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Oyster's **Charles Harcourt Groome** and IBT's **Torsten Toedter** discuss the accelerating global shift toward mandatory digital invoicing – and why format compliance is becoming unavoidable for maritime operators

Across global supply chains, a profound shift is underway. Governments are moving decisively toward state controlled digital invoicing, replacing traditional PDF-based workflows with structured XML formats, real time clearance systems, and mandatory reporting platforms. What began as isolated national initiatives has evolved into a world-wide regulatory transformation – one that is reshaping how companies issue, transmit, and archive invoices.

For most industries, this transition is disruptive. For the maritime sector, it is existential. Shipping companies operate across borders, ports, and jurisdictions, often issuing invoices in multiple countries within the same week. As states impose their own formats, validation rules, and transmission pathways, maritime operators face a growing operational burden that directly affects cashflow, compliance, and service continuity.

Germany offers a clear example of this

new reality. Companies must now support two parallel invoice formats – XRechnung and ZUGFeRD – each with its own structure, validation logic, and technical requirements. For IBT, a German maritime services company, this dual format obligation has reshaped how invoices are created and transmitted.

In response to this accelerating shift, Oyster has restructured its product ecosystem. Its marine-focused ERP is now MarineFlow, a dedicated identity for the bunkers and marine lubricants market. Alongside it, Oyster is developing CargoFlow, BioFlow, and YachtFlow, each aligned with the compliance pressures and workflows of their respective sectors. The message is clear: sector specific compliance requires sector specific systems.

As state mandated digital reporting becomes the global norm, maritime operators must prepare for a future where invoicing is no longer an administrative task – but a regulated, state validated process.

A WORLD MOVING TOWARD MANDATORY DIGITAL REPORTING

The last decade has seen a rapid expansion of government controlled invoicing systems. Italy's SDI, Poland's KSeF, France's e Facture, India's IRP, and Saudi Arabia's ZATCA are part of a broader movement: states want real time visibility into commercial transactions. These systems share common characteristics:

- Structured XML formats
- Mandatory validation before invoice issuance
- Centralised government platforms

Alongside national systems, the EU's VIDA programme is moving toward enforced implementation, introducing a phased digital reporting framework designed to standardise the validation of cross border transactions across the Single Market. By 2028, maritime operators will be operating within an increasingly state controlled European invoicing environment as VIDA's



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mandatory stages come into force.

For maritime companies, the implications are significant. A rejected invoice in a clearance system is not a clerical inconvenience – it is a cashflow stoppage. When a vessel has already sailed, when services span multiple jurisdictions, or when fuel deliveries involve complex tax logic, the operational impact of non compliance becomes immediate and material.

The maritime sector is uniquely exposed because its invoicing footprint is inherently international. A single voyage may involve a seller in one country, a buyer in another, a service performed in a third, and a vessel flagged in a fourth. Each jurisdiction may impose its own invoicing rules, tax logic, or clearance requirements. As more countries adopt clearance systems, maritime operators face a fragmented landscape where each state defines its own rules, formats, and transmission pathways.

The result is a compliance environment that is not only complex but also rapidly evolving.

GERMANY AS A PREVIEW OF WHAT'S COMING

Germany's eInvoicing framework is one of the most demanding in Europe. Companies must support:



XRechnung – the mandatory EN 16931 XML format for B2G and increasingly B2B



ZUGFeRD – a hybrid PDF/XML format widely used in private sector workflows.

For IBT, this dual format requirement has reshaped how invoices are created – but not in the way many assume.

Before Oyster introduced eInvoicing compliance, IBT issued all invoices as PDFs. Once Oyster added support for XRechnung and ZUGFeRD, IBT transitioned seamlessly to structured formats. Crucially, IBT does not produce invoices twice. Instead, the company selects the required format at the moment of invoice creation.

To explore this shift, ship.energy spoke with Torsten Toedter of IBT. Founded in 1976 and built on Hanseatic tradition, IBT has since then continuously developed its customer relations, responsibility and sustainability and has established a strong market position in worldwide back-to-back trade of bunker fuels and marine lubricants.

Q&A WITH IBT: A GERMAN OPERATOR'S PERSPECTIVE

Q: What prompted IBT to adopt structured eInvoicing?

Toedter: 'We saw the direction of travel. Germany was moving toward mandatory structured invoicing, and several of our customers – especially larger ones – were already requesting XRechnung or ZUGFeRD. We realised that continuing with PDF only workflows would eventually put us at a disadvantage. It wasn't just about compliance; it was about staying aligned with our customers' expectations.'

Q: How did the transition from PDF to structured formats work in practice?

Toedter: 'Surprisingly smoothly. Oyster introduced the eInvoicing module, and

from that point we simply selected the format we needed – XRechnung or ZUGFeRD – when creating the invoice. The system generates the correct file automatically. There was no duplication, no parallel workflows. We've been using it for six months now, and it's been stable and reliable.'

Q: What benefits have you seen since adopting structured eInvoicing?

Toedter: 'The biggest benefit is certainty. When we send an XRechnung, we know it meets the schema requirements. When a customer wants ZUGFeRD, we know the embedded XML is correct. It reduces back and forth, reduces errors, and speeds up payment cycles. It also positions us well for future regulatory changes.'

Q: How do you see the future of invoicing in the maritime sector?

Toedter: 'I think structured invoicing will become the default. Not just in Germany, but across Europe and beyond. More countries will adopt clearance systems. More customers will expect machine readable formats. For maritime companies, the ability to produce the right format instantly – without manual work – will become essential. We're glad we made the shift early.'

THE MARITIME EXPOSURE PROBLEM

Unlike land based industries, maritime invoicing is inherently multi jurisdictional. A single voyage may involve:

- A seller in one country
- A buyer in another
- A service performed in a third
- A vessel flagged in a fourth
- A port authority in a fifth.

Each jurisdiction may impose its own invoicing rules, tax logic, or clearance requirements. This creates three major risks:

Rejected invoices delay payment: If a state platform rejects an invoice, the clock stops. For operators with tight margins, this can create liquidity pressure.

Manual dual format workflows increase error rates: As IBT experienced, producing structured formats manually is slow and error prone. Automation is essential.

Compliance becomes operational, not administrative: In the new regulatory environment, invoicing is no longer a back office task – it is a core operational function.

The maritime sector's exposure is structural, not incidental. As more states adopt clearance systems, the operational burden will only increase.

MARINEFLOW AND THE NEW PRODUCT FAMILY

To meet the sector's evolving needs, Oyster has restructured its product ecosystem around industry specific identities.



MarineFlow

The newly rebranded marine ERP, dedicated to:

- Bunkers
- Marine lubricants
- Port services
- Vessel based invoicing
- Multi jurisdiction compliance.

MarineFlow reflects the reality that the marine fuels and lubricants market requires its own identity, workflows, and compliance logic.



CargoFlow

A forthcoming product for cargo trading, logistics, and cross border documentation.



BioFlow

A compliance driven platform for biofuels, reflecting the rapid regulatory changes around sustainability reporting, mass balance, and lifecycle emissions.



YachtFlow

A specialised solution for the yachting sector, where invoicing, provisioning, and charter operations face their own regulatory pressures.

Each product is built on the same principle: sector specific compliance requires sector specific systems.

AUTOMATING MULTI FORMAT, MULTI COUNTRY COMPLIANCE

MarineFlow automates the entire compliance chain:

- A single invoice entry
- Automatic generation of XRechnung, ZUGFeRD, FatturaPA, KSeF, Peppol BIS, and other formats
- Schema validation
- Digital signatures
- Transmission to state platforms
- Error handling and status tracking
- Archival rules for each jurisdiction.

'The biggest advantage is consistency,' says Toedter. 'Whether a customer wants XRechnung or ZUGFeRD, MarineFlow produces the correct file instantly. It removes the friction from our workflow.'

For maritime companies, automation is not a convenience – it is a necessity.

CONCLUSION

The global shift toward mandatory digital invoicing is accelerating. States are asserting control over transaction reporting, and maritime operators – with their cross border operations and complex service chains – are among the most exposed.

Germany's dual format model is only the beginning. As clearance systems proliferate, companies will need systems capable of producing multiple formats, validating against multiple schemas, and transmitting to multiple state platforms.

MarineFlow positions Oyster at the centre of this transition, offering a dedicated identity for the marine fuels and lubricants market. Alongside CargoFlow, BioFlow, and YachtFlow, it reflects a broader truth: sector specific compliance requires sector specific solutions.

The compliance wave is rising. The companies that prepare now will navigate it with confidence. Those that wait will find themselves reacting to a regulatory landscape that is no longer optional – but mandatory.

'I think structured invoicing will become the default. Not just in Germany, but across Europe and beyond'

Torsten Toedter, IBT

TIMELINE: THE GLOBALISATION OF STATE LEVEL CONTROL

2025



- FuelEU Maritime begins
- Germany expands XRechnung usage
- Italy SDI clearance tightens
- France begins phased rollout of e-Facture.

2026



- Poland KSeF becomes mandatory
- Spain expands FACeB2B
- Saudi Arabia enters ZATCA Phase 3
- India expands IRP coverage.

2027–2029



- France transitions to full clearance
- Belgium adopts Peppol based mandates
- Singapore expands nationwide e-Invoicing.

2030–2035



- EU pushes for harmonised digital reporting
- IMO explores alignment with global clearance systems
- State validated invoicing becomes the global norm.

For maritime operators, this timeline is not abstract – it defines the operational environment of the next decade.

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