FIEC position paper on the relationship between users and software companies/editors/service providers

The construction industry is undergoing a major transformation, characterised by digitalisation and more automated production and assembly processes. The use of BIM (Building Information Modelling)\(^1\) is increasing. The value of the data that is generated not only by BIM, but also by other new technologies involved in digitalisation such as sensors and robots is growing significantly. Data has value and more than ever before this means that the way intellectual property is handled, as well as how data is stored, managed, updated, protected and accessed, are becoming critically important. There are implications for day to day operations and particularly for the relationship between the construction company and the providers of digital tools, services and infrastructure on the one hand, and with their clients on the other.

The IT industry recognised long ago the value of data generated during the construction life cycle. Its response was to create not only software, but a range of services around BIM models and data. In some cases, licensing and contractual arrangements have disadvantaged contractors and this situation looks not only set to continue, but indeed to get worse (as explained below).

Therefore, FIEC calls on the European Commission to consider, in particular the following challenges and recommendations:

1. **The dominant position of a few software companies/editors/providers raises major concerns.**

   A few software providers have come to dominate the global market for construction related software and services, in particular around BIM. This has led to distorted competition on the EU market as well. Choice is becoming increasingly limited and FIEC is aware that these dominant providers are locking in their construction clients to unfavourable agreements. We would like to emphasise:

   - The software can no longer be purchased permanently by the users, but is only accessible in the form of subscriptions/lease for example 1 year and the use can be cancelled or their access can be suspended at any time;
   - Geographical restrictions are becoming a problem (e.g. some software can only be used in the country where it is initially purchased);
   - Contract conditions are changing continuously, with increasing costs;
   - The software providers regularly update their products, often to ensure that they are backward compatible and respond quickly to the pace of change. This capacity is essential

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\(^1\) In certain contexts BIM can also mean Model and/or Management
to their business and is also commercially lucrative, because regular updates encourage customers to stay loyal to the brand and upgrade periodically. The customer has little opportunity to reject updates or maintain support for pre-release versions. Considering that software is not the main business for construction companies, but just a tool, software companies are ahead of construction companies in anticipating rapidly changing circumstances. They effectively exploit new opportunities before they are even apparent to the users. Poor backward compatibility forces an entire project team to upgrade the software if only one or a few subcontractors have upgraded.

- Nevertheless, the software providers in question – whilst they may be interested in construction and building related data – have little expertise in the construction industry. This means that solutions may not be the right ones. Therefore, it should be for the market to decide and this is why the construction industry needs open, competitive and fair markets for software and related services.

We are also extremely concerned that such “locking in” enables the providers to increase the cost of their services.

⇒ The European Commission should undertake targeted initiatives according to its competence in competition matters.
⇒ An initiative on fair and site-specific contractual conditions should be a first step.

2. The non-EU origin of these suppliers and their infrastructure is exacerbating the lack of autonomy in software capability in the EU.

It is being observed that increasingly, EU software editors are being bought by non-EU companies. This in turn creates a situation, in which investment in software innovation and infrastructure is coming from outside the EU and preventing the EU from becoming a key player, because it is not matching such investment. This raises the question of European autonomy in the digital field and, down the line, autonomy in shaping its built environment. Software tools shape what is ultimately built as a result of such tools having been used. It also has an impact on the EU’s ability to enact legislation in line with the interests and values of European companies, such as measures aimed at ensuring cybersecurity and protecting data and the ownership of data.

Example: Once stored on servers based in third countries, EU companies have no guarantee that their ownership of their own data will be respected.

In addition, non-EU software suppliers create difficulties for EU construction companies because interoperability with other software and systems used by EU contractors is not necessarily automatic.
FIEC is the European Construction Industry Federation, representing via its 32 National Member Federations in 28 countries (25 EU, Norway, Ukraine & Turkey) construction enterprises of all sizes, i.e. small and medium-sized enterprises as well as “global players”, carrying out all forms of building and civil engineering activities.

3. Contracting authorities must remain software-neutral and promote open standards.

The general principle in public procurement is neutrality. With this in mind, where BIM is requested, public authorities are not permitted to ask for the use of already-specified software in the call for tenders. However, illegal practices are being observed. In some cases, contracting authorities are imposing specific BIM software in the contract, which might create additional costs for companies. Even in cases where it is provided free of charge by the contracting authority, experience shows that using specified software would still generate additional costs for the bidder, as a result of needing to adapt to the software that is being imposed.

- Software users should be allowed to decide where their data is stored. Specifically, EU companies should be able to have their data hosted on EU territory, by EU servers/companies, under EU legislation.
- FIEC calls for the fastest possible creation of a secure European Cloud.
- Non-EU software services provided in the EU should be required to meet EU standards for interoperability and open access.

- The European Commission should monitor and act against such infringements to the EU public procurement rules (Directive 2014/24/EU).
- In parallel, the European Commission should further promote open standards for data, protocols and file formats in public procurement.

4. Rules need to be established for multiple-user-access platforms such as BIM models.

Data access rights are normally handled in the contract between the client and the contractor. In order to improve co-operation and efficiency, such flow of information is necessary. However, access should be limited to the duration of the contract and best practice and common rules to establish ownership and protect intellectual property should be established at EU level.

- EU measures aimed at protecting the data owner should ensure that:
  - Other users that require access to data not owned by them should only have this right for activities related to the project in question. For the construction companies, this nevertheless needs to be for the entire life cycle of the construction in question.
  - Data that has been accessed and used by one construction company cannot be transferred to another.
  - Only the data owner can grant permission for access to his/her (company’s) data.