



BEST PRACTICE

Enterprise content management at Deutsche Bahn is picking up speed

- Group standard for archiving, DMS, record and workflow projects
- Already 32,000 users in 22 Group areas
- Scalable, long-term stable ECM architecture
- Final system version set to have 70,000 users



Deutsche Bahn

The Deutsche Bahn (DB) Group is an international provider of mobility and logistics services and is active in over 130 countries worldwide. Over 300,000 employees, almost 196,000 of which are based in Germany, dedicate themselves day in, day out to ensure mobility and logistics services for their customers and to efficiently control and operate the associated rail, road, sea freight and air freight transport networks. In the 2019 financial year, the Group's adjusted revenue amounted to approximately 44.4 billion euros and its operating profit (adjusted EBIT) totalled around 1.8 billion euros.





Management summary

The ECM strategy pays off

Four years after concluding a framework agreement to introduce a Bahn content management platform (BCM) that could be used right across the Group, DB Systel, Deutsche Bahn's IT service provider, and enterprise content management (ECM) specialist Doxis are able to report positively on the progress that has been made to date: the BCM platform has been set up, tested

by the accountancy firm PwC and a master template providing the basis for a quick roll-out in the Group has been developed. 22 Group areas of Deutsche Bahn and around 32,000 users are already using the BCM platform for their archiving, DMS, record and workflow projects. When the project is complete, up to 70,000 users are set to make use of the BCM solutions across the DB Group.

The project at a glance

AREA OF APPLICATION:	Creation of a Bahn content management platform (BCM) for use right across the Group
CUSTOMER:	Deutsche Bahn AG, implementation via IT service provider DB Systel
INDUSTRY:	Mobility, logistics, networks
EMPLOYEES:	300,000 worldwide
Doxis SOLUTIONS:	Doxis modules for archiving, DMS, workflows, electronic files and email management
VOLUME OF DOCUMENTS:	Approx. 190 million documents and 750 million information objects, 22.5 TB archived in total, monthly growth 2.5 million
IMPLEMENTED:	22 productive projects across the DB Group
THE CHALLENGE:	Consideration of Group-wide IT standards for the DB Group, the ability to scale Doxis solutions from just a few users for each organisation up to several thousand, from very simple projects to applications with complex rights concepts
OBJECTIVES ACHIEVED:	• BCM platform is the Group standard for archiving, DMS, workflows, electronic files, email archiving and ICC (Intelligent Context Control) • Master template providing the basis for a quick roll-out developed • M Heterogeneous archiving/DMS landscape consolidated • M Latest ECM technology available across the DB Group

Initial situation – objectives – choosing a system

BCM: The Group standard for information management

For several years, the Group management of Deutsche Bahn has been pursuing an ambitious objective with respect to information technology. Across the Group, it is striving to establish binding standards for the IT requirements of the Group companies. Faced with a range of different DMS and archiving systems operating in parallel, the decision was taken to set up a consolidated information technology management system. The strategic objective was defined as the creation of a single, up-to-date and standardised ECM framework that would manage documents for their entire life cycle right across the DB Group. What is now known as the BCM platform provides the foundation for the Group-wide ECM strategy and its reference architecture.

With BCM, the people in charge of the project were looking to create end-to-end and standardised information processes to improve process speeds and quality as well as to ensure and prove observance of legal and compliance requirements. Based on the requirements of Deutsche Bahn, the new ECM suite was to include workflow functionalities, which, for example, would enable assessors and regulatory authorities to track processes and workflows for documents that had been archived. Differentiated access rights were to provide effective protection for critical and confidential information. In order to achieve these objectives, the former document management system within the DB Group needed to be replaced in favour of standardised ECM software offering a structured information management and archiving procedure. The functions available within the ECM suite were to be provided across all business areas.



EU-wide tender – Dosis comes out on top

To consolidate the various systems used in the DB Group, tenders were invited for enterprise content management for Deutsche Bahn across the EU. The functional requirements for the future ECM system were defined in a detailed set of criteria for the EU tendering procedure. The requisite software solution was expected to demonstrate a wide variety of functions and cover the entire ECM spectrum. Vendors whose software was unable to offer this did not make the shortlist. General scalability for all components was an essential requirement for the ECM infrastructure when it came to being able to ensure both efficient operation as well as quick response times when creating new projects and procedures or making changes to those already in existence. The functionality of the solutions included in the tender was tested based on use cases.

Requirements specification for the new BCM system

- Document management
- Records management
- Workflow
- Mailbox
- Audit-proof long-term archiving
- Email archiving
- Full text
- Tenant capability
- Multilingual capability
- Scalability
- Standard DMS client (rich client)
- Standard DMS client (web client)
- Import and export functions
- Interfaces and integrators

The company itself was also put under the microscope as part of the tendering procedure. When it came to making a decision, it wasn't just simply the product that counted – the search was also on for a reliable, long-term partner who was large enough and had the expertise and resources to work jointly with DB Systel to lead this major ECM project to success for Deutsche Bahn.



“DB Systel and Dosis work together as a solutions provider for our customer – Deutsche Bahn.”

Thomas Schnell, Project Manager, DB

With the Dosis, Dosis was the clear winner in the tendering procedure. “Dosis made by far the best overall impression with respect to solutions, adaptability and presentation, and was also far and away the best candidate in terms of the overall solutions they were able to offer,” reports Thomas Schnell, Head of Operations Management for the BCM platform in the Archiving + DMS Solution Center division at DB Systel.

The selected software – Dosis is an enterprise content management (ECM) system that covers all the basic ECM functions from document management, records management, archiving and mailbox/workflow to intelligent email archiving, and also has interfaces to external systems such as SAP as well as those for import and export processes. The framework agreement concluded between DB Systel and Dosis following the tender includes the supply of software licences to establish the strategic product platform for archiving documents and data as well as the provision of the associated services for maintenance, set-up, integration, consultation and training.

A well-drilled team: DB Systel and Dosis

As Deutsche Bahn’s IT service provider, DB Systel plays a leading role in the set-up and operation of the BCM platform and is the point of contact for the DB Group companies when it comes to developing and implementing BCM-based DMS/archiving projects. DB Systel is supported by ECM experts from Dosis. Decisions regarding the incorporation of new functions for the platform are made jointly. “We coordinate our efforts closely with the Dosis consultants. DB Systel and Dosis work together as a solutions provider for our customer – Deutsche Bahn,” explains Project Manager Thomas Schnell. The experts from Dosis are always brought in when new requirements are defined in the projects. Both parties then work together to see whether the requirements can be mapped using the standard system or whether additional components are available in Dosis that could be used to meet the needs of the customers.

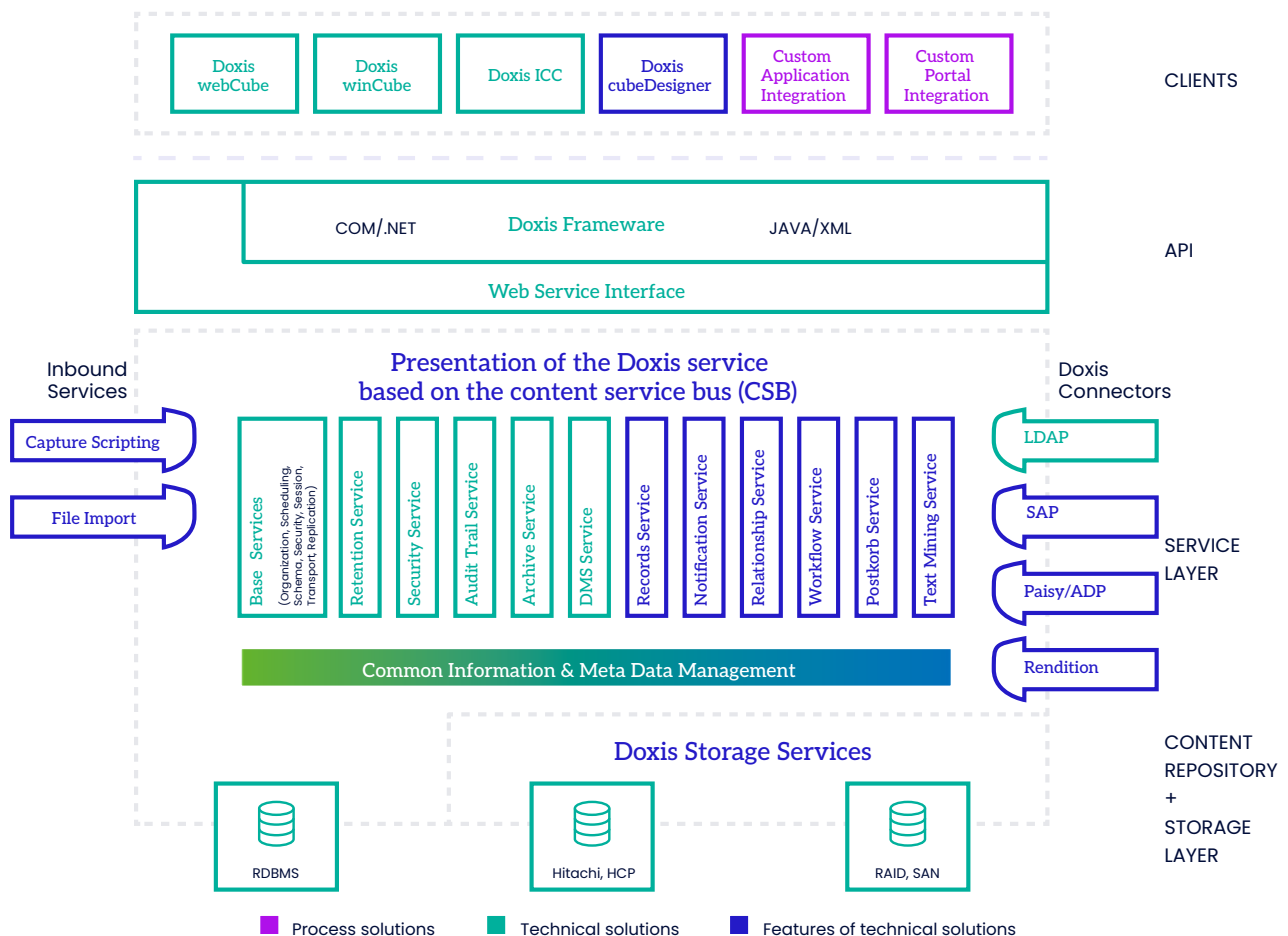
10 reasons why Dosis stands out from the competition

- 1 Long-term stable ECM architecture based on the latest technological standards
- 2 Excellent clients, both for Windows and the web
- 3 High level of scalability – the aim is to incorporate 70,000 users
- 4 Coverage of all areas/solutions associated with ECM
- 5 Comprehensive tenant capability of Dosis
- 6 Common understanding with respect to an ECM solution and product philosophy
- 7 Experience in implementing large-scale IT projects/references
- 8 Trusted quality ‘Made in Germany’: Local vendor, but also global market leader
- 9 Multilingual capability of the system
- 10 Flexible licence and price model

Implementation

A firm foundation: Deutsche Bahn's BCM platform

Before launching Doxis, the Group was using between 30 and 35 different DMS installations. BCM is now the defined Group standard when a DB company has requirements concerning document management, archiving and workflows.



Deutsche Bahn's BCM architecture

DOXIS SERVICES:	Archive, DMS, Information Lifecycle Management (ILM), Workflow, Records & Relationship, Retention, Audit Trail, Mailbox, Notification
DOXIS CLIENTS:	winCube, webCube
INBOUND SERVICES:	Capture, File Import, Rendition
INTERFACES:	SAP, Paisy, LDAP
SYSTEM LANDSCAPE:	4-stage ECM system landscape, comprising a development, test, acceptance and production system. New/further developed procedures are integrated via transport mechanisms without impacting on users' productive processes

Master template for rapid project implementation

To prevent the wheel having to be reinvented for each project, DB Systel has developed a master template. It contains the latest versions of the key basic functions and the default rights options. This master template serves as a preconfigured organisation template. If a DB company wishes to initiate an audit-proof archiving process for its documents, for example, a new organisation is set up for this customer and provided with the basic functionalities from the master template. This enables an electronic archive to be ready for use within a short period of time. If the archive is later also to be used to archive SAP data, this function can simply be added. This modular principle makes implementing new projects easier and faster and guarantees that the quality of the installations is retained, as the template ensures that they always have the correctly preconfigured functions.



BCM projects that have already been implemented include:

- DB AG – harmonisation of the contract archive
- DB AG – harmonisation of the finance archive
- DB AG – myCube DMS in Management Board Division C
- DB Dialog – passenger rights
- DB Energie – maintenance and planning tool, IPS archive
- DB Fahrzeuginstandhaltung (vehicle maintenance) – digital vehicle record
- DB Fahrzeuginstandhaltung – storage management archive
- DB Fahrzeuginstandhaltung – document template release workflow
- DB Projektbau (project engineering) – digital project record
- DB Projektbau – electronic construction record
- DB Projektbau – electronic log
- DB Schenker Rail – contract pricing invoice
- DB Station & Service – digital tenant record
- DB Vertrieb (sales and marketing) – revenue accounting
- S-Bahn Berlin (urban rail) – non-destructive material testing







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Thomas Schnell, Project Manager, DB

Roll-out in the Deutsche Bahn Group

“At present, around 32,000 users are connected to the BCM platform in 22 different organisations – and we are no where near the end”, reports Thomas Schnell, Project Manager and Head of Operations Management for the BCM platform. Since it was launched, the volume of archived documents has grown to 190 million documents and 750 million information objects with a total volume of approx. 22.5 TB. The new finance and contract archive alone has seen 70 million archived documents transferred. 2.5 million new documents are added every month.

The projects that have already been implemented range from 10 users to several hundred. Both the Doxis winCube for Windows and the Doxis webCube for web applications are used. In the initial phase, it was primarily procedural applications, such as those for maintenance, that were implemented. Over the last year, however, work has started on providing Management Board Division C – Compliance, Privacy, Legal Affairs and Corporate Security, an entire Group division, with a standardised ECM solution made by Doxis to which external users can also connect. Sophisticated rights structures and filing environments provide the requisite data protection. The launch of BCM in Division C – known as the myCube project – was a portfolio project that also involved the Management Board of Deutsche Bahn AG. What’s more, the project has already been honoured by the divisional Board – it received an award recognising particularly successful projects in the “Cost-effectiveness” category.

Internal marketing ensures buy-in for the platform

Intensive internal marketing by DB Systel and the active BCM users is ensuring that other areas are also able to experience the successfully implemented applications and the major potential benefits that BCM has offered them. For example, project partners take part in internal events and in-house exhibitions and present their projects to other DB companies.

A comprehensive intranet portal set up by DB Systel is available as a source of initial information and is a place where Group members can go to find BCM solution and project descriptions as well as contacts for their own projects.



Benefits

Group-wide information management is picking up speed

Group-wide information management at Deutsche Bahn is picking up speed. With the certified BCM platform and master template, Deutsche Bahn has laid the foundations for a continuous roll-out of archiving, DMS, records management, workflow and email archiving projects throughout the Group companies. The heterogeneous system landscape of the past is making way for a standardised and up-to-date platform for distributing information thanks to the ECM solutions from Doxis. All of the modules are perfectly matched and can be combined to suit the individual requirements of the projects. "With the Doxis system, we have succeeded in establishing a single, electronic ECM infrastructure that can be integrated as a Group standard," enthuses Project Manager Thomas Schnell. The solution is a high-performance and reliable system: "Up to now, the platform has been able to deal with everything we've thrown at it."

Deutsche Bahn benefits from the modular structure of the BCM platform in several respects. DMS/archiving projects do not have to constantly be recreated as stand-alone solutions. The individual components and solutions can be reused in an extremely wide range of use cases, ensuring that the quality of the installations is retained. The fact that the software solutions from Doxis are incorporated consistently means that information can also be used comprehensively across multiple departments if needed. DMS, archiving or records management projects that can otherwise take several months to implement can now often be put in place in just a few weeks using the BCM platform.



“With the Dosis system, we have succeeded in establishing a single, electronic ECM infrastructure that can be integrated as a Group standard.”

Thomas Schnell, Project Manager, DB

With the BCM platform, the DB companies have quick access to the latest technologies. As a result, they are able to organise their business processes and procedures in an improved, much leaner and more up-to-date manner. As the number of applications implemented in the DB Group increases, so too does the expertise that can be passed on from one unit to another. “The BCM project managers at DB Systel work very closely with each other and know which solutions have already been implemented in the individual projects. For each new requirement, we check whether the required components are already in use somewhere else. We then simply transfer these, instead of having to develop everything from scratch each time,” states Thomas Schnell, detailing the synergy effects.

+ Savings

E.g. less maintenance & administration as a result of consolidating the DMS landscape, process optimisation and automation, etc.

+ Conformity

Safeguarding business process conformity and continuity.

+ Reduced material costs

E.g. space rental, folders or paper, transport routes for records or information, postal charges, courier services.

+ Increased quality

Data storage and cost-effective project handling.

+ Increased effectiveness

As a result of simplifying administrative processes; merging data distributed within the company from highly diverse origins; information is made available across all locations that is complete and fully up to date.

+ Increased employee satisfaction

All of the required key data is available in the current version (inconvenience of searching in different locations eliminated). Individual views can be created.

+ Increased efficiency

Decisions can be made more quickly and more adeptly; networking and cooperation between distributed project teams; new knowledge generated by using information that is available.

See DOXIS in action

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