

SUCCESSFUL PROJECT DELIVERY WITH EPLASS

Modules and solutions



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EPLASS is an optimum solution regardless of the project size, whether custom or standardised.

Meet EPLASS

As a web-based project platform (Common Data Environment = CDE) a construction projects. We ensure the progress and success of your construction project while helping you to save on costs, outlay and time.

With decades of experience in digital drawing management, EPLASS has proven its specialist expertise in the management of construction projects and infrastructure measures of all sizes. When it comes to major projects in the field of infrastructure, i.e. public private partnerships or public property developments – the more complex the processes, the more benefit EPLASS provides. Benefit from efficient, structured and reliable cooperation using EPLASS.

The entire company is certified to ISO/IEC 27001:2013 and has ISO and TÜV-certified computer centres in Germany.



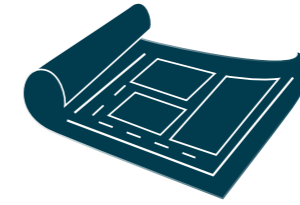
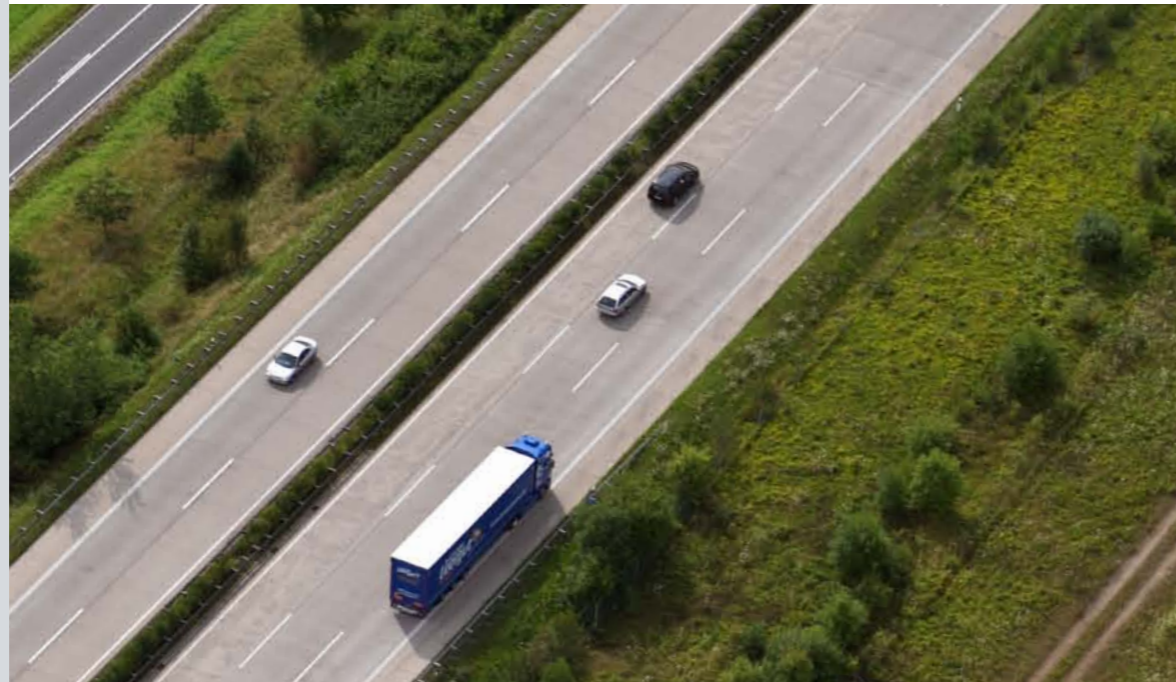
Drawing Management

OVERVIEW

- Workflow-based construction drawing management at the highest level (with parallel editing by different reviewers too)
- Automatic index management and document categorisation (drawing or document number)
- Comprehensive redlining functions (= graphic review entry) via layer on every document
- Electronic signatures directly on reviewed documents
- Schedule management with extensive controlling and reporting functions
- Comparison of different drawings or drawing indices
- Flexibly configurable platform for implementing custom processes as desired

The fully-integrated, workflow-based project platform for the effective management, coordination and processing of projects on any scale, from anywhere, at any time and with any terminal device. The highlight of the EPLASS product range with all comprehensive functions.

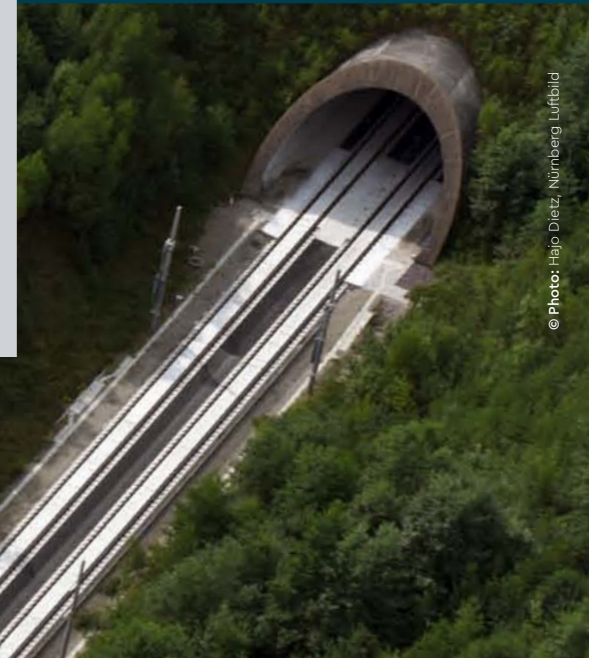
The digital review and approval process is an essential and important component of our EPLASS drawing management module. The focus in this is on the ability to track review processes. Our workflow engine helps us to achieve a high degree of automation and therefore reduce the review and approval time considerably.



The most important functions

- **Workflows:** All kinds of documents (e.g. drawings, review reports, forms, supplements, tenders etc.) can be reviewed and distributed in workflows.
- **Digital test run:** EPLASS Professional provides an end-to-end digital review process including commentary, review reports and signatures on documents. Changes can be traced at all times.
- **Drawings are always up to date:** The project participants always have access to the latest versions of the documents and can trace changes using a history. Organised clearly in packages, the required documents can be sourced quickly and easily.
- **Quick viewer:** Using the integrated viewers approx. 200 different formats can be shown and reviewed directly on our platform without downloading to your local computer. You save bandwidth with Citrix® technology.

Use in a variety of major projects for Deutsche Bahn AG, including expansion section ABS 38, VDE 8, S21, for DEGES GmbH, e.g. A3 Lahntal bridge, or in the PPP project A10/A24 Havellandautobahn, A7 Bockenem-Göttingen and structural engineering work like the Commerzbank Arena in Frankfurt.



Document Management



OVERVIEW

- Central address management
- Editing & distribution of all correspondence
- Dedicated project email addresses for each database
- Direct link to MS Word and Excel
- OCR full text recognition and automatic data entry (optional)
- Structured filing and archiving of all correspondence including incoming and outgoing emails
- Create, distribute and file daily construction reports or meeting minutes quickly and easily.
- Modules such as photo documentation, defect management etc. are also available
- Transparent and centralised on one platform

EPLASS Correspondence is the web-based document management system (DMS) for the structured filing, editing and distribution of correspondence and QM documents within the EPLASS product range.

The document management system can assign documents accordingly as soon as they are uploaded (document coding) and file these in the right category on the basis of this assignment.



The most important functions

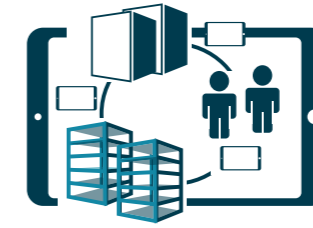
- **Address management:** EPLASS Correspondence helps you to organise all the addresses associated with your project. Contacts can be imported from MS Outlook. Any correspondence can be found right beneath a contact. This makes looking for these later considerably easier.
- **Central document filing:** Any correspondence, whether electronic or in paper form, can be filed and archived quickly and conveniently in EPLASS Correspondence. The end result is that you have access to a complete digital construction file at the close of the project.
- **Convenient navigation:** In EPLASS, documents can be filed by addresses, categories or key words. Users do not need to engage in laborious filtering as with other products.
- **OCR text recognition:** EPLASS can process scanned documents with OCR full text recognition on request. Thanks to complex text recognition functions, the process of filing and distributing documents is then assisted with suggestions from the software.

Use in various standard projects for the motorway authorities or state building authorities.

E.g. A8 Ulm-Augsburg, Rosenheim West bypass



BIM Collaboration



OVERVIEW

- The logical next step of the tried and tested drawing review feature
- All project information from DMS, the drawing management system and BIM on one platform
- The fully-integrated, workflow-based BIM solution from the market leader in infrastructure construction
- Automation: Categorisation & index management of all 3D, 4D and 5D documents
- Flexible modelling, any desired combination of coordination models from partial models
- Straightforward creation of 3D viewpoints with extensive redlining functions

BIM consists of working methodology, process design, communication, organisation as well as corporate and project culture. Only by incorporating all of these points can BIM achieve its full potential.

Control via rights and authorisation management: individual project participants can be assigned different roles. Integration of EPLASS and DESITE for BIM management with various functions for the visualisation, review, analysis and expansion of models as well as model-based communication between project participants.














The most important functions

- **Submodels:** The first step in managing 3D BIM models in EPLASS is uploading submodels to the BIM database in IFC or CPIXML format. EPLASS enables users to display the configured models without any additional software installations using the integrated 3D viewer.
- **Coordination models:** Submodels are compiled individually to create 3D coordination models and managed by independent categorisation and versioning. Selected 3D coordination models are then assigned 4D and 5D documents.
- **3D viewpoints:** The powerful 3D viewer creates 3D viewpoints and generates automatic PDF sections. Redlining functions with comments are supported, as is workflow-based distribution. 3D viewpoints can also be compiled and exported in BIM collaboration format (BCF).

Use in pilot projects of the the Federal Ministry of Transport and Digital Infrastructure (BMVI): Karlsruhe–Basel expansion and new section, Rastatt tunnel shell construction, A99 four-lane expansion Munich North Autobahn junction to the Haar junction, A111 Westend Bridge via Charlottenburg interchange

DESITE MD

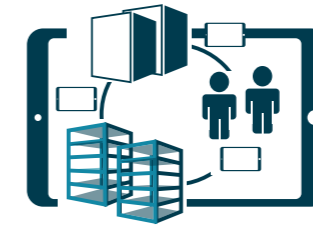
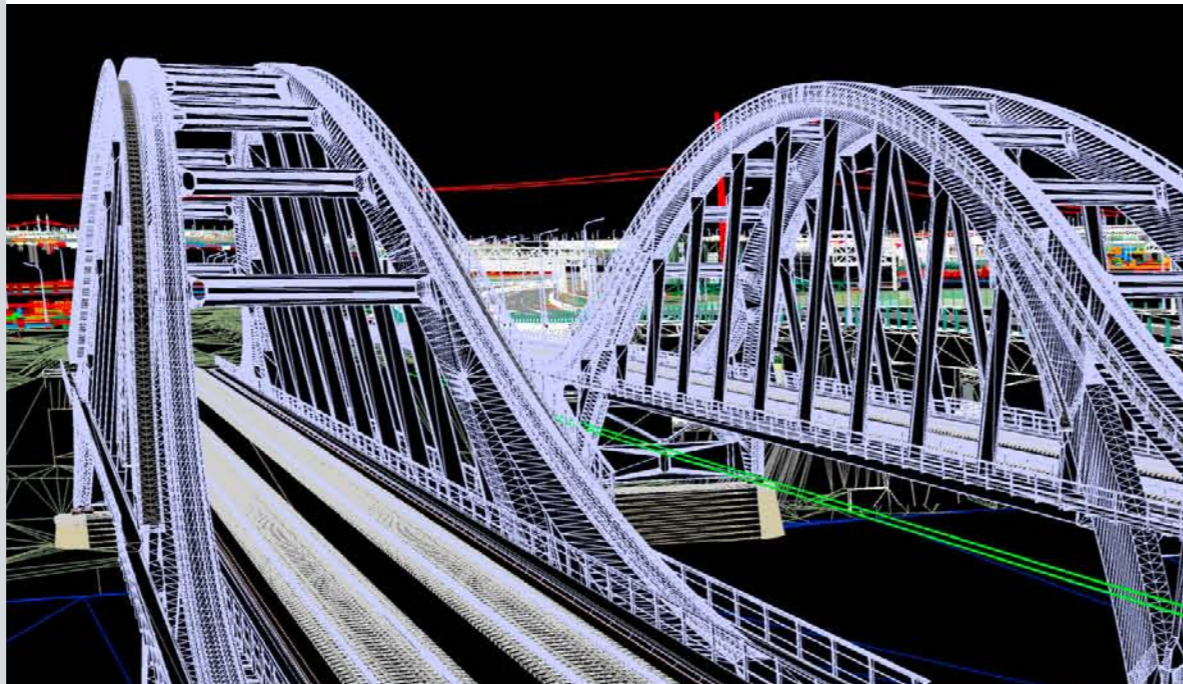
OVERVIEW

-  BIM Information Management
-  BIM Quality Management
-  BIM Project Management
-  4D Simulation
-  Quantity Determination
-  Model Checking
-  DESITE directly linked to and integrated in EPLASS
-  Data formats: IFC, CPI XML, DWF/x, DWG 2D/3D, DXF, OBJ, 3ds, VRML, SKP, LandXML
-  Sections in model, up to six section planes
-  Measuring in the model, points, distance and areas with point snap
-  Generate viewpoints and animations, export viewpoints in BCF format





DESITE MD allows you to interactively analyse, visualise, evaluate, add to and review your 3D models.

With DESITE MD you create the 3D coordination model using submodels from the project. You can also generate and forward viewpoints from this. In the model review, quality assurance is assured with the help of rules-based review, review of object properties, geometric review and review of contacts (collision check) between objects.

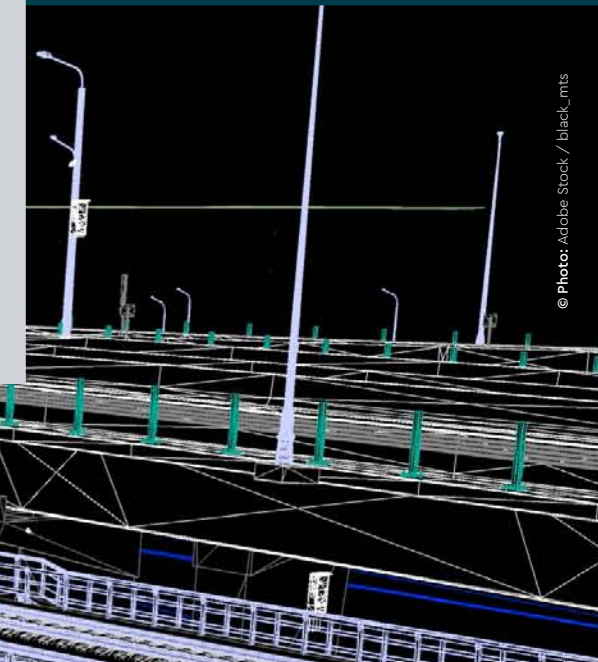
DESITE MD helps you maintain a professional overview of your project – regardless of what information you need.



The most important functions

-  **4D drawing:** Visualise construction progress in a 4D simulation, calculate the construction timelines using the 3D model and calculate quantities on the basis of the 3D model. You can also link documents to the 3D model and manage information relating to the building.
-  **Model review:** In model review you can use you own rules to check whether your models are correctly and fully modelled. You can compare new and old models with one another and specify changes to objects.
-  **Clash detection:** Collision check can be used to identify and analyse geometric conflicts in the 3D model. The test run can be either rules-based or automated.
-  **Quantity determination:** The quantities for a model are determined using a list of specifications. This involves the objects being linked to the specification items and calculated using formulas.

Used for instance in the public private partnership project Havellandautobahn A10-A24 and in Berlin in the BIM project, DEGES Westend Bridge.



Objection Management



OVERVIEW

- Convenient generation of standard answers for optimised processing
- Digital integration of hearing authorities such as district administrative offices
- Digital integration of legal departments and relevant divisions
- Schedule management for monitoring compliance with processing times and deadlines
- Automatic generation of response letter in Word and PDF files
- Archiving of signed reply letters in PDF format

Citizens are becoming more and more involved in planning approval and consultation procedures for new infrastructure projects. The planning, organisation and execution of consultation procedures is a mammoth task, and these can easily receive anywhere from several hundred to thousands of objections with a variety of individual question topics. With tailored processes, intelligent search functions for standard objections and simultaneous processing by different divisions, EPLASS saves project participants time and money. The Objection Management module represents a logical upgrade to EPLASS Professional for the controlled processing of objections.



The most important functions

- Clear organisation of objections using QR code label on each objection
- Dedicated project email address, e.g. objection-projectXY@eplass.com
- Intelligent fuzzy search for the optimisation & automation of response generation – standard objections are identified and colour coded
- Link to Google Maps for display of addresses on a map (distance from construction project)
- Workflow-based processing and answering of objections; central legal review of responses
- Splits objections up into individual questions and forwards these individually to the relevant divisions

The overall design of the route, all the tunnels and bridges of the railway project VDE 8 from Nuremberg via Erfurt, Leipzig and Halle to Berlin within a project worth more than 10 billion euros is reviewed and organised using EPLASS.

Also used for the Fehmarn belt rail link



Requirement Management

OVERVIEW

- Workflow-based requirement management
- Seamless integration of your drawings in the EPLASS review process
- Convenient extraction of individual requirements from your PDF documents
- OCR recognition on request
- Graphic representation of individual requirements in evaluated review reports and requirement documents
- Schedule management with extensive controlling and reporting functions
- Excel analyses for monitoring and documenting requirement compliance
- Flexibly configurable platform for implementing custom processes as desired
- Tried and tested in major projects, e.g. Stuttgart 21 with new Wendlingen-Ulm line

The sheer variety of construction-, content- and design-based requirements which must be monitored, complied with and documented before or during the construction project can often overwhelm simple database applications or Excel lists.



Here, a workflow for extracting the individual requirement items launches automatically. The individual requirements are generated via our viewer. Then a second workflow starts, with evidence of the fulfilment of requirements requested from the involved reviewers initially. In a second stage this evidence needs to be confirmed and signed.



© Visualisation: Bahnprojekte Stuttgart-Ulm e.V./Aldinger&Wolf

Optimum compliance and monitoring of requirements.

Supplement Management

OVERVIEW

- Determine a contract controller: Assign editors for contract and define marginal conditions
- Access protection system: i.e. the user sees and edits only what the contract controller has activated for him/her.
- Access to the latest versions of the documents at all times
- Integrated PDF viewer (without downloading to local computer)

EPLASS Supplement Management provides an end-to-end digital document flow, including editing, commentary, graphic entries, attachments (e.g. opinions, negotiation minutes etc.) and signatures on your documents.

EPLASS Supplement Management allows you to process supplements in workflows, review them according to different aspects (legal, commercial, etc.) and retrieve them. Our powerful workflow engine allows us to map out even the most complex processes.



The contract controllers define the process by assigning the respective editors to each contract and also defines the marginal conditions. EPLASS Professional Supplement Management also uses the reliable access protection system. This ensures that each connected user only sees and processes what the contract controller has activated for him or her.

| Defect Management

OVERVIEW

- Full defect history from the execution and warranty right through to operation
- Speech-to-text function for easier recording of defects
- Link to geographical points (e.g. Google Maps)
- Edit and record defects using your smartphone, tablet or PC
- Schedule management for monitoring all deadlines
- Flexibly configurable for implementing custom processes
- Can be used without additional software (simple web application)
- Automated generation of project-specific defect reports in MS Word, Excel or PDF file

The progress of construction projects on any scale depend on a number of factors: the quality of the work, the materials used – even weather conditions!

Workflow-based Defect Management guarantees clear and on-time processing as well as a considerable simplification of the whole process.

Helps you to keep an overview at all times so you can manage and distribute your defects in an efficient and structured manner.



| Construction Diary

The construction diary is one of the most important documents in a project. All key information such as the date, object or construction section, weather, working hours, worker or equipment use etc. must be recorded and documented in one daily report.

This falls under the duties of construction management and serves to provide complete and comprehensive documentation of the progress of construction.

Careful editing is ensured from the outset. It should not be possible for information to be changed at a later point in time.



OVERVIEW

- Fully customisable templates for daily construction reports
- Structured filing of individual daily construction reports
- Categories & intelligent search function
- Automated generation of project-specific daily construction reports
- Easy entry of the relevant information
- Workflow-based review of daily construction reports
- Complete history of daily, monthly and annual construction reports
- Flexibly configurable for implementing your custom processes



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| Form Management

OVERVIEW

- Integrated PDF viewer
- Workflow-driven editing of form fields
- Customised form fields
- Digital signature

EPLASS form management provides an end-to-end digital form process which includes editing, comments, graphic entries, attachments, review reports and signatures on your documents. The various different form fields can be released for editing or blocked in the course of the workflow. Changes can be traced at all times in an extensive log.

With EPLASS Form Management, forms of any kind (e.g. requests for information (RFI), supplements, additional costs, obstruction notifications, defect notifications, holiday requests etc.) can be processed, checked and distributed in workflows.

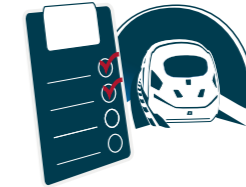
The project participants always have access to the latest versions of the documents and can trace changes using a history. Clearly organised in packages, the required documents are found quickly and easily. Complex and time-consuming document filtering is not necessary.



| Commissioning

EPLASS Commissioning enables the digital filing of relevant documents including the generation of contents tables with an indication of documents already saved or documents which are still missing.

Developed for Deutsche Bahn, notices and applications for the Federal Office for Railways are issued using the client's templates (advance notice of construction, notice of start of construction etc.). If need be this can also be done automatically via a workflow. EPLASS offers a clear map display of the various different document statuses for each construction for the purposes of documenting the entire project.











OVERVIEW

- Adoption of acceptance documents in the event that these have been generated in a workflow in a separate EPLASS database
- Convenient connection to the EPLASS design management system, e.g. where the certificates of approval for special contractual terms for building works are documented
- Also possible in conjunction with EPLASS Requirement Management
- Processes, documents (authorisations, design packages, approvals, requirements and their processing) for all individual structures collected in one central location
- Clarity & transparency

Renovation

OVERVIEW

-  Clear map display
-  Data can be adopted from SIB
-  Importing from Excel lists possible
-  Option of automatic form generation in line with client wishes
-  Clear visualisation of all structures
-  Status tracking
-  Structure assessment
-  Description of measures

EPLASS Renovation Management helps to record base data and structural assessments in major projects using the tried and tested workflow approach. All existing construction documents such as as-built drawings, structure files and inspection reports are collected and analysed on one central platform.

The necessary individual measures can then be defined for each construction.

The overall project can be conveniently monitored using overview site plans or a map display. At the end, forms such as technical evaluations or treatment concepts can be emitted via EPLASS.












Tendering & Contracting

EPLASS Tendering & Contracting provides you with intelligent, customisable workflows and a powerful, fully-integrated viewer. This makes it possible for as many project participants as necessary to work on the same tender document in parallel and at the same time.

Comments, corrections and review entries can be generated directly on the tender documents in the form of so-called redlining markups on a workflow-driven basis. Thanks to the integrated rights concept, all authorised redlining markups are protected against editing. EPLASS thereby ensures optimum process reliability and full logging of all actions.



OVERVIEW

-  Integrated schedule management for monitoring all deadlines
-  Flexibly configurable for implementing custom processes
-  Automatic index management and document categorisation
-  Control of individual reading and writing rights
-  Intelligent workflows master complex document flows
-  Parallel, simultaneous review
-  Automatic sending of emails
-  Full logging of all actions
-  Powerful viewer incl. full redlining functions

EPLASS in practice

In use in selected projects

Major projects for Deutsche Bahn

-  German Unity Transport Project 8
-  Stuttgart 21
-  Munich main line
-  Expansion section 38 Munich-Salzburg
-  Expansion section 48 Munich-Lindau
-  Fehmarn belt rail link
-  Rhine-Ruhr Express

Road works

-  A10/A24 Havelland Autobahn
-  A6 Wiesloch/Weinsberg
-  A7 Bockenem-Göttingen (DEGES)
-  BIM pilot project A 99 (ABDS)
-  A94 Isental Autobahn
-  A7 Hamburger Deckel

International projects

-  Dresden-Prague rail project (Czechia)
-  University of Liverpool (England)
-  Hydroelectric power station Alto Maipo (Chile)
-  BARWA Commercial Avenue, Doha/Qatar

What our clients say...

"For us, EPLASS is a very reliable partner, having provided us with easier solutions for a number of different day-to-day project tasks. Take drawing management for instance, this isn't just another task for our project engineers, it's a central tool and one which has now become indispensable in their daily work."

*Bernd Homfeldt,
Project manager for rail link Fehmarn belt fixed link*

"The Autobahn Authority of Southern Bavaria has been using EPLASS drawing management as standard in its project work for engineering structures for a number of years now. As part of this project EPLASS is being expanded for BIM projects and EPLASS Archive used for the digital structure file. Once again EPLASS has demonstrated its talent for impressive customisation and flexibility."

*Prof. Uwe Willberg,
Lead Construction Director for the Autobahn Authority of Southern Bavaria*

Decades of experience makes EPLASS a valuable partner.

"Our EPLASS team is dedicated to using its expertise and enthusiasm to help you achieve success in your projects. We look forward to continuing the fantastic partnerships we have developed with our customers!"

Dipl.-Ing. (FH) Andreas Fersch, CEO of EPLASS project collaboration GmbH





Contact

Have we sparked your interest? Get in touch!

Find out more about the practical benefits and potential implementation in your project. We would be happy to introduce you to EPLASS in a free, non-binding presentation.

We are happy to advise you!



EPLASS project collaboration GmbH
Schweinfurter Str. 11 | D-97080 Würzburg | Tel.: +49 931 35503-0
Fax: +49 931 35503-700 | contact@eplass.com | www.eplass.com