



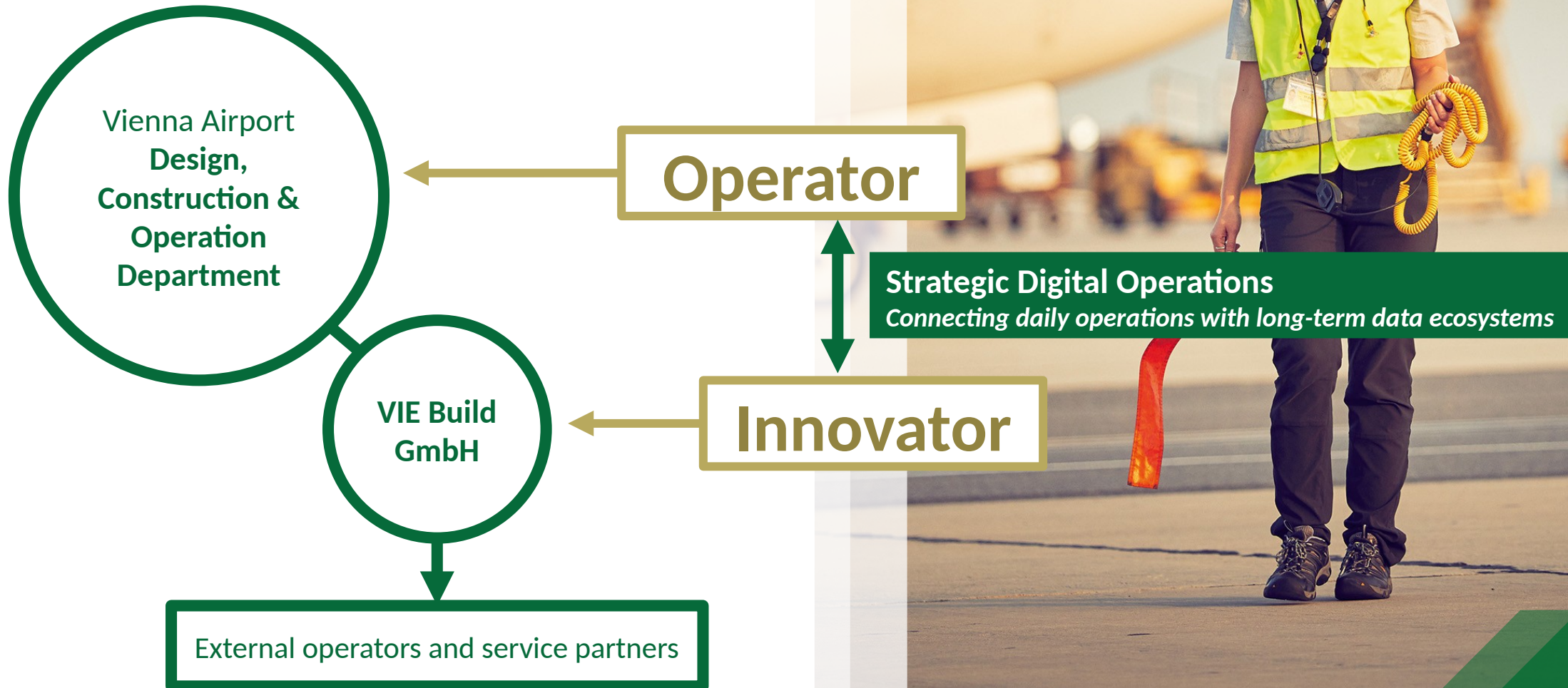
13.10.2026 | Christoph Eichler | Flughafen Wien AG | The BIM-Conference - Athens

Beyond the model

How can we turn information into value in real projects through actual data and better decision-making

The dual role of a modern airport in a data-driven ecosystem

We are: Operator & Innovator

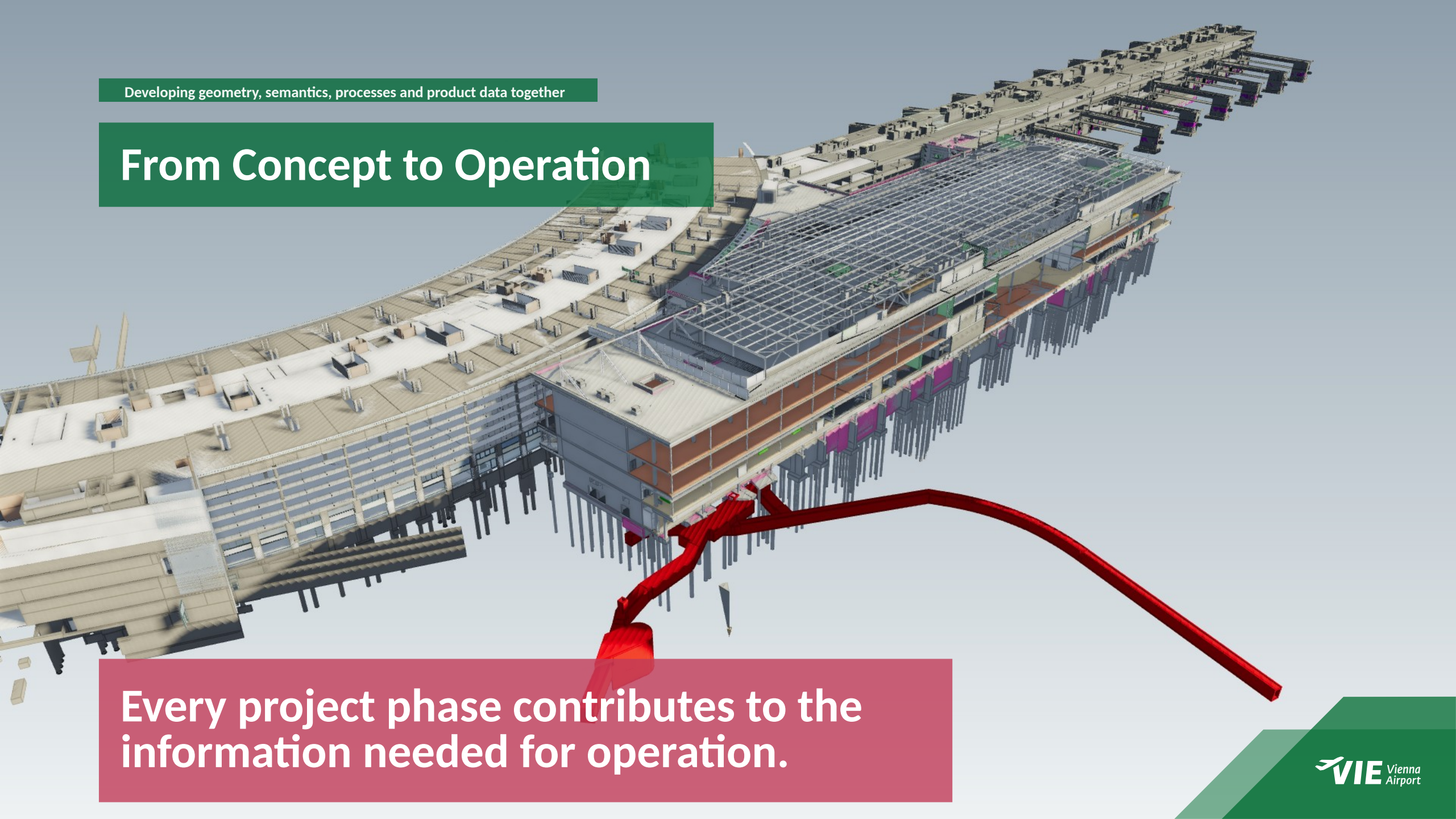


An aerial photograph of the Vienna International Airport terminal extension. The new terminal building is a long, curved structure with a grey roof and multiple levels, currently under construction. It is connected to the existing terminal by a bridge. Several aircraft are parked at gates, including a large Austrian Airlines plane and several smaller ones. The surrounding area includes parking lots, roads, and other airport infrastructure. In the background, the city of Vienna is visible, including the Pulkheim Tower.

Scenario: a terminal extension opening in four years

From Concept to Operation

What must work from day one for
this investment to pay off?



Developing geometry, semantics, processes and product data together

From Concept to Operation

Every project phase contributes to the information needed for operation.

Planning resources, training teams and testing operating scenarios

Operation needs Preparation

Early operator involvement improves design and prepares the organisation for operation.

OPERATIONAL OPTIMISATION THROUGHOUT THE DESIGN PROCESS

2.0
DESIGN

3.0
TENDER

4.0
CONSTRUCTION

5.0
OPERATIONS

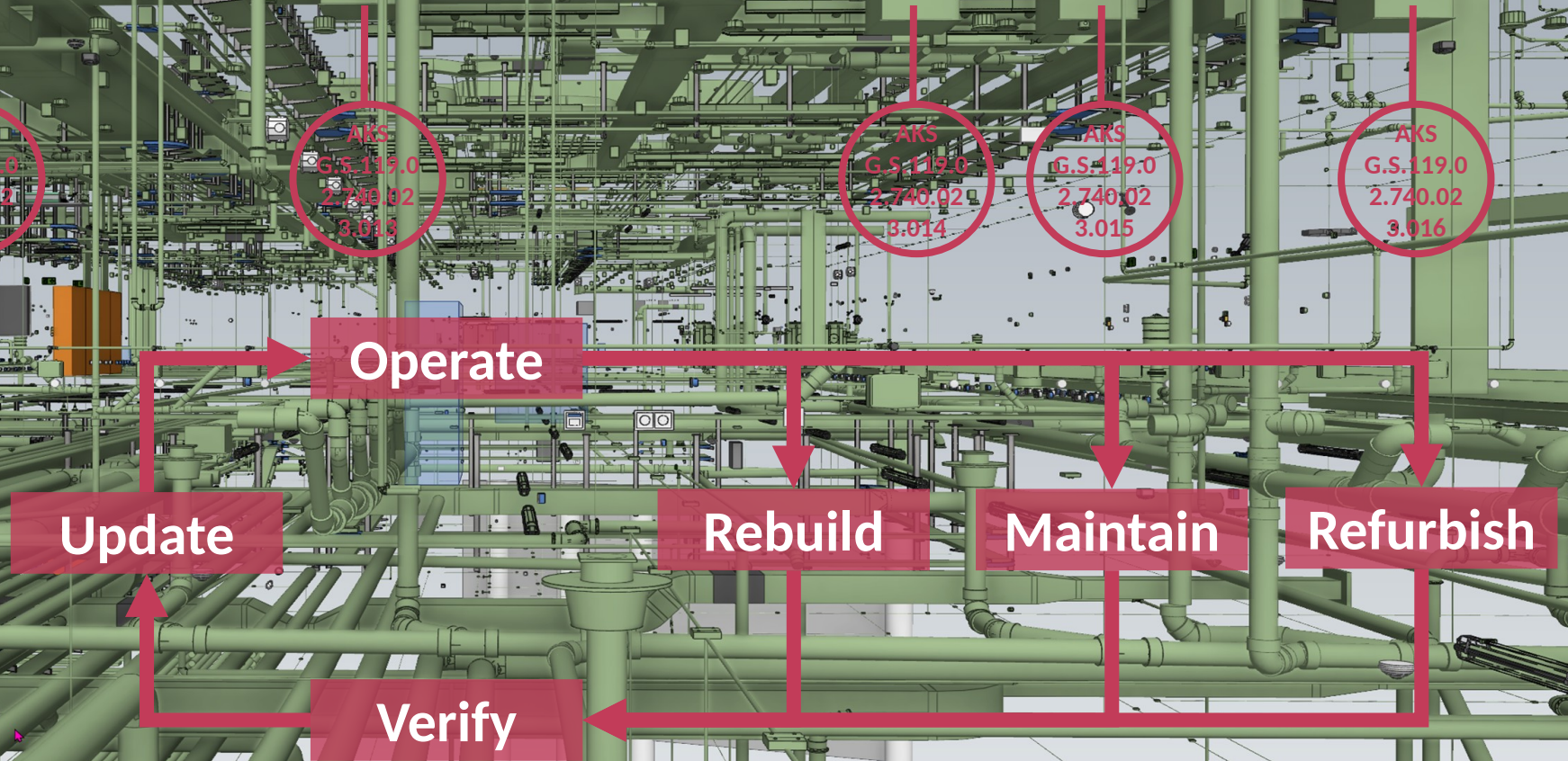
6.0
REBUILD

COST-EFFECTIVE DESIGN

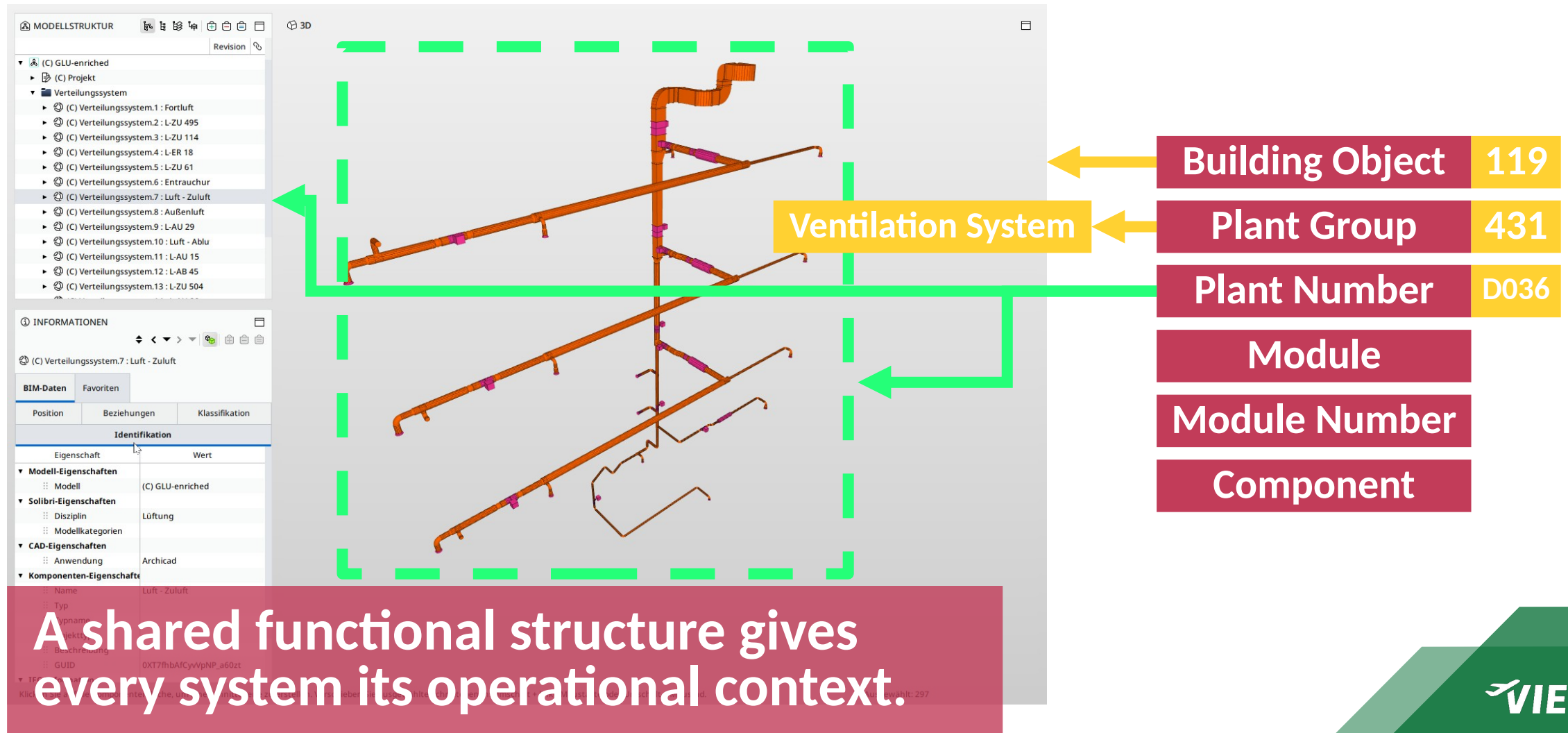
FURTHER USE OF EMPIRICAL DATA

Keeping Information Aligned with a Changing Reality

Unreliable documentation gets ignored. Neglect makes it less reliable.



Structural & Semantic Continuity | Functional classification structure at Vienna Airport



Identifying each component within its functional location

Structural & Semantic Continuity I Functional classification structure at Vienna Airport

Building Object 119

Plant Group 431

Plant Number D036

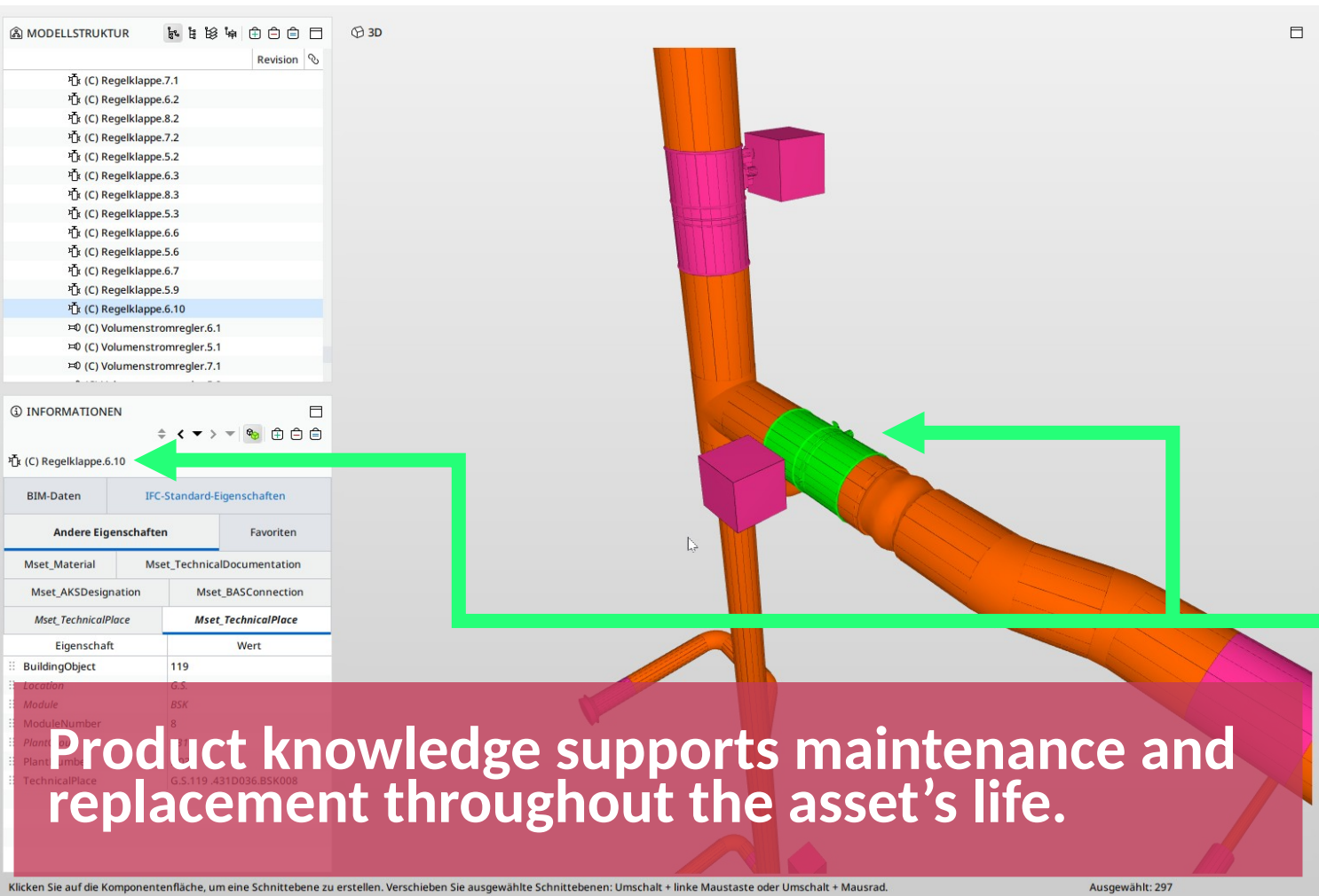
Module BSK

Module Number 8

Component

A stable operational reference keeps information connected through change.

Structural & Semantic Continuity I Functional classification structure at Vienna Airport



Building Object	119
Plant Group	431
Plant Number	D036
Module	BSK
Module Number	8
Component	Damper
Product Information	DPP

Product knowledge supports maintenance and replacement throughout the asset's life.

Klicken Sie auf die Komponentenfläche, um eine Schnittebene zu erstellen. Verschieben Sie ausgewählte Schnittebenen: Umschalt + linke Maustaste oder Umschalt + Mausrad.

Ausgewählt: 297



Your documentation
is one piece of a much
larger operational
puzzle.

BIM provides shared meaning
across specialised information
systems

Your Documentation in the Operational Ecosystem

IoT / BMS

Energy

BIM

ERP

Safety /
Compliance

FM

DMS

GIS

From Theory to Practice

Leading System in Design
and Construction/Rebuild

BIM-Ecosystem

Building
Operation
System

ERP-Ecosystem

SAP-System

FM-System

Leading System in
Operation

Mobile
maintenance
system

Existing systems remain authoritative — the BOS connects them

GIS

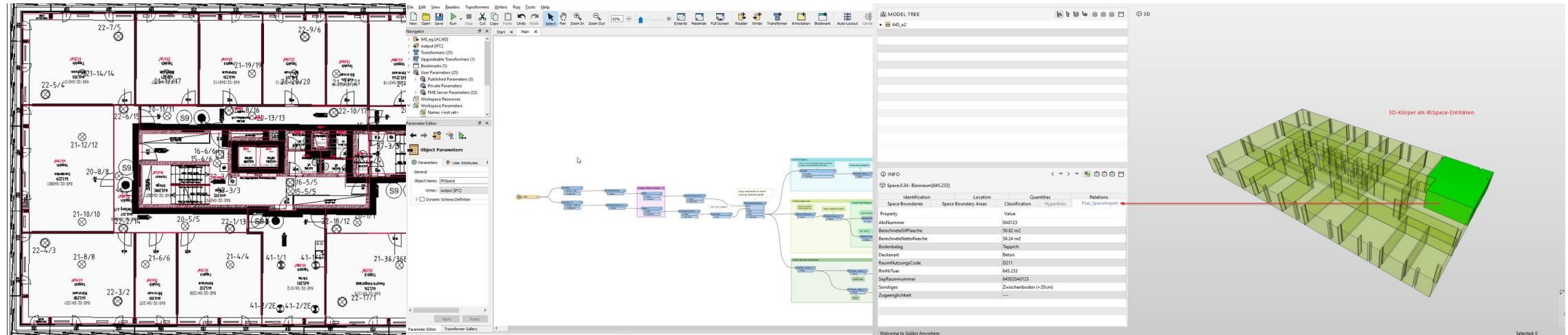
BIM

BCS

DMS

Combining drawings with asset records and product information

From DWG to an Operational Model



A usable model combines geometry with reliable information about the asset.

DWG-Drawing

Processor

IFC-Model

Closing the feedback loop through model and point cloud comparison

Model-to-Reality-Verification

Detected deviations guide corrections and updates to operational information.

Digital Model



Deviation
Analysis /
Verification



Point Cloud

Operational knowledge for AI support and real-time simulation

From Data to Organisational Intelligence

(local) AI / AGENTS / DECISION SUPPORT

Search | Analysis | Realtime Simulations | Validation support | Decision support

OWNER KNOWLEDGE & JUDGEMENT

Information Requirements | Validation Rules | Asset Strategies | Classification Logic
Operational Experience | Lessons Learned

TRUSTED INTEGRATED INFORMATION

Continuity + Verification

BIM —
SEMANTIC
INTEGRATION
LAYER

GIS

ERP

DMS

BCS

Structured operational knowledge turns reliable information into decision support.

Connecting operational assets with external product and regulatory knowledge

The Information Ecosystem Is Expanding

Leading System in Design
and Construction/Rebuild

DPP

AAS

Building
Operation

ERP-Ecosystem

SAP-System

Leading System in
Operation

FM-System

BIM-Ecosystem

Future operations will connect assets with trusted external knowledge and services.

+ PRODUCT
KNOWLEDGE

Digital Product Passport
Data Dictionaries
Manufacturer Data
AAS / Data Spaces

OPERATIONAL
INFORMATION
ECOSYSTEM

Identity + Semantics + Context

+ REGULATORY
KNOWLEDGE

Laws
Standards
Technical Rules
Approval Requirements

Mobile
maintenance
system

machine-
readable
regulation