

#### RKW Architektur +

BUNDES ARCHITEKTEN

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Senior Partner RKW Architecture + 450 employees

BIM implementation at RKW

Committee work in the field of BIM at the Federal Chamber of Architects, AKNW, AHO and VDI, BIM Alliance Consortium, member at BIM Germany





#### **Concept Basis**

- Architect is fully resposible for the whole planing, coordination and supervision process from begin to end.
- Engeneers fullfil their limited tasks.
- Architects resposibility maybe splited between different firms including general contractor.





#### **History**

- 1950 Schedule of fees for architects
  - Later fee schedule for architects and engineers (HOAI)
- Binding pricing law until 2020 for projects up to 20 million EUR.
- Also regulates fees for engineers and for formal urban planning services.
- ECJ judgment 2020 overturns binding price law







#### **Today**

- Last amendment was in 2021.
- Still common ground in the market according.
  - Scope of work
  - Related fees





# **Topic: Regulation for Architects**

- Interior architects with minor deviations.
- Not work of urban planners or engineers.
- § 34 and Appendix 10.1





#### **Basic service**



Basic service is all the planning and coordination necessary to enable the construction of the building and in the manner in which the architect himself determines the implementation.



# Basic service in planning phases as an ideal process

Planning phase	In detail	fee
1. basic determination	No planning, only collecting information Outcome: Complete planning basics	
2. preliminary design	Design of variants on the above basis, generally approvable, Cost estimation +/-20% Outcome: Decision for a variant	7%
3. final design – 1/100 + principle details	Technical and creative conception phase Outcome: Buildable constructed, creative and approvable designed Costs estimation+/-10%	15%



# Basic service in planning phases as an ideal process

Planning phase	In detail	fee
4. approval planning	Formalize LP3 planning. Outcome: Submission of building application, monitoring of the approval process	3%
5. execution planning	Outcome: Plans for direct use for construction (also basis for tender?), review (not production) of assembly plans In the future: Aditionaly Update of the costs	25%
6. tender documents	Preparing documents	10%



# Basic service in planning phases as an ideal process

Planning phase	In detail	fee
7. Tender process	Assisting the contracting process	
8. Construction supervision and documentation	Dervision and In case of general constructor 5% - 15% for supervison "light"	
9. Repair of deficiencies	Accompanying the elimination of defects normally over 5 years	2%





# How 100 % is split

Up to building permit	LP1-LP4 <b>27</b> %	
Up to start of construction	LP5-LP7 <b>39 %</b>	
Up to completion	LP 8 <b>32 %</b>	
After completion	LP9 <b>2</b> %	
Total	100 %	How many Euros are 100 % ?





# Chargeable construction sum

- The costs of all components belonging to the building, including the technical systems, not the operational installations.
- If the value of the technical equipment is more than 25% of the other costs, only half of the exceeded value will be added (§33).
- In case of existing building a value for the existing construction may be added.

#### **Fee zones**

	Zone 1 "barn"	Zone 3 "housing"	Zone 5 "hospital"
1.000.000	92.000	120,000	177.000
	83.000	130.000	177.000
	8,30%	13,00%	17,70%
20.000.000	1.180.000	1.850.000	2.500.000
	5,90%	9,25%	12,50%

Conversion surcharge: **Up to 33%** 





#### **Special Services**

- Special services such as e.g.
  - Special supporting documents in the field of energy, ecology, the disabled, fire protection or escape routes.
  - Everything that does not belong to the actual construction, e.g. data for facility management, special cost calculations, special data requirements.
- Special services are to be commissioned individually.





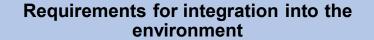
#### **HOAI 202x**

- HOAI 202x by AHO (Commission for Fees for Architects and Engineers)
  draws up a proposal and discusses it with Ministry of Construction and the
  leading Ministry of Economics.
  - Creation of revised service descriptions.
  - Including BIM Building Information Modeling.
  - replacing the fee zones by a points-based calculation system.
- Neutral expert opinion about scope of work and fees will be commissioned by Ministry.
- Planned entry into force in 2025.





#### **Points-Based System**



**Number of functional areas** 

BIM planning method when commissioned

Increased project organization requirements

**Conversion or renovation** 

Matrix to replace the fee zones will cover those aspects

**Design requirements** 

**Constructive requirements** 

**Technical equipment** 

Fit out requirements
Sustainability





#### BIM in HOAI 202x

- BIM is part of the points-based system and basic service with some extra fee if explicit commissioned up to planning phase 5.
- Basic BIM service will be described more closely.
- BIM may be reason for numerous special services e.g. as built model, special file formats...
- Bundesarchitektenkammer: "BIM für Architekten, Leisungsbild, Vertrag Vergütung" 2017 (german).
- https://bak.de/wp-content/uploads/2021/06/BIM-BAK-Broschuere-WEB1.pdf
- French version at the Luxembourg Chamber of Architects.



# Ready for the future!



# **Scope of Architectural Services and Fees** CCA International Conference

Zagreb, Croatia October 13-14, 2022