG | LONDON | MILAN
MOSCOW | MUNICH | PARIS | ROME | SHANGHAI

advant-beiten.com

09/2022