The new Felix Platter-Hospital is a 5-story building that gathers all necessary facilities, i.e. outpatient, diagnostic and inpatient departments with 320 available beds. The outpatient clinic, the Basel Mobility Center and the Memory Clinic are integrated in the new building. Moreover, the interior design of the new hospital responds sensitively to the diverse needs of tranquility and confidentiality of both the patients and the staff.

The project delivery through the entire design and construction phase of this project has been Open BIM delivery based on the Industry Foundation Classes (IFC). During the first stage of the project, the owner defined part of a BIM Directive’s objectives and requirements for the use of BIM throughout its entire life cycle, from planning to operation. In the second stage the contractors, together with the client, defined the BIM goals and targets in all the project phases.

Multiple BIM-Workshops were held by the Information-Manager to increase the awareness and knowledge of BIM-processes and guidelines within the project stakeholders. In addition, Integrated Concurrent Engineering Sessions (ICE) took place on a bi-weekly basis. Interoperability problems were solved directly with the software vendors through regular meetings and workshops to increase the quality of the IFC files being exported from their software.
### Experience gained and benefits:

**Communication**
The use of IFC formats to communicate the models, and the use of BCF formats to communicate the clashes lead to great improvements in the planning process. IFC models are uploaded into BIM 360 Glue/Field for construction management purposes; and to update and add as-built information and documents to the model.

**Quality**
Solibri allowed to check advanced quality requirements like:
- Physical clashes (i.e. between two walls or doors)
- Non-physical clashes (clear space in the fire-escape routes…)
- Codes and accessibility
- Optimization process for distance between rooms

**Cost**
BIM increases the costs in the earlier phases of the project, on the other hand, risks and changes in the construction phase are reduced to a minimum. Solibri is used for quantity takeoffs in the planning and construction phase.

**Time**
The model was linked to the time-schedule to generate a construction and logistics simulation (4D time planning).

**Innovation:**
The Construction Information Management System (CIMS) and the Virtual Maintenance System (VMS) are bi-directionally connected with Computer Aided Facility Management (CAFM) System.

Laser-scanning will be used to create an As-Built Model for the core & shell, and MEP services during the construction phase. This As-Built Model will be used as the base model for the operation phase of the building.

**Collaboration:**
The strong collaboration with the external designers and the supply chain leads to a high quality and an efficient design and construction process.

---

### The BIM Uses

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PRELIMINARY STUDIES</th>
<th>DEVELOPMENT DESIGN</th>
<th>DETAILED DESIGN</th>
<th>CONSTRUCTION</th>
<th>OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GATHER</td>
<td>Capture existing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facility/ Site</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIMs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANALYZE</td>
<td></td>
<td>Compliance validation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(codes, standards, disabilities…)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LCC Estimation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMUNICATE</td>
<td></td>
<td>Model exchange through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IFC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REALIZE</td>
<td>Construction Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONTROL AS-BUILT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Experience gained and benefits:**

**Operation and Maintenance Using Open Technology**

**Winner of BIM Cluster Stuttgart Award 2016**

**Winner of BSI 2016 Award**

---

**BuildingSMART**

International Alliance for Interoperability

---

**Felix Platter-Hospital in Basel (Switzerland)**

Winner of BSI 2016 Award

“Operation and Maintenance Using Open Technology”

“Prozesse / Organisation”