THE GLOBAL DANGEROUS GOODS CONFIDENCE OUTLOOK

The definitive outlook for the worldwide dangerous goods industry based on the thoughts and attitudes of DG Pros across the globe.

2017 Sponsored by: Labelmaster and Hazardous Cargo Bulletin
CONTENTS

01 // PART ONE
The Changing DG/Hazmat Landscape

06 // PART TWO
The Compliance Investment Gap

10 // PART THREE
Further Adoption of Supply Chain Technology
PART ONE

THE CHANGING DG/HAZMAT LANDSCAPE
The landscape for shipping dangerous goods (DG) and hazardous materials (hazmat) continues to evolve. With thousands of items classified as “hazardous” and shipping regulations continuing to expand and become more complex, moving DG in a secure, safe and compliant manner is more critical than ever. Unfortunately, those responsible for DG/hazmat find it challenging to do their jobs properly against a backdrop of increasingly complex rules and regulations, and – in many cases – inadequate infrastructure and training.

GROWING DG VOLUMES = GREATER RISK
Growing volumes and types of dangerous goods in the supply chain mean that those responsible for compliance have an increasingly difficult job. DG/hazmat professionals across the globe believe:

88% of DG/hazmat professionals believe that keeping DG secure across the entire supply chain is more important than ever.

56% believe their companies face greater risk due to an increasing volume of dangerous goods.
For many, complexity and difficulty come as a result of the number of handoffs of a company's business partners. According to the survey, there is not much trust in how partners deal with the complexities of DG regulations:

73% wish others across their supply chain were as compliant as their company.

For others, it has to do with their company’s current level of infrastructure and training.

And while some companies feel they have the necessary tools, there is still a large number that do not believe their tools or infrastructures are adequate. In fact:

27% don’t believe their DG training programs adequately prepare people within their organization to comply.

33% are not confident that their current infrastructure and training can adapt to changing needs.
Making the task of compliance even more difficult – there are thousands of regulations governing the shipment of DG – which vary by country and transportation mode – and these complex regulations are constantly changing.

59%

AGREE IT IS CHALLENGING TO KEEP UP WITH THE LATEST REGULATIONS.

This is especially true for those in North America, where 63% of respondents agree that it is challenging, compared to 48% in Europe.

The challenge of keeping up with new and changing regulations is compounded by the fact that there is a perception that everyone has a different interpretation.

67% feel that even if they follow the rules to perfection, it still might not be enough to avoid stopped shipments.

NORTH AMERICA: 72%
EUROPE: 61%
OTHER COUNTRIES: 60%
Furthermore, there appears to be a gap in part due to a perceived disconnect between how the rules are created and how they are implemented in the marketplace.

68% AGREE REGULATORS SHOULD SEE WHAT IT’S LIKE IN THE REAL WORLD.

72% NORTH AMERICA

61% EUROPE (TOTAL)

64% OTHER COUNTRIES

REQUIREMENTS VERSUS ENFORCEMENT

But it is not that DG pros are against regulations. If fact, it is the opposite. When asked how they felt about the level of regulatory requirements imposed on dangerous goods, 68% agree requirements should “stay the same.”

But there is a sizable percentage of respondents that believe regulatory requirements should be even more restrictive:

UK: 32%
EUROPE: 27%
NORTH AMERICA: 19%
OTHER COUNTRIES: 35%

What they do want is for these regulations to be enforced.

Given the critical nature of DG shipping and the time and resources some companies spend in order to be compliant, DG pros who are following the rules want those who are not compliant (especially those who are doing so intentionally) to feel the impact of regulatory enforcement.

53% AGREE ENFORCEMENT IMPOSED ON DG SHOULD BE MORE SEVERE.

This is especially true in Europe (71%), compared to only 42% in North America.

North America was highest in terms of wanting enforcement to stay the same, with 49% compared to 24% in Europe, 19% in the UK, and 30% for all other countries.
PART TWO

THE DG COMPLIANCE INVESTMENT GAP
While DG pros must navigate the complex landscape with changing regulations along with a myriad of supply chain partners, much of the risk and challenge comes from how companies are approaching DG. A company’s DG investment and infrastructure should reflect the impact it truly has on the business. However, for many, there is a serious gap in infrastructure, technology and training. Their level of investment isn’t keeping pace with the increased level of complexity and risk associated with the DG supply chain.

When asked about their company’s level of investment in compliance technology and training for DG/hazmat shipping over the last year:

<table>
<thead>
<tr>
<th>Region</th>
<th>Increased</th>
<th>Stayed the Same</th>
<th>Decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH AMERICA</td>
<td>39%</td>
<td>53%</td>
<td>10%</td>
</tr>
<tr>
<td>EUROPE</td>
<td>43%</td>
<td>52%</td>
<td>5%</td>
</tr>
<tr>
<td>ALL OTHER</td>
<td>65%</td>
<td>33%</td>
<td>2%</td>
</tr>
</tbody>
</table>

THE EFFECT OF COST-CUTTING AND ROLE CONSOLIDATION ON COMPLIANCE
According to the survey, DG compliance is often not someone’s intended career choice.

ONLY 19% indicated that DG compliance was their planned career path.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH AMERICA</td>
<td>12%</td>
</tr>
<tr>
<td>UK</td>
<td>7%</td>
</tr>
<tr>
<td>OTHER EUROPEAN COUNTRIES</td>
<td>36%</td>
</tr>
<tr>
<td>OTHER COUNTRIES</td>
<td>40%</td>
</tr>
</tbody>
</table>
And whether or not this was their planned career, more than half (56%) have (or expect) DG compliance and supply chain safety to be combined with other roles. This expectation is highest in Europe at 64%.

This means many companies are entrusting the role of DG compliance to someone who may not be completely focused on it and is doing the job part-time. Would such a situation be allowed in any other business-critical function, with all it means for public liability, commercial reputation and the potential for hefty financial penalties?

It's unfortunate (and risky), but DG often doesn't get the focus that it deserves, or management just does not fully understand what it takes to be compliant and the overall impact of compliance on the organization.

OVER ONE-THIRD AGREE THEIR SUPERVISORS ARE UNAWARE OF EXACTLY WHAT THEY DO.

NORTH AMERICA: 42%
EUROPE: 25%
OTHER COUNTRIES: 20%
TRAINING THAT DELIVERS REAL BUSINESS VALUE

Good training can help those – both directly and indirectly – responsible for DG, but the survey results are somewhat ambivalent about its provision.

Yet, when asked about the business value outcome that DG training delivers, half of DG pros do NOT believe it adds real business value.

Nearly half of all respondents said their training is conducted solely to meet regulatory requirements, demonstrating that there is clearly space here for training providers to do more to show the value good training can bring to the organization, and not just in terms of avoiding penalties for non-compliance.

Ensuring that companies have the proper training could also be supported by clarity in training requirements, as over one-third believe the training requirements mandated in the DG/hazmat shipping regulations are too vague.

73% of respondents agree their training adequately prepares them to comply with regulatory requirements. This sentiment was fairly consistent across the globe.

48% FEEL THEIR CURRENT TRAINING PROGRAM DOES NOT PROVIDE “REAL BUSINESS VALUE.”

NORTH AMERICA: 71%
UK: 61%
REST OF EUROPE: 77%
OTHER COUNTRIES: 87%

73% agree their training adequately prepares them to comply with regulatory requirements.
PART THREE

FURTHER ADOPTION OF SUPPLY CHAIN TECHNOLOGY
PART THREE

FURTHER ADOPTION OF TECHNOLOGY
Even with the technology innovation and advancements of recent years, a large number of DG shippers still rely on manual processes. Nearly half of all respondents indicate they have some type of software specific to DG, and when used have more confidence in their ability to achieve compliance. Yet more than one-quarter of respondents are still doing everything manually and not even using general shipping or warehouse software or systems provided by carriers.

WHICH TYPE OF TECHNOLOGY DOES YOUR COMPANY USE TO SHIP DG?

- 48% DG-specific software
- 32% General shipping or warehouse management software
- 26% Software that the carrier gives you (typically free)
- 17% Other

When asked to describe their infrastructure’s ability to quickly adapt to instruction and process changes for DG shipping across their supply chain:

- 34% INDICATED “ADVANCED”
- 50% INDICATED “CURRENT BUT NEEDS UPDATING”
- 16% INDICATED “LAGGING BEHIND THE INDUSTRY”
According to DG pros surveyed, those who feel their company’s infrastructure is “advanced” feel:

- More confident in their ability to keep up with changing regulations.
  - Advanced tech: 65%
  - Current tech: 64%
  - Lagging tech: 49%

- Less likely to have shipments stopped (when following the rules).
  - Advanced tech: 53%
  - Current tech: 72%
  - Lagging tech: 75%

- More confident that their training provides real business value.
  - Advanced tech: 68%
  - Current tech: 51%
  - Lagging tech: 24%

Yet, even with a number of technology resources available, nearly one-quarter are still relying on manual processes. And lack of technology and infrastructure greatly contributes to DG pros feeling that their organization is lagging behind the industry.

North America had the greatest number of respondents feeling that their infrastructure was lagging (23%) compared to 7% in the UK, 4% for all of Europe, and 12% for all other countries.

According to those who feel their company’s infrastructure is “lagging” are more likely to:

- Use only manual processes (43%)
- Have greater risk today (64%)
- Have supervisors who don’t understand all they do to keep the company safe and compliant (62%)
- Feel their training is solely to meet regulations (71%)
- Feel their training adequately prepares them (49%)
INFRASTRUCTURE, TRAINING AND TECHNOLOGY = COMPLIANCE CONFIDENCE

More and more substances and items will continue to be classified as dangerous, regulations will continue to evolve and expand, and supply chains will continue to become increasingly complex and include more partners. However, in spite of the growing risk and complexity, many organizations do not appear to have the appropriate levels of infrastructure, training and technology that give DG pros confidence.

Companies involved in the dangerous goods supply chain need to continue to invest in their people, realize the value of training and invest in that, and invest in compliance systems and infrastructure to help their DG professionals to do their job. This is the key to furthering regulatory compliance adoption (for the shippers as well as their partners) as well as the profession itself.

Compliance technology and training cannot be viewed as just an added cost of doing business. And non-compliance needs to be viewed as more than just fines. It can result in delayed shipments and negatively impact customer service and brand equity.

By making hazmat compliance a priority and investing in forward-thinking technology, shippers can be confident that their operations teams, suppliers, distributors and partners are all fully compliant with the latest rules and regulations.

Labelmaster’s comprehensive selection of hazmat compliance publications, training materials, software and services makes it easy for you to stay current with the latest requirements, remain compliant and transport your shipments safely. Learn more at labelmaster.com and hcblive.com

// ABOUT THE SURVEY

The survey was conducted online between May 23 and June 30, 2017. This survey was open to DG pros and was not limited to Labelmaster customers or subscribers of HCB media. It was promoted within Labelmaster and HCB marketing properties.

All questions were developed by both Labelmaster and Hazardous Cargo Bulletin. Management of the survey and tabulation of the results were conducted by an objective third party. Neither Labelmaster nor HCB has shared contact lists or information with each other or any other outside parties.

The data and results are copyrighted by Labelmaster and HCB.