





Editorial

Communication is everything

Dear readers,

We live in an age of communication. Which is one reason for us to limit ourselves to the most essential topics as there is already more than enough information on all manner of issues. Yet we are keen to keep communicating. Be it with you as our project partners, at seminars, at universities, or with our colleagues. With these pages we would like to communicate to you what we have achieved and what has kept us busy over the past year.

Apart from yet another significant surge in growth during 2016, we were pleased to announce the on-schedule completion of the first construction phase for the Oberpollinger in Munich for KaDeWe Group, the timely handover of the Charité high-rise ward building and the handover of



the Munich Airport extension building (T2 Satellite). Refurbishment of the Neue Nationalgalerie in Berlin is progressing, the 182-metre Omniturm in Frankfurt grows by the day, and the conversion of a historical Munich mail distribution centre into a luxury hotel is taking on shape.

In 2017, we wish to not only start numerous new exciting projects, but hope to be able to apply our know-how in school construction that we gathered in Hamburg and Baden-Württemberg, to a Berlin project - and, of course, to meet you for hopefully more than one conversation.

Happy reading!

Dr. Markus G. Viering

Managing Partner

KVL Holding

the fact 19 Const Colunt

Sven Seehawer Managing Partner **KVL** Holding



Prof. Dr. Bernd Kochendörfer Managing Partner **KVL Holding**



Renovation of an icon Start of construction, Neue Nationalgalerie (New National Gallery) in Berlin

The building designed by Ludwig Mies van der Rohe once stood on the fringe of West Berlin. Now, 50 years after its construction, it has moved into the centre of the undivided city as well as the public eye. While the building appears fresh and young to this day, time has taken its toll on this architectural icon. So following intensive planning, construction started in 2016 to restore the structure's radiance, with KVL handling the project management until 2020.

More luxury for everyone!

Completion of the first construction phase of the Oberpollinger in Munich The KaDeWe Group consists of the three foremost luxury department stores in Germany - the Alsterhaus in Hamburg, the Oberpollinger in Munich and the KaDeWe in Berlin. The company has set itself the goal of creating striking architectural experiences in their stores to claim a permanent position amongst the leading luxury department stores in the world KVL has supervised work on the Pollinger since 2015 and does the same for the Alsterhaus since 2016. Now we are proud to announce that stage one is complete!

} Essentials {

ers.

No brain, no gain A leading project developer, a project manager and a construction lawyer put their heads together for a few months. This is the result: A publication titled "Intelligente Vergabestrategien bei Großprojekten" ("Intelligent tendering strategies for major projects"). As part of the "Essentials" series published by Springer Vieweg, Volkmar Aghte (TishmannSpeyer), Stefan Löchner (Clifford Chance) and Steffen Schmitt (KVL) have dealt with the risks of different tendering models in order to offer a solid decision-making foundation for owners, investors and legal practition-

61

Review

Our highlights 2016

We continue to grow **Relocation of KVL Munich**

It's some achievement to come of age in just three years. To pay tribute to this fact, KVL Munich moved to new larger premises on Friedrichstraße in August 2016. The new offices provide more space for the currently twelve employees to solve their tasks.

High-rise hospital Handover of the Charité high-rise ward building

We are pleased to have contributed to the success of this project in an advisory role to the board. Again, we demon strated that good communication in all direction is vital to the success of a project. Following the on-schedule and on-budget handover of the facility in November 2016, the landmark hospital building became operational once again.

Founding member returns Bernd Kochendörfer rejoins the management board of **KVL Holding**

After leaving his university post in 2015. one of the founding members returned in 2016 as Managing Partner of KVL Holding, thus fully returning to the private sector. We are grateful for the additional wealth in practical, theoretical and personal experience that Bernd Kochendörfer brings to our management team. Welcome back!

81

This is KVL

Supervising, managing, consulting, and much more...

As an owner-managed technical property consulting group, and despite our growth and international orientation, we have remained as flexible, fresh and unconventional as on the day we started 14 years ago.

- our staff of civil and industrial engineers, architects and businessmen strive to deliver what's good for you and your project. Anywhere in the world and in any phase of the project. We are at your side right from the initial idea (phase 0) up to the conversion of your property.

how we've always done it" run counter to our philosophy. Instead, mental flexibility, individual solutions and a claim to intellectual leadership is what we stand for.

In Germany, Central Asia or soon-to-be in Latin America This does not mean that we have no routines, standards and quality demands that we constantly improve. On the contrary our standards and demands increase with each new challenge and solution.

We look forward to expand our scope of work and activity to meet your requirements. We strive for healthy growth with and Rigid structures, self-administration or statements like "That's for you and aim to continue to deliver optimum performance at six German and nine international locations: for better results.

Our scope of services

Project management

- Organisation, information, coordination and documentation
- Qualities and guantities •
- Costs and financing •
- Deadlines, capacities and logistics •
- Contracts and insurance

Technical property consulting

- Feasibility studies, requirements and utilisation concepts
- Project controlling •
- Due diligence / transaction consulting
- Project development

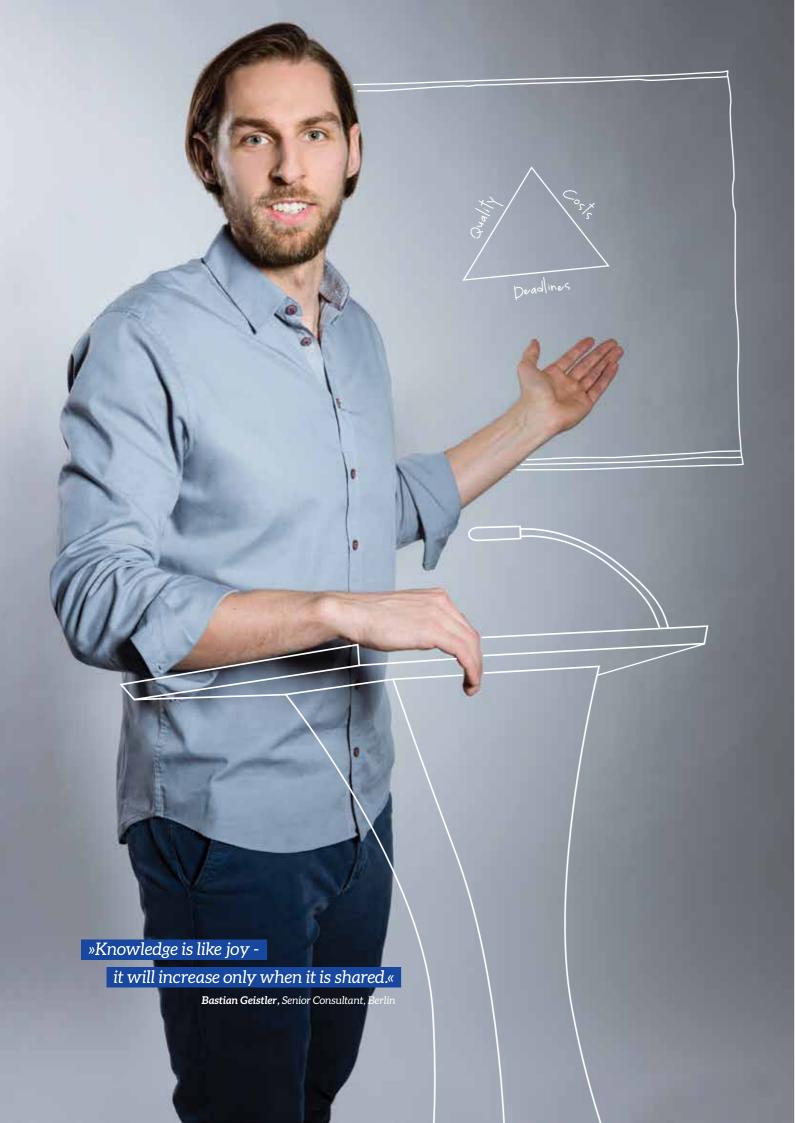
Contract / anti-claim management / expert services

- Project, planning and construction contracts
- Technical variations, construction delay claims Accounting in building construction and •
- civil engineering
- Reports, private and court opinions
- Mediation





»Only by carefully listening to all parties involved, can complex relationships be grasped and conveyed.« Andreas Ligner, Managing Partner, Berlin



Topic

PUBLIC

M

Quickly recognising the latest developments and to react accordingly - that is our goal. In this regard, active communication with

all players in the industry is a key factor - and one we're committed to. What are the best places to communicate if not those where the "who is who" in the world of real estate congregates: real estate trade fairs. In Spring you will be able to meet us at MIPIM in Cannes and in Autumn we are part of the joint stand of the German Association of Construction Project Managers (DVP) at EXPO Real in Munich which we have attended since 2011. We would be more than pleased to greet you as our guest. At the very latest, however, in 2018 when we celebrate a very special occasion: KVL's 15th birthday!

Communication means sharing knowledge

PUBLICATIONS

▼

We make room for academic work. Anyone is free to turn their attention to an industry topic and advance the issue. Which advantages are associated with mediation in the real estate industry? We have dealt with this topic in a publication as far back as 2003. Other publications have since become standard reading. The publication titled "Bau-Projekt-Management" ("Construction Project Management"), for example, will soon be published in its 5th edition. The "Handbuch Bauzeit" ("Construction Time Manual") reached its third edition in February 2016. These, and other, publications emerged during and based on our work. We are eager to solve tasks and look forward to share our solutions with you.

TEACHING ◀ **APPOINTMENTS**

We feel equally at home in education. At the Technical University Berlin in the department of Construction Industry and Construction Operation or in the "Real Estate Management" post-graduate degree course, as instructors for training courses and seminars in the Management Circle or at the IR|EBS and the University of Economy and Technology in Berlin as well as the Hafen City University in Hamburg and in company lectures. It does not matter where we flourish whenever we share our knowledge, train colleagues, offer insights to interested persons or are able to present new viewpoints to experts. This is our world.

We strive for the highest standards. We're all about intellectual leadership. Collecting, interconnecting and sharing knowledge plays a central part in how we view ourselves. Everything is connected. We teach, students become employees, then managers - we recognise problems, do research and document the solutions. See above for an insight into the pillars of our communication with the (real estate) world.

7L



»An open ear for

Anastasija Radke, Commercial Manager Holding, Berlin

everyone and everything«

Topic

Knowledge transfer

Quality management

Office seminars

KVL Days

ShortCuts

Communication connects

Talk is silver, silence is golden. This applies to many situations in life, but not to interactions for a project or in a company. We consider talk to be golden.

There are many experts - each one for themselves excellent - but all of them together a fantastic pool of knowledge that we draw upon. This can, however, only be realised if we keep on the ball of progress and regularly communicate about all that is important. To live up to this commitment and to be able to offer our clients and co-workers the best possible knowledge and skills, we use different internal and external training programmes. Once a year since 2007, we hold our KVL office seminar, complemented by our "KVL Days" that take place twice a year, revolving around current topics in the construction industry. Shared knowledge is increased knowledge!

Since our company is not just a business unit, but a team, there is also the joined fun we engage in besides all that knowledge. Not a negligible factor - because anyone enjoying their workplace and communicating with colleagues will also enjoy their work and finding solutions. That is why we celebrate our parties as they come and keep a record of the experiences in our "Short-Cuts" staff magazine. It is a means of informing everyone in the company on how we think, work and party in the different locations and countries. We invite you to browse through "ShortCuts" when you spend time at our premises.

Outlook

"Why not?! – What I do well I do well anywhere in the world!"

»We pursue goals

in a SMART way.«

Talking to Markus G. Viering about the desire for new tasks and enjoying new countries

In 2016 you took another step in expanding the company by founding KVL Georgia. What were your motives and where does the journey lead in 2017?

We founded KVL Georgia after we were asked to do so by a Georgian partner. We are happy to respond to such requests. The current tasks involve infrastructure projects. Among other projects, we support the Road Department in the implementation of road construction projects in Western Georgia. With regard to where the journey leads in 2017... I've just returned from Lima where the founding of KVL LATAM is under preparation... Which means: Let's go to South America.

Sounds exciting! How do you ensure that your employees deliver the same service quality at every location in the world?

This is a question we had to address at an early stage. In summary, firstly: We value knowledge transfer. The knowledge we have acquired must not be lost, but preserved and developed. Secondly: Our quality manual - consisting of guidelines, a code of conduct as well as standardised templates and procedures. Everyone's experience is required for the continued updating of this manual. Thirdly: Open

communication. Asking questions is permitted and welcome! Not everyone can do or know everything. But there must be a path to all knowledge and skills - even if this path leads us to external partners.

What does "to partners" mean?

Very simple - it means: networked thinking! Complex construction projects require experts from all specialist disciplines. Based on our academic work, as well as on our many successfully completed projects, we have access to a network that can provide competent support on any conceivable issue. Strategic partnerships are extremely important for implementing major construction projects.

Talking about complex construction projects - how do you treat new construction methods like BIM and others?

We view these methods primarily with a great deal of curiosity and interest. We are in constant communication with industry pioneers and conduct joint pilot projects. We have a competence centre that is permanently on the lookout for new ideas and is continually learning we are prepared for the future.

Cornelius Schmitz, Senior Project Manager, Berlin



7L

For the real estate industry I hope that the order situation remains as excellent as it currently is... and for us: more engineers and architects, larger premises we are growing!

Tailor-made solutions from

head to toe

















KVL Germany

KVL

International

KVL Bauconsult GmbH Spichernstraße 2

10777 Berlin +49.30. 25 41 07 0 info@kvlgroup.com

→ Dr. Markus G. Viering

KVL Consult Emirates PM LLC U.A.E, Abu Dhabi

KVL Projektmanagement Berlin GmbH

Spichernstraße 2 10777 Berlin

+49.30. 25 41 07 0 pm@kvlgroup.com \rightarrow Sven Seehawer

KVL Consult T00 Kazakhstan, Astana

KVL Sachverständige GmbH Olivaer Platz 17

10707 Berlin +49.30. 25 41 07 90

sv@kvlgroup.com \rightarrow Nina Rodde

KVL Consult 000 Russia, Moscow

KVL Bauconsult Frankfurt GmbH

Wilhelm-Leuschner-Straße 68 60329 Frankfurt am Main

+49.69. 27 13 67 10 0 frankfurt@kvlgroup.com → Michael Rieckenberg

KVL Consult Latam S. A. C. Peru, Lima

Geibelstraße 46b 22303 Hamburg

+49.40. 69 65 65 36 hamburg@kvlgroup.com → Andreas Ligner

KVL Consult Iran Ldt.

Iran, Tehran

Friedrichstraße 20 80801 Munich

+49.89. 33 03 95 50 muenchen@kvlgroup.com → Matthias Werner

KVL Consult Georgia LLC

Georgia, Tbilisi

KVL Bauconsult Hamburg GmbH KVL Bauconsult München GmbH KVL Bauconsult Stuttgart GmbH Augustenstraße 2

70810 Stuttgart

+49.711. 96 89 39 20 stuttgart@kvlgroup.com → Stefan Bröcker

KVL Bauconsult Zürich GmbH Switzerland, Zurich

٥l 11

Budget calculation for high-rise buildings

0

The task:

Faster, higher, further. How much does a square metre in a 140-m high-rise cost? How does the use as a hotel in a particular star category impact costs? What are the estimated costs for residential spaces? Can costs for a lift be calculated according to the number of elevator stops? How must an underground parking space be valued the deeper down it is? And how much is a square metre of facade near the top of the high-rise?

High-rises of more than 100 metres are still fairly rare in Germany, meaning that standard cost calculation tools are not designed for these tall structures. Special characteristics of the foundation, the long vertical supply routes, the facade and the top structure as well as additional requirements pertaining to special buildings and fire protection are only marginally considered in standard tools.

The solution:

Our own cost reference model named "KORS". According to our own high-rise projects and cost data relating to numerous other high-rise buildings, we developed "KORS". It is a reference model based on comparable projects for calculating around 50 project-specific cost elements, including key geometrical and functional parameters such as facade surface area or elevator characteristics in relation to the costs of the macrostructure according to DIN 276 based on a rough bill of quantities. Every high-rise project requires its own tendering strategy. Success is based on intelligent purchasing of planning and construction services. In this respect, KORS indicates the future tendering packages (e.g. building shell, elevator) making it possible to flexibly adapt the cost estimation to changing market situations, e.g. awarding of the contract in batches or to the general contractor. In this way, costs can be forcasted in greater detail and therefore more reliably.

> »If you aim high you must not lose sight of the objective.« Nadja Litkowski, Consultant, Frankfurt a. M.

»Understanding the past

to shape the future« Matthias Werner, Managing Partner, München

A new lease of life:

Converting a historical parcel distribution centre into a luxury hotel

The task:

In September 2016, the investor tasked KVL München GmbH with support services for the conversion of the building complex around the listed parcel distribution centre. Under consideration of the extensive conservation legislation related to listed buildings, a five-star-plus hotel is to be constructed partly in existing stock and partly in new build, while a portion of the historical spaces are to be converted into modern office spaces.

The solution:

As part of the project management task, the short-term reorganisation of the partly international planning team and awarding the architectural services to a renowned Munich-based architectural practice were successfully completed. This set the course for an approvable planning solution for the



architectural and technical challenges regarding the conversion of the existing stock and new construction. To ensure that the project objectives were met, communication between authorities and experts in the core team was organised and implemented during the planning phase.

By onboarding the future occupant - an international hotel group -, important planning parameters can be determined during the currently active pre-planning phase in order to meet cost and schedule targets as the project proceeds and to meet the high quality demands.

Summary

Arnulfpost Munich Conversion of parcel distribution centre into a luxury hotel

KVL location Munich

Client Projekt Arnulfstraße München Grundstücks GmbH

Completion September 2020 Project manager Matthias Werner

Services of KVL Project control, basic services AHO and project management 83 AHO



Green light for the new T2 satellite

New extension for Munich Airport

The project:

Handling more than 40 million passengers each year, Munich Airport is one of the largest in Germany and the only 5-star airport in Europe! To be able to offer an additional 11 million passengers sufficient space and comfort, a satellite building was erected that has no land-side connection to Terminal 2. Passengers reach the satellite from the existing Terminal 2 by underground train only, a so-called automated personal transport system (PTS) that is unique in Germany. The enormous advantage of the building is that planes can dock from all sides. This ensures increased travel comfort and also offers an environmental advantage as no more bus transfers between planes and the terminal building means reduced CO2 emissions. Four years

after the foundation stone was laid, the new terminal opened on-schedule in April 2016, with costs having stayed within budget. The additional check-in terminal now has 52 gates, 35 boarding bridges and 27 parking positions near the building.

The task:

When the owner called us, around 600 "open" or unevaluated supplements had accumulated. About 100 new contractual supplements were received every month. In addition, there was an (unknown) number of supplements that had in principle been rejected (unresolved).



The client wanted to bring the project to a swift conclusion and avoid subsequent years of disputes about additional costs. KVL was therefore asked to restructure and supervise the follow-up management of the ongoing project. 150 individual contract awards and - at the time of opening - around 3,000 supplements had to be managed.

How do you get to grips with such a large data volume? How do you achieve a degree of sovereignty in order to succeed in swiftly auditing the contractual supplements and reach an agreement with the contractors while remaining fair and cost-effective?

The solution:

Strict amendment and deadline management, meaningful prioritisation in auditing the supplements, close cooperation between the individual inspection bodies on the client's side as well as early involvement of the contractors in the auditing and negotiation process.

To do this, we first of all analysed and optimised the previous auditing processes. Efficient deadline management enabled us to identify the inspection durations for all inspection

Summary

Satellite Terminal T2 New extension for Munich Airport

KVL location Experts

Client

Munich

Completion

April 2016

Budget EUR 650 m

Project manager Birthe Saalbach

Services of KVL Follow-up management



bodies involved and then to monitor, manage and substantially reduce these. The contractors were also involved in the inspection processes at an early stage in order to quickly clarify any questions and concerns and to obtain missing documents. Instead of insisting on formalities, the client focused on fair cooperation with contractors. One partial aspect was prioritising the contractors. For this purpose, KVL developed a weekly evaluation of the "top 20" most pressing issues. In this way, companies particularly affected were able to develop trust that their cases were dealt with as a matter of urgency.

KVL wishes you a good flight and a safe landing!

»Clear mutual decisions and unambiguous signals enable swift agreements in complex communication situations.« Birthe Saalbach, Authorised Representative, Berlin





The solution:

Active stakeholder management. In this case, the neighbours, the school administration, the pupils and teachers, and all other employees of the school are the stakeholders. In several workshops we involved the neighbours in the upcoming planning and coordination process at a very early stage and documented the large number of ideas for the new school building as well as for the community school. This was followed by an architectural competition taking into account these wishes. The proposal by Behnisch Architekten from Stuttgart won.

In the further course of the planning process we succeeded in uniting the high standards of the City of Hamburg for the construction and equipping of schools, the individual user requirements as well the creative ideas of the planning team in a joint concept.

The result even convinced the founders of the Velux Foundation. With this foundation, the Danish manufacturer of roof windows supports technical, economical, environmental, socially and culturally relevant projects. The extra funding that won amounts of approximately 2 million euros, gave the pupils a media centre, a high-performance data infrastructure and particularly attractive furniture. Additional grant funds for green roofs, photovoltaics and CHP are set to follow, addressing aspects of energy generation and ecological balance. Not only the pupils will love this school!

Great spaces for great education!

Extension of the Lurup district school

The task:

Bringing together a school from three locations in one new building? Relocating a sports club while it continues to run to free up the required space? And on top of that the definition and integration of a community school into the new building?

The construction task: An extension of about 14,000 m² (gross floor space) for 900 pupils and 120 teachers in grades 5 to 10. Desired completion by mid-2019. Specified construction cost of 36 million euros gross. All of it in the public eye.

Making your ears ring? Ours too. But complexity is music to our ears and stimulates our creativity. For the new district school in Lurup, the largest district of Hamburg Altona, SBH I Schulbau Hamburg as the client set us this task. Which got us thinking. About a school that creates an appetite for learning.

Summary

Schulbau Hamburg

Extension of the Lurup district school

KVL location Hamburg

Budget EUR 36 m

Client SBH I Schulbau Hamburg

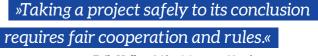
Project manager Erik Holler

Completion Mid-2018









Erik Holler, Office Manager, Hamburg

61

»Putting projects on track

and staying on course.«

Kai Hansen, Member of the Executive Management, Berlin

Generalists and specialists

Dear readers,

Project management requires generalists because new tasks arise each day from every aspect of project implementation. They can be issues regarding urban development and public construction law or funding of the project development phase, a discussion about various award strategies for tendering planning and construction services for construction preparation, or the ability to coordinate the very diverse stakeholders during the implementation phase – every project is different. A generalist in project management finds answers to questions about which data and information is available and which of it is relevant. He draws conclusions from this information and develops new frameworks from it. Marginal conditions and options for action



become structured goals.

But, of course, a generalist doesn't have the answer to all questions. Many issues require expert knowledge. Based loosely on the principle that you can only be really good at something if you've dealt with it at depth before, all our employees have their own personal area of expertise. Some have nurtured that particular professional passion during their career, without losing sight of the larger picture. The specialists in our team support the generalists in all they need for tackling more complex issues, e.g. in contract management, energy savings, structural optimisation and evaluating contractual changes or construction time issues.

Together – as a team made up of generalists and specialists – we take individual approaches to special tasks for a wide range of projects. On the following pages we would like to present you with a few examples of what kind of projects these can be.

Mathias Stieb Partner KVL Projektmanagement Berlin GmbH

Nina Godah

Nina Rodde Managing Partner KVL Sachverständige GmbH

Phase O The project before the project

Proper strategic preparation of a building project substantially determines the economic success in marketing and for the efficient completion of the project. Services defined in the AHO (German fee structure for project management services in the construction and real estate industry) normally only start once the key project objectives have been defined. We refer to the period of time in which the idea for the project is born and matures as "phase 0". The success of the project can be decisively influenced in this phase.

KVL increasingly advises clients on the strategic direction of their

real estate projects in this early phase. After analysis of the gen-

eral conditions, we undertake the facilitation process tailored to

the client's interests to develop realistic and market-driven pro-

ject goals as well as to develop the requirements for the further

project set-up. In particular the following aspects are consid-

ered in this regard:

planr discu prese Produ ies, e





- Client-oriented project structure
- Definition of target groups and their requirements
- Creative and political relevance
- Specifications for product development
- Project communication
- Profitability analysis

In this process we involve experts, e.g. market researchers, planners and agencies. The relevant issues are worked on and discussed in the team in various ways such as in workshops and presentations.

Products of "phase 0" can be lists of objectives, feasibility studies, economic efficiency calculations, concept studies or tenders for planning or investor competitions.



Projects 2016 K







