

Webinar Summary

Prefabricated Containerized Solutions for Industrial Applications

Date: 22 January 2026

Hosted by: Cihan Altunbay, Key Account Manager, VONK

Panelist & Co-host: Jurgen Tollner, Senior Project Manager, VONK

Introduction

On 22 January 2026, VONK hosted a webinar focused on prefabricated containerized solutions for industrial applications. The session brought together experts from across the project lifecycle to discuss real-world challenges in complex industrial projects and how containerized solutions can effectively address them.

The webinar was moderated by **Cihan Altunbay**, Key Account Manager at VONK, together with **Jurgen Tollner**, Senior Project Manager at VONK. The panel represented the full ecosystem of project execution, including perspectives from the **end user, EPC, OEM, and system integrator**.

"Today, the question is no longer whether containerization helps, but how to apply it intelligently to maximize project value."

From Traditional Construction to Containerization

The webinar opened with a reflection on traditional on-site construction methods for electrical and control systems. Historically, these projects involved large numbers of people, multiple contractors, and overlapping scopes, all working in parallel on site.

This approach typically led to three major challenges:

- **Health, Safety & Environmental risks** due to high on-site manpower
- **Complex coordination** between multiple contractors
- **Late discoveries during commissioning**, causing delays and cost overruns

As projects became larger, more complex, and more cost- and schedule-driven, a fundamental question emerged:

"Why are we building everything on site, in the most difficult environment possible?"

This question marked the rise of **prefabricated, containerized solution**, not as a trend, but as a response to real project challenges.

Why Containerized Solutions Create Value

Containerized solutions enable a shift from on-site construction to **off-site fabrication in controlled environments**.

According to the panel, this brings several key benefits:

- Reduced on-site manpower and improved safety
- Higher and more consistent quality through factory-controlled conditions
- Early integration and testing of systems
- Shorter commissioning time on site
- Greater flexibility for late-stage design changes

These benefits were first clearly demonstrated in the **oil & gas industry**, where safety, cost control, and schedule certainty are critical. Over time, containerized solutions expanded into many other industries.

Applications Across Industries

Today, containerized solutions are widely applied across sectors such as:

- Hydrogen and energy transition projects
- Petrochemical and chemical plants
- Power generation and utilities
- Data centers
- Renewables
- Mining and marine applications

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Depending on the application, containerized units can function as:

- Electrical substations (E-houses)
- Control and instrumentation rooms
- Auxiliary buildings
- Rectifier units, EV charging stations, hydrogen fuel cell systems, and more

Specifications: Functional vs. Technical

One of the central discussions focused on **how specifications are defined**.

From the end-user perspective, traditional technical specifications are often outdated and limit innovation. The panel highlighted a clear shift towards **functional specifications**, allowing EPCs, OEMs, and system integrators to apply the latest technologies and lessons learned.

"Functional specifications create space for innovation, while overly detailed technical specs often restrict value creation."

At the same time, the panel agreed that a **hybrid approach** is essential:

- Core equipment still requires technical specifications
- Building and system integration benefit from functional requirements

Early involvement of suppliers and system integrators, preferably during the **FEED phase**, was identified as a key success factor.

Early Engagement and Trust

A recurring theme throughout the webinar was **trust and early collaboration**. Early vendor involvement allows risks, constraints, and opportunities to be identified before procurement and execution.

"Without trust and open communication, everyone is designing in the dark."

Early engagement enables:

- Better alignment of project drivers (cost, schedule, quality)
- Smarter design decisions
- Reduced interfaces and fewer surprises later in the project

Quality, Cost and Schedule: Finding the Balance

While containerized solutions require thoughtful upfront engineering, they consistently deliver clear project advantages:

- Faster installation and commissioning on site
- Better quality assurance through comprehensive factory testing
- Lower overall project cost and reduced execution risk

"By investing in engineering upfront, projects gain time, cost control, and certainty during execution and commissioning."

Standardization vs. Customization

Standardization was another key topic. The consensus:

- **Standardization works best in programs**, not one-off projects
- A balance is needed between standardized building blocks and project-specific customization

Elements such as HVAC, fire & gas systems, lighting, cable routing, and earthing can often be standardized, while equipment interfaces and process-specific requirements remain project-dependent.

Safety, Permits and Site Constraints

Safety was repeatedly highlighted as a primary driver for containerized solutions. Reducing on-site activities directly lowers safety risks and exposure.

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Additionally, practical challenges such as:

- Permitting processes
- Environmental regulations (e.g. nitrogen emissions)
- Availability of skilled labor
- Remote or constrained locations

make off-site fabrication increasingly attractive.

Testing and the “Plug & Play” Philosophy

From a system integrator perspective, VONK emphasized the importance of **maximizing off-site testing**.

Integrated factory acceptance testing (FAT) significantly reduces:

- Interface issues
- Commissioning time on site
- Costly troubleshooting in the field

“Problems should be solved in the factory, not on site.”

This plug & play approach requires close coordination between all parties and a mature project mindset.

Contracting Strategy and Interface Management

The panel addressed the question of **single-source responsibility versus multiple packages**. While splitting scopes may seem cost-effective on paper, it often increases risk, interface complexity, and overall project cost.

Bundling scopes with a competent system integrator:

- Reduces interfaces
- Simplifies procurement
- Improves accountability

Ultimately, the key question is not price alone, but where risk is best managed.

Key Takeaways

- Containerized solutions are a proven answer to modern industrial project challenges
- Early engagement and functional specifications unlock innovation
- Off-site fabrication improves safety, quality, and schedule certainty
- Trust and collaboration across the ecosystem are essential
- Smart standardization and thorough off-site testing create long-term value

Watch the Webinar Content

A **curated compilation** of this webinar is available on the VONK website.

You can watch a short summary of the webinar and individual video clips per key question.

If you have any specific questions about this webinar or the topics discussed, please feel free to contact:

Cihan Altunbay
Key Account Manager – VONK
cihan.altunbay@iivonk.com