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RELIABLE  
ACTIVE**



Air Cargo Community Frankfurt e.V.

# FRA meets pharma

28. November 2017

# Bitte beachten Sie die Compliance!

Gespräche über wettbewerbsrechtlich unzulässige Inhalte sind zu unterlassen z.B.:

- aktuelle und zukünftige Preise
- Provisionen & Rabatte
- Zahlungsbedingungen, Konditionen
- Kosten, Mengen, Erträge
- Nachfragen von und Angebote an einzelne Kunden
- Marktanteile
- Weitergabe von Kostenerhöhungen.

Führen Sie insbesondere keine Gespräche über Preise und Preisbestandteile, Wettbewerbsstrategien oder Konzentration auf bestimmte Gebiete oder Kunden.

## Merkblatt Verhaltensregeln für Mitglieder Air Cargo Community Frankfurt e.V.

Bitte beachten Sie in allen Vereinsaktivitäten unbedingt die folgenden kartellrechtlichen Vorgaben. Sprechen Sie in Zweifelsfragen den Hauptgeschäftsführer des Vereins an.

- Gespräche über wettbewerbsrechtlich unzulässige Inhalte sind zu vermeiden. Sprechen Sie bei Zweifeln vorab den Hauptgeschäftsführer an. Wettbewerbsrechtlich unzulässige Inhalte sind beispielsweise aktuelle und zukünftige Preise, Provisionen, Rabatte, Zahlungsbedingungen, Kosten, Mengen, Erträge, Konditionen, Nachfragen von und Angebote an einzelne Kunden, Marktanteile oder Weitergabe von Kostenerhöhungen. Führen Sie insbesondere keine Gespräche über Preise und Preisbestandteile, Wettbewerbsstrategien oder Konzentration auf bestimmte Gebiete oder Kunden.
- Achten Sie auf die Einhaltung der Tagesordnung auch durch die Mitglieder.
- Kontrollieren Sie die verteilten Dokumente und Statistiken der anderen Mitglieder auf ihren Inhalt.
- Beteiligen Sie sich auch in „lockerer Runde“ nicht an Gesprächen über wettbewerbsrelevante Themen. Verhalten Sie sich so, als wäre das Vereinsstreben öffentlich.
- Achten Sie bei der Arbeit in Arbeitskreisen und bei Verbandstreffen darauf, dass die Diskussion über „technische“ Themen nicht zu einer Diskussion bzw. einem Informationsaustausch zu oben genannten wettbewerbsrechtlich sensiblen Themen führt.
- Nehmen Sie keine Unterlagen mit vertraulichen Informationen über Ihr Unternehmen zu Vereinsstreffen mit.
- Informieren Sie den Hauptgeschäftsführer unverzüglich bei Verdacht eines Verstoßes gegen wettbewerbsrelevante Vorschriften.

Stand: 22.05.2015

# Übersicht der Teilnehmer

## Pharma-Industrie

- 1 Biotest AG
- 1 CSL Behring
- 4 Merck

## Hochschulen

- 2 Frankfurt University of Applied Sciences

## Weitere

- 1 Camelot Consulting
- 1 IATA

## Hochschulen (2; 5%)

## Weitere (2; 6%)

## Pharma-Industrie (6; 16%)

## Luftfrachtmacher (29; 74%)

## Luftfrachtmacher

- 2 AirBridgeCargo
- 2 Air Cargo Community
- 3 Celebi
- 3 DHL Global Forwarding
- 2 DoKaSch
- 3 Frankfurt Cargo Services
- 2 Fraport AG
- 1 Frigo Trans
- 2 Gefco
- 1 Georgi Transporte
- 1 LATAM
- 3 Lufthansa Cargo AG
- 1 LUG aircargo handling
- 2 Perishable Center Frankfurt
- 1 Swissport Cargo Services

- 13:30h  
🕒 0:30 Einlass
- 
- 14:00h  
🕒 0:15 Begrüßung und Anmoderation  
(Dominik Mißkamp, Air Cargo Community Frankfurt)
- 
- 14:15h  
🕒 0:25 IATA CEIV Zertifizierung – Aktueller Stand in FRA  
(Beverly Seebach, IATA)
- 
- 14:40h  
🕒 0:25 Ausbau und Modernisierung der Pharma-Infrastruktur in FRA  
(Joachim von Winning, Air Cargo Community Frankfurt)
- 
- 15:05h  
🕒 0:40 Trends und Entwicklungen der Pharma-Industrie  
(Constantin Reuter, Camelot Consulting)
- 
- 15:45h  
🕒 0:15 Kaffeepause
- 
- 16:00h  
🕒 1:30 Bearbeitung verschiedener Fragestellungen und Themen der  
Pharma Supply Chain in Gruppen
- 
- 17:30h  
🕒 -:- Networking bei gemeinsamem Feierabendsnack/-drink



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WEITERDENKEN  
WEITERGEHEN  
WEITERENTWICKELN

## Unsere Mission

Durch die **Bündelung** unserer **gemeinsamen Interessen** wollen wir die Wertschöpfung und Effizienz am Flughafen Frankfurt weiter steigern.

Nur dadurch können wir unsere **führende Position im globalen Wettbewerb** dauerhaft festigen.

### Airlines


### Spediteure


### Handlungsunternehmen


### Sonstige


### Flughafenbetreiber



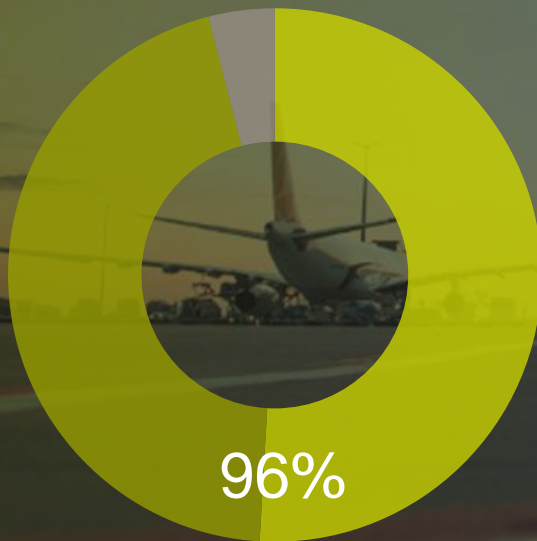
### Sondermitglieder



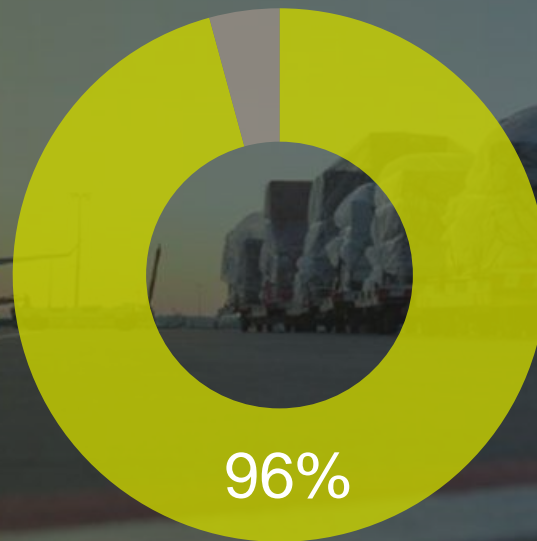


## Anteile der Community-Mitglieder an der Luftfracht

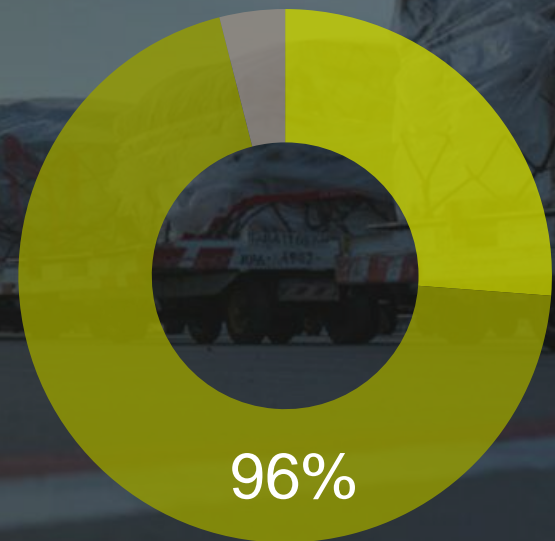
Airlines



Abfertiger



Spediteure



■ Direkte Mitglieder    
 ■ BARIG/SLV    
 ■ andere

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## Kompetenzteams im Überblick



[pingo.upb.de/922504](https://pingo.upb.de/922504)



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**CEIV**  
Center of Excellence  
for Independent Validators

**Pharmaceutical Handling**



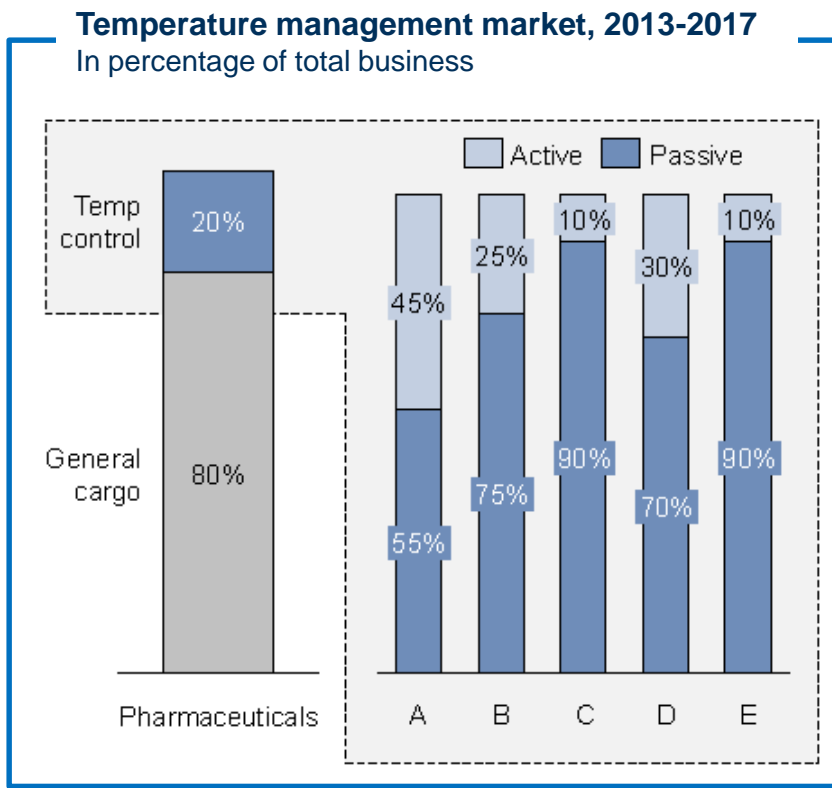
**FRA**   
AIR CARGO COMMUNITY

**„FRA meets Pharma“  
November 28, 2017**

- 1.0 **Introduction:** Pharma logistical market growing – Concerns and Challenges
- 2.0 Standards + Regulations: The nature of the industry requires strong cooperation and IATA as a standard setting organization
- 3.0 Objective: CEIV Pharma is a concerted effort to improve the level of competency, operational and technical preparedness
- 4.0 Approach and methodology: Validate knowledge, facilities, as well as processes, train stakeholders and recognize compliance
- 5.0 CEIV Pharma approach, governance, and organization: A partnership model and approach tailored to the needs of the different stakeholders in the value chain with qualified experts
- 6.0 CEIV Pharma: Update of activities

## Background: Pharmaceutical Product Logistics

### Temperature control share of pharma



➤ A big share of pharmaceutical shipments in the 15-25°C segment are shipped as general cargo.

➤ A **significant part** of pharmaceutical shipments requires **temperature controlled** transport.

➤ 75% of shipments require **passive cooling solutions**, and

➤ 20% **require active temperature control**.

➤ Active temperature control solutions demand a yield premium due to complex requirements.

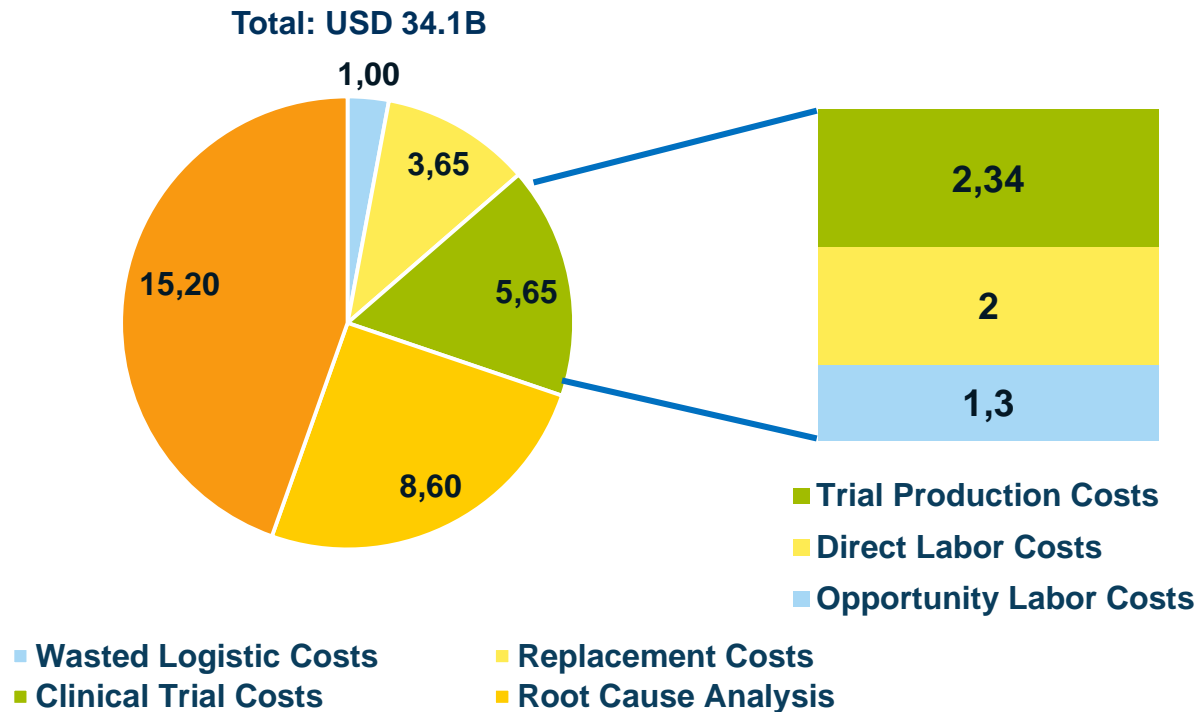
➤ Passive solutions drive volume and are less costly to implement.

Source: Seabury, BRU Cargo

## Background: Critical Issues Raised by the Shippers

Losses associated with temperature excursions in healthcare are around a staggering ~USD 35B

Losses associated with temperature excursions  
In USD Billion



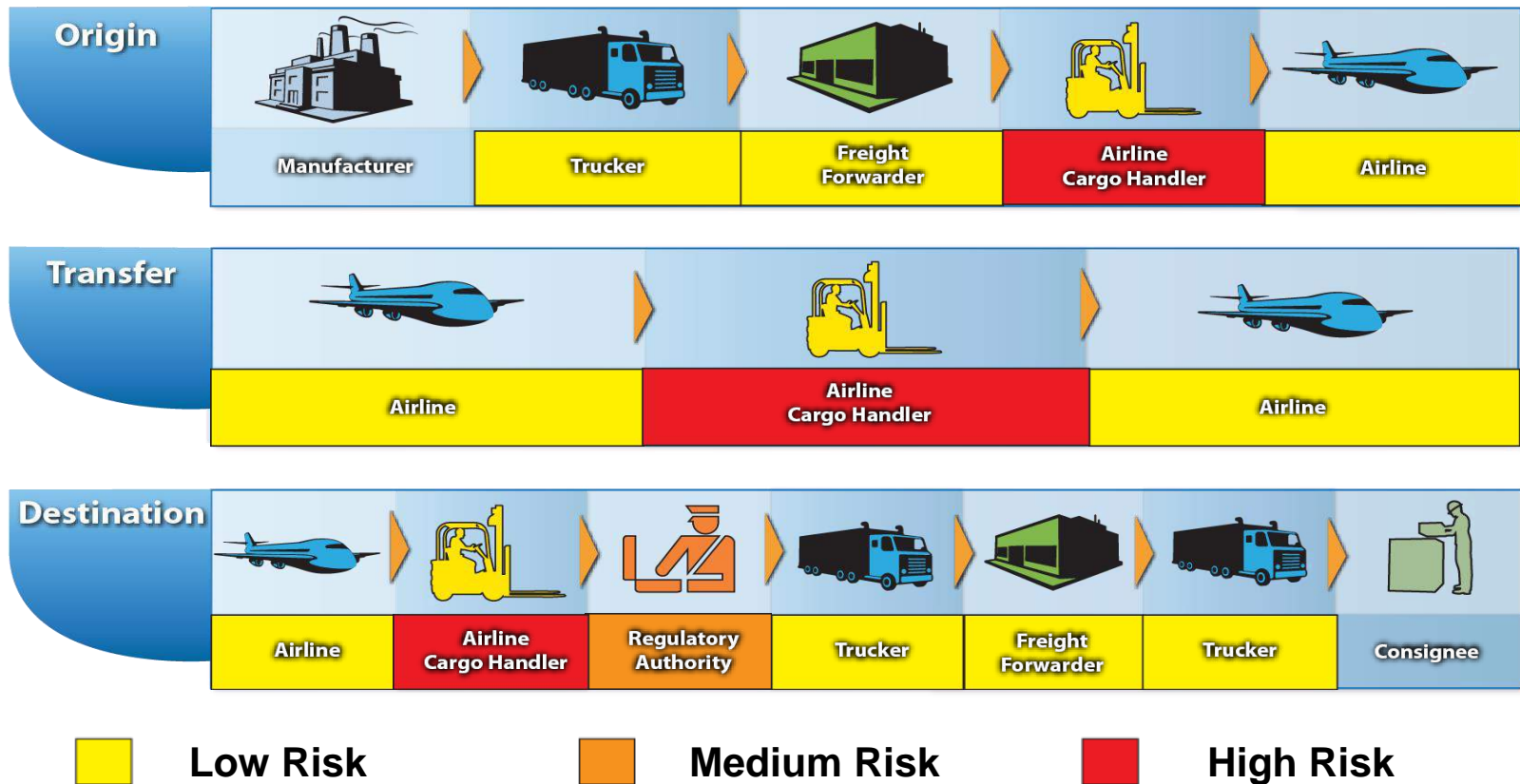
↗ The average costs of root cause analysis for each excursion can range from \$3K to up to \$10K (avg. USD 6.5K per year)

Source: World Health Organization, Parenteral Drug Association, worldpharmaceuticals.net, cargosense.com, other industrial analysis



# Background: Air Cargo Industry Concerns and Challenges

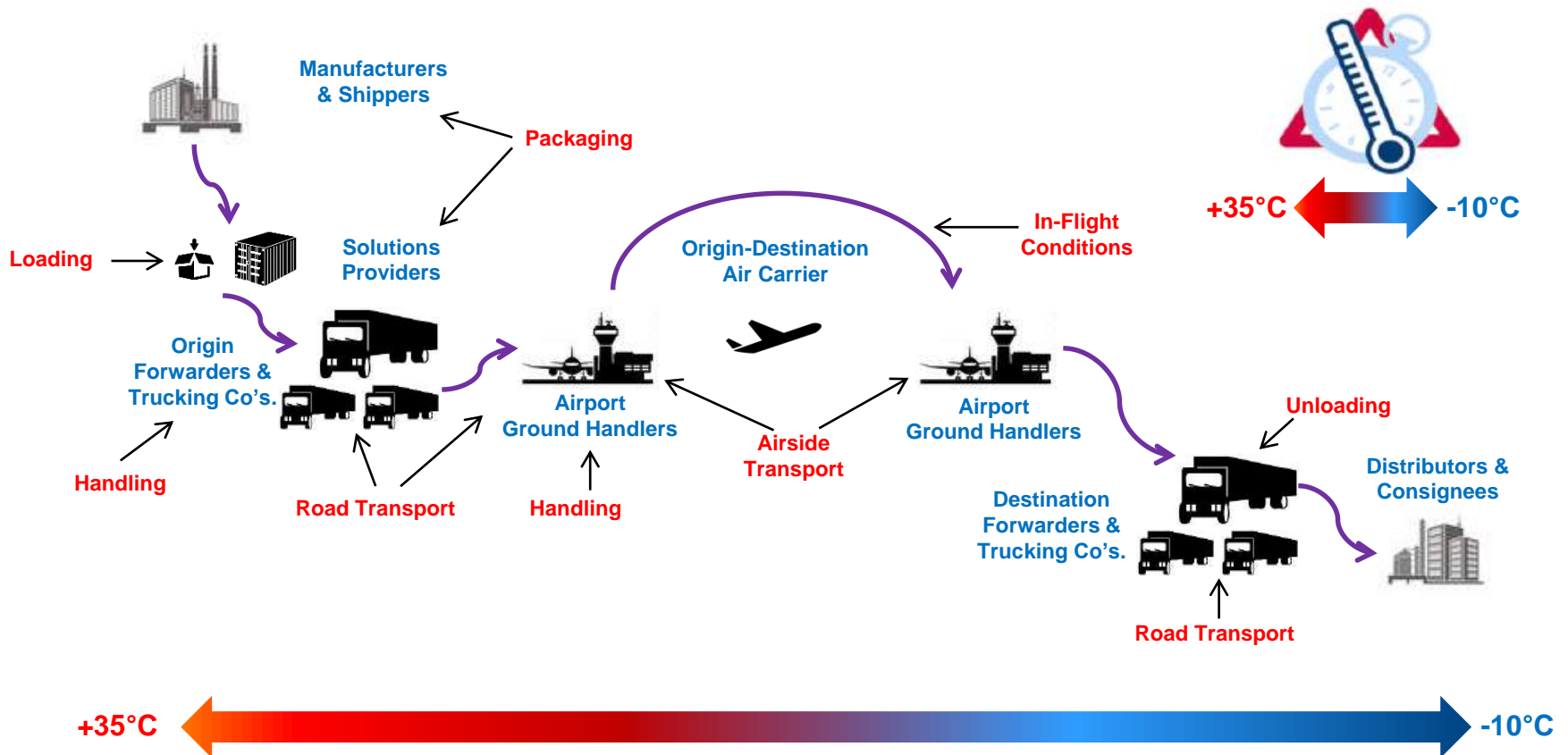
## Temperature Excursions – Where do they occur?



Source: Expeditors

## Background: Air Cargo Supply Chain Challenges

From origin to destination pharmaceutical products can be exposed to different climates



- 1.0 Introduction: Pharma logistical market growing – Concerns and Challenges
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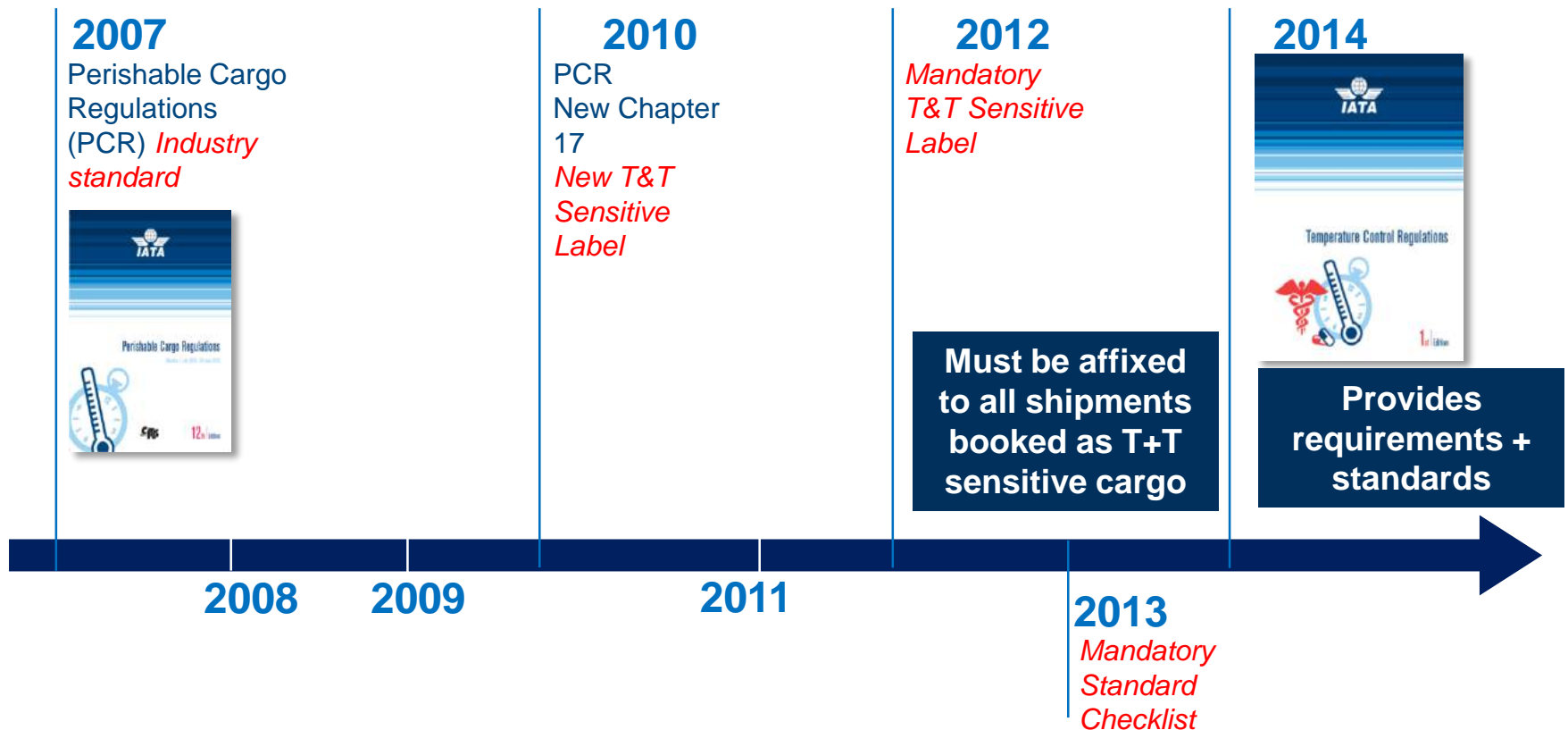
## Industry Cooperation in Air Cargo

The nature of the business requires strong industry cooperation – Strong stakeholder management is required



## IATA a Standard Setting Organization

Since 2007 IATA and its industry stakeholders have developed a number of temperature sensitive standards



## Content

- 1.0 Introduction: Pharma logistical market growing – Concerns and Challenges
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- 6.0 Benefits: A win-win opportunity for all stakeholders
- 7.0 CEIV Pharma: Update of activities

## CEIV Pharma

To ensure the integrity of the product throughout the supply chain

# »» OBJECTIVES



**Prevent sanitary issues** caused by temperature excursions during transportation.

**Improve handling** of pharmaceutical products and compliance with existing regulations + standards.

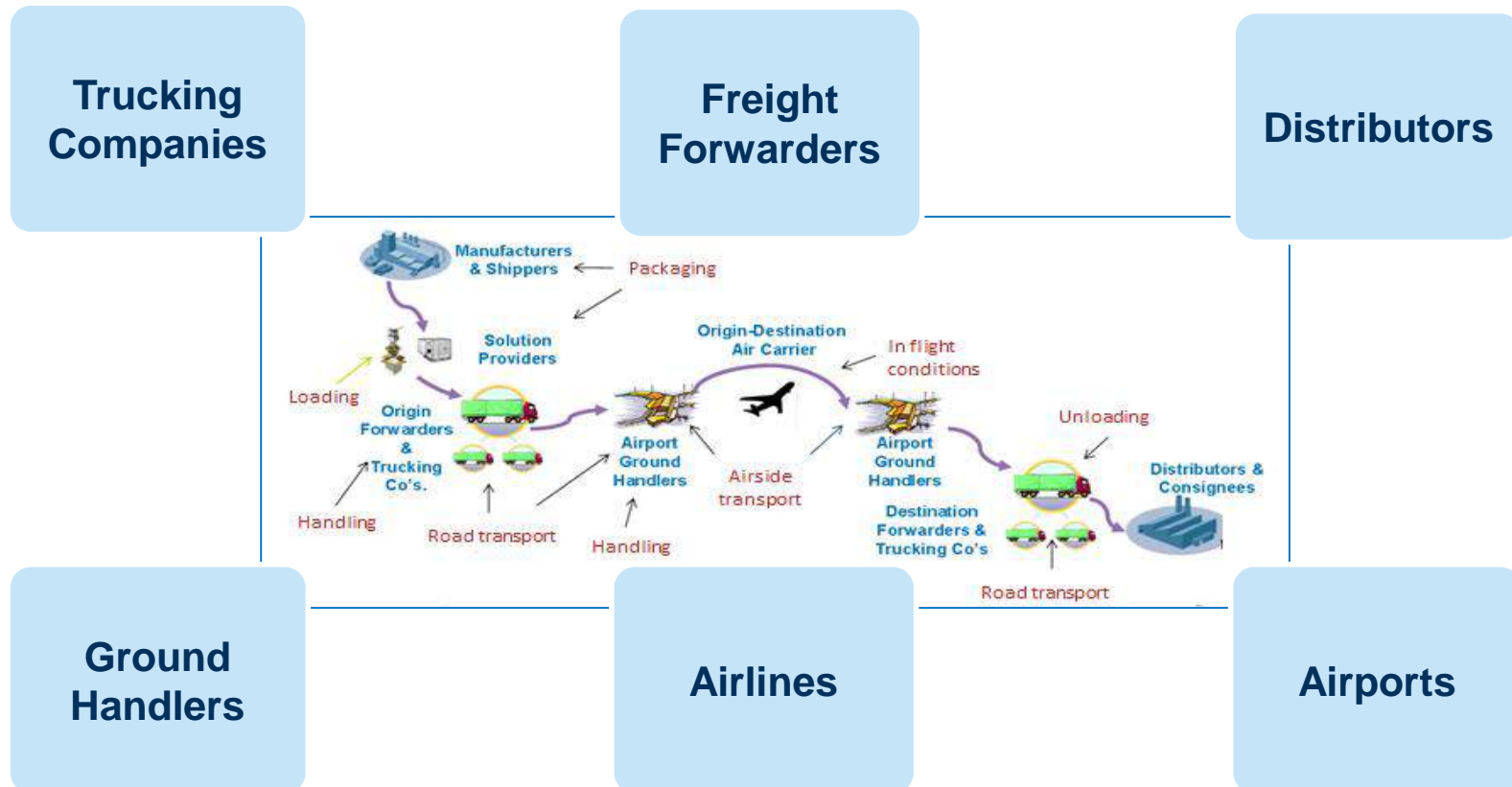
**Ensure product integrity**

**Elevate level staff competency** through efficient and robust training program.

**Create a global and consistent certification** that industry can rely on.

## CEIV Pharma targets

Who does CEIV Pharma target? The supply chain





## CEIV Pharma Standard

... by applying the newly developed CEIV Pharma standard that focuses on global coverage and universality...

### IATA GUIDELINES



### GOOD DISTRIBUTION PRACTICES



### LOCAL + REGIONAL GUIDELINES



### CEIV Pharma:

- encompasses various regulations and standards e.g. EU GDP.
- covers GDP requirements.
- aims at covering international standards and country-specific requirements.
- aims at reducing the number of audits or simplifying them.
- aims to align air cargo stakeholders needs.

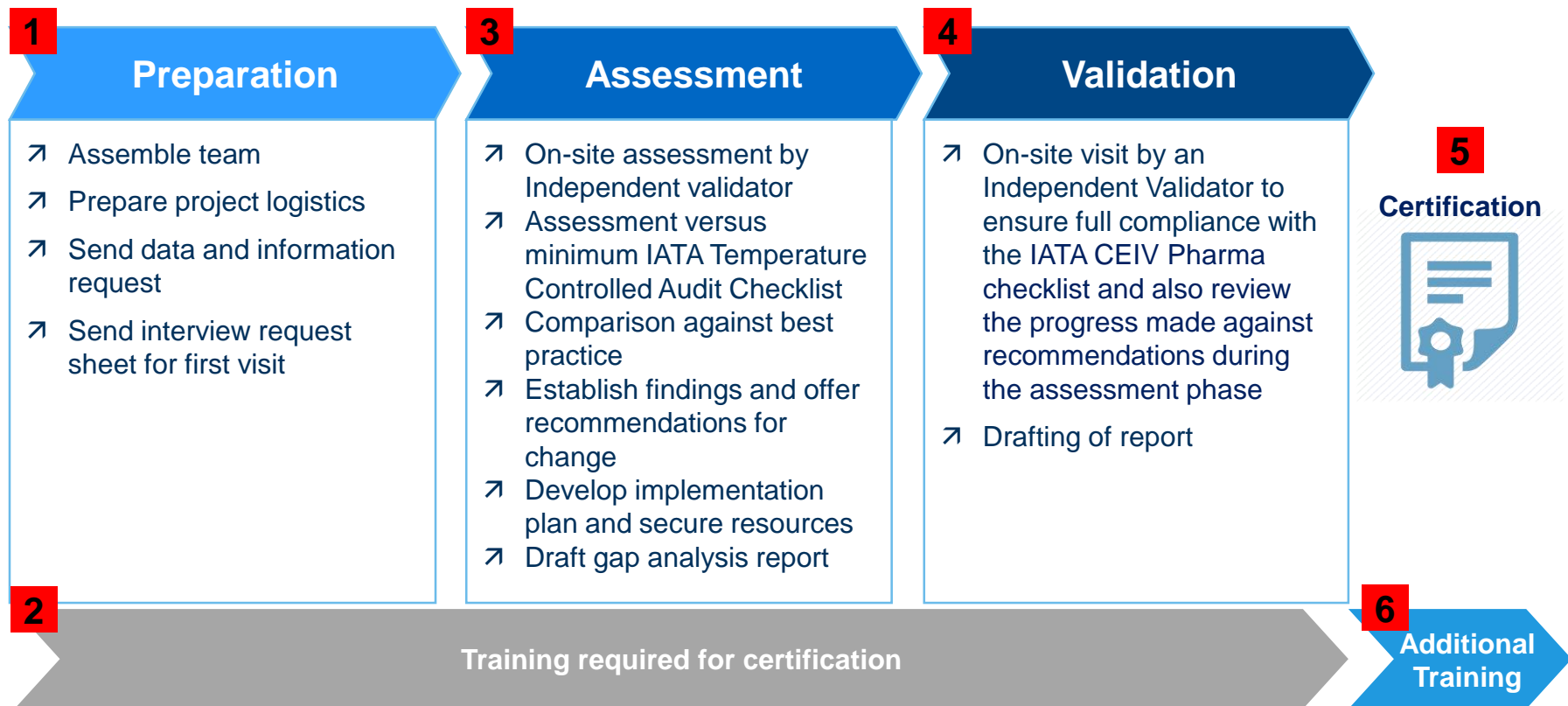


## Content

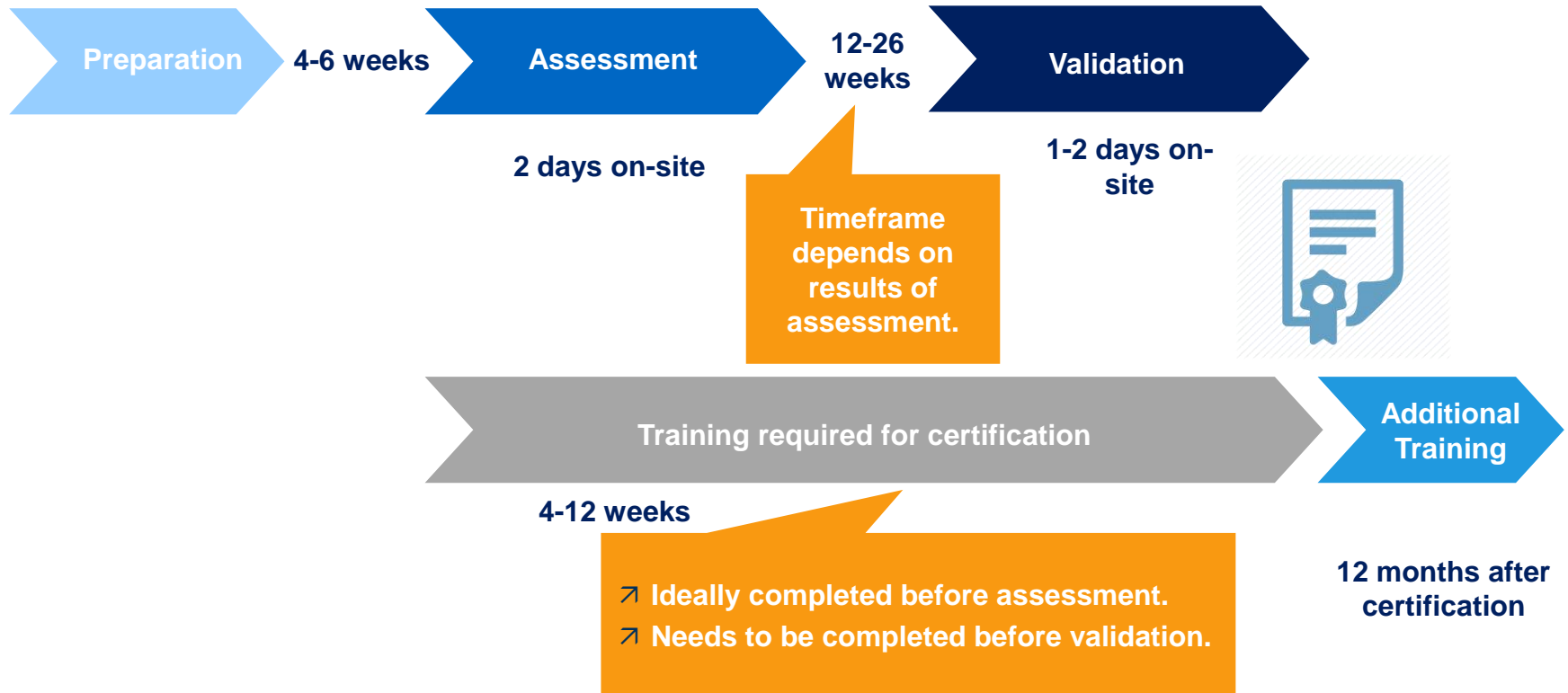
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# Certification Approach and Methodology

IATA will certify companies in several steps



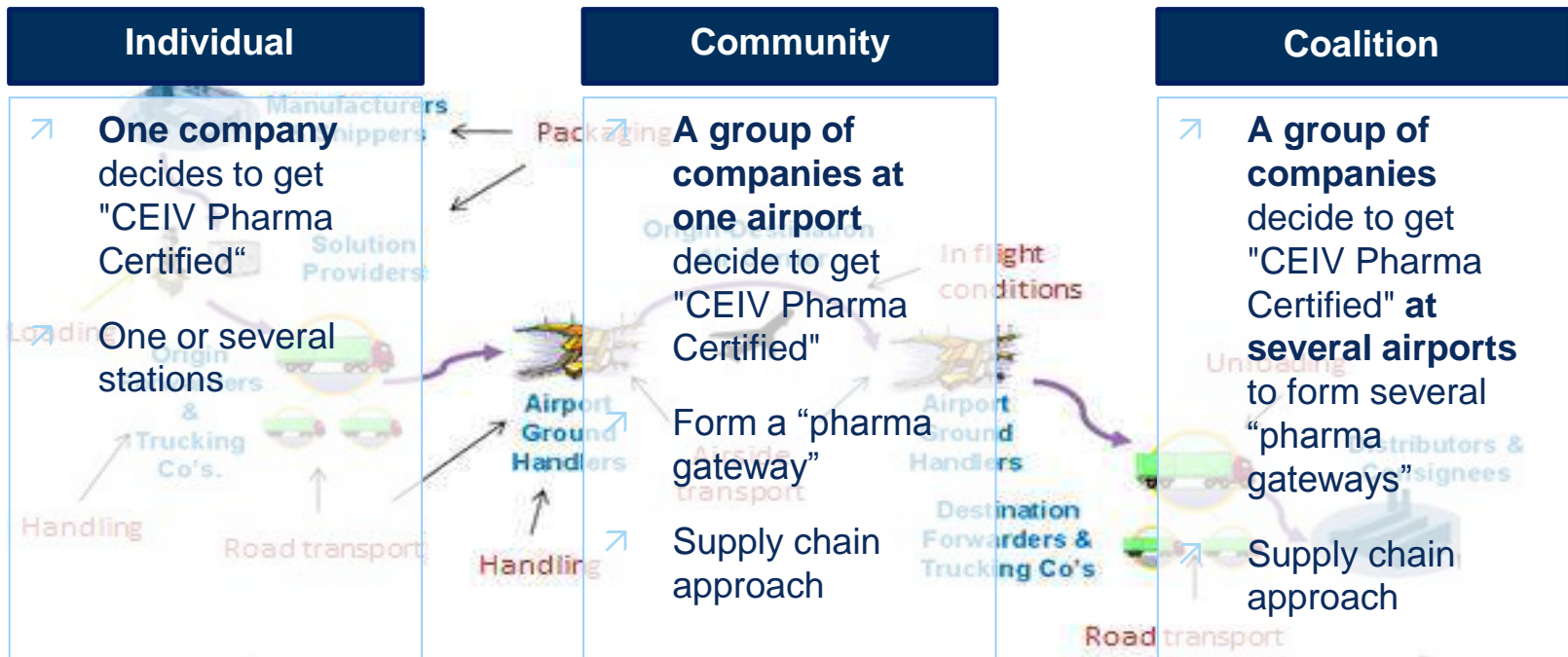
## Certification Timeline (general approach)



- 1.0 Introduction: Pharma logistical market growing but air cargo losing market share to other modes of transportation
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- 6.0 CEIV Pharma: Update of activities

## CEIV Pharma Certification Approach

There are different approaches to obtain certification



# Project structure – Who is involved and who can participate?

Everyone in the value chain can participate in the certification process

## Example (BRUCargo)

### Pharma shippers



### Forwarders with pharma focus



### Handlers



### Truckers



### Airlines



### Regulators



### Facilitators

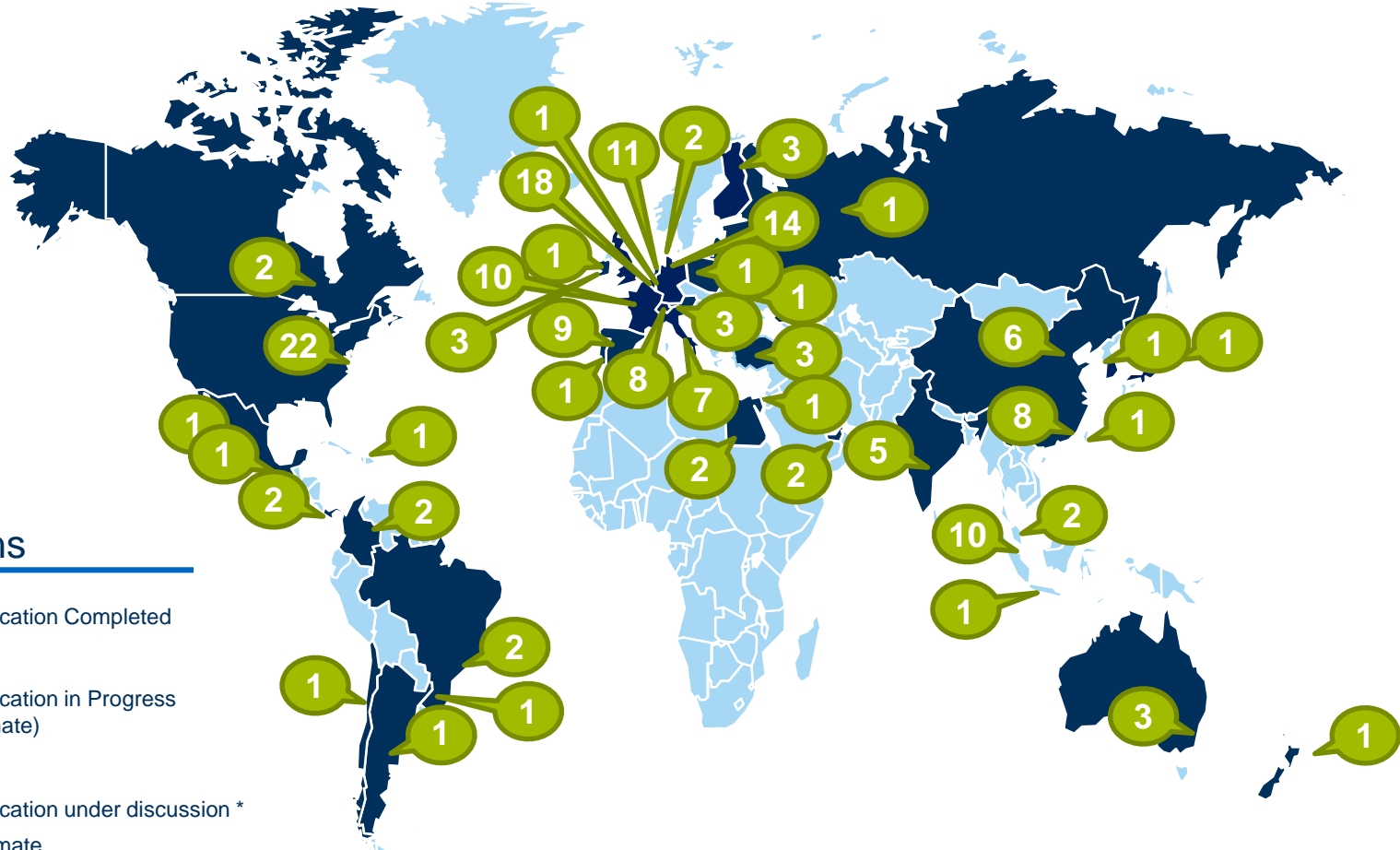


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# CEIV Pharma (Certified Entities)

## Certified Pharmaceutical Trade Lanes Development

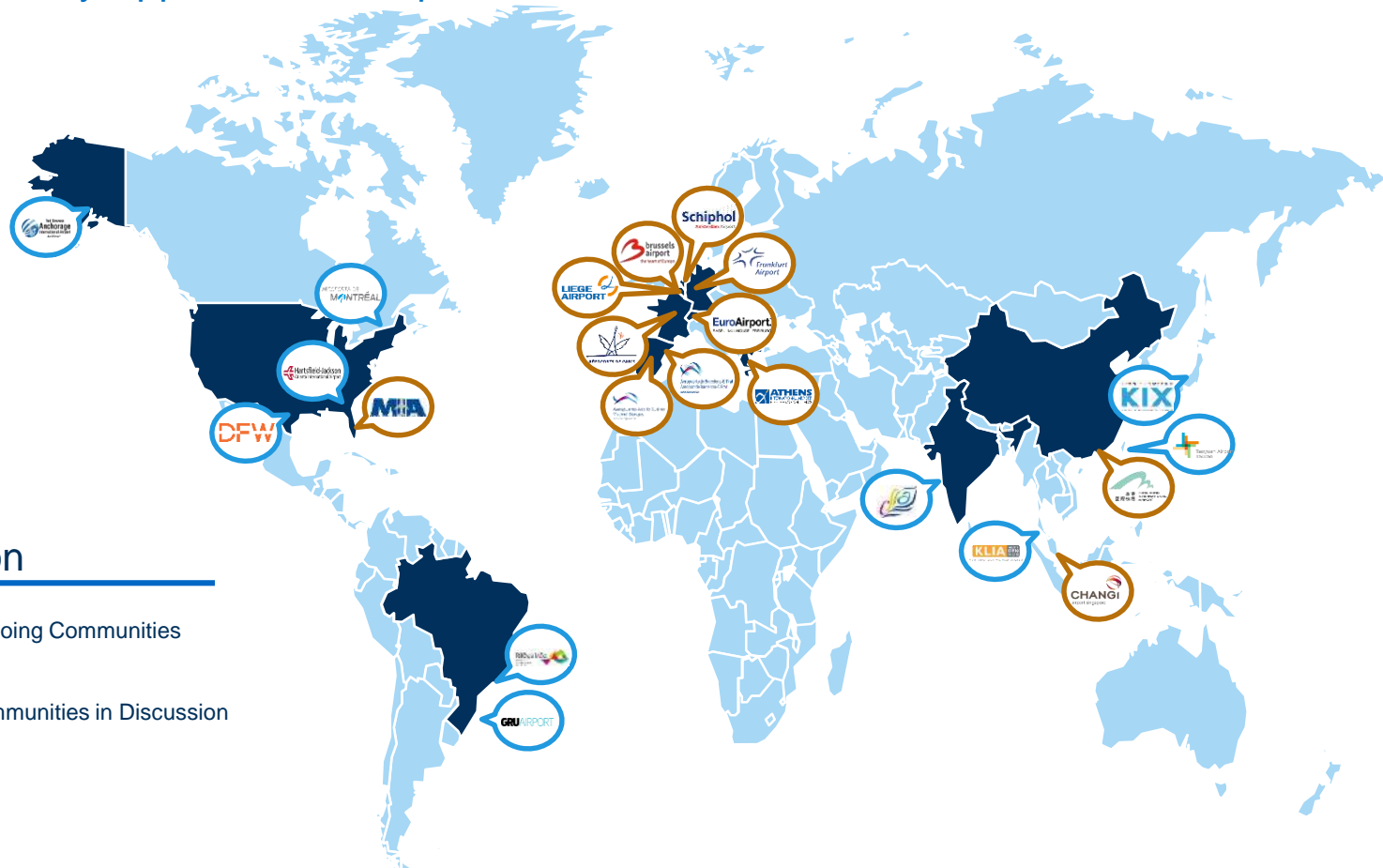


### Locations

- 222 Certification Completed
  - +75 Certification in Progress (estimate)
  - +99 Certification under discussion \*
- \* Estimate

# CEIV Pharma (Community Approach)

## Community Approach Development Worldwide



### Location

- 12** Ongoing Communities
- 9** Communities in Discussion

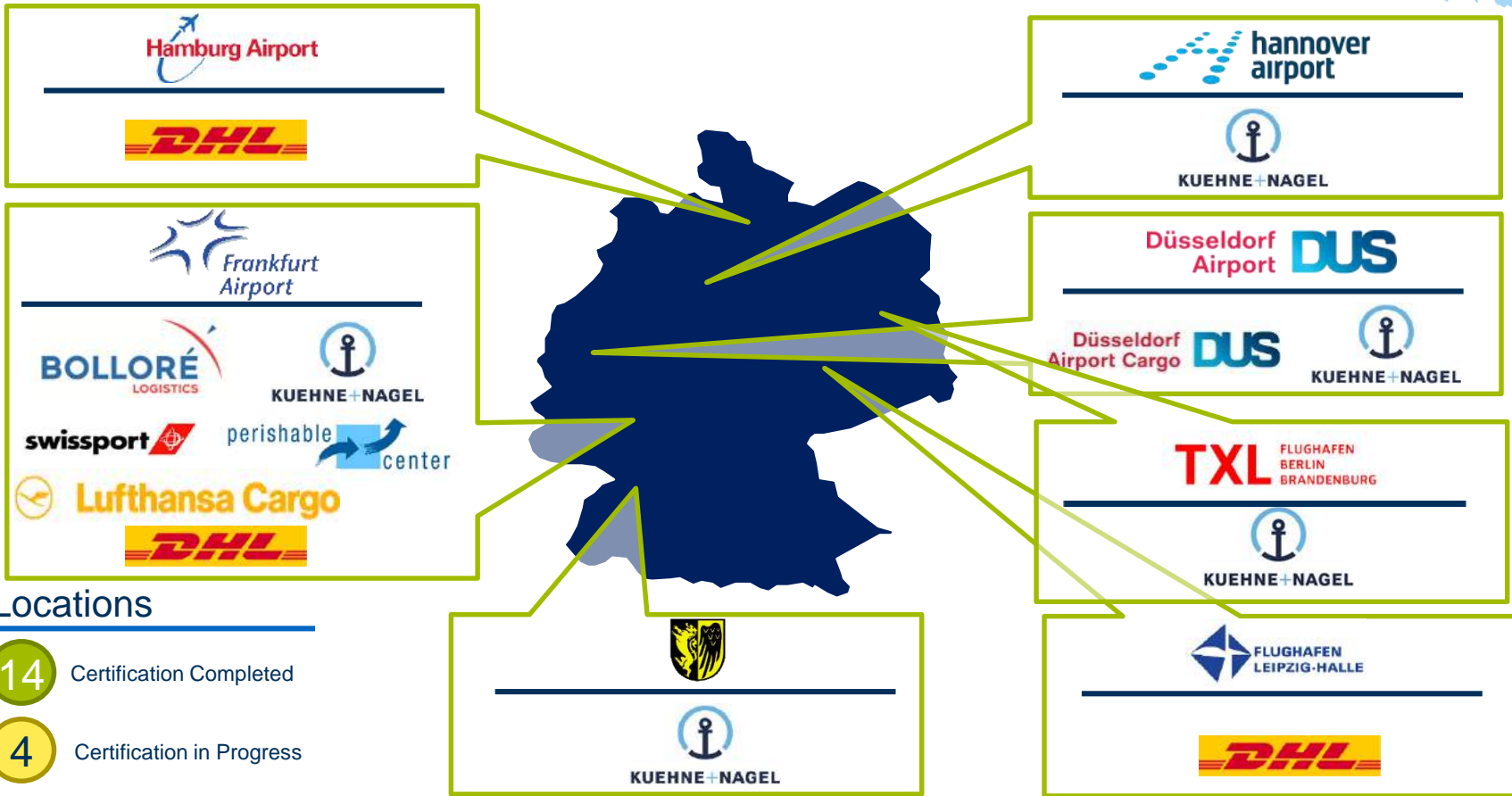
# CEIV Pharma (Community Approach)

## Community Approach Development Europe

### Location

**64** Stations participating in Community Approach in Europe

# CEIV Pharma (Certified) Germany



## Locations

- 14 Certification Completed
- 4 Certification in Progress

# CEIV Pharma (in progress)

## Germany



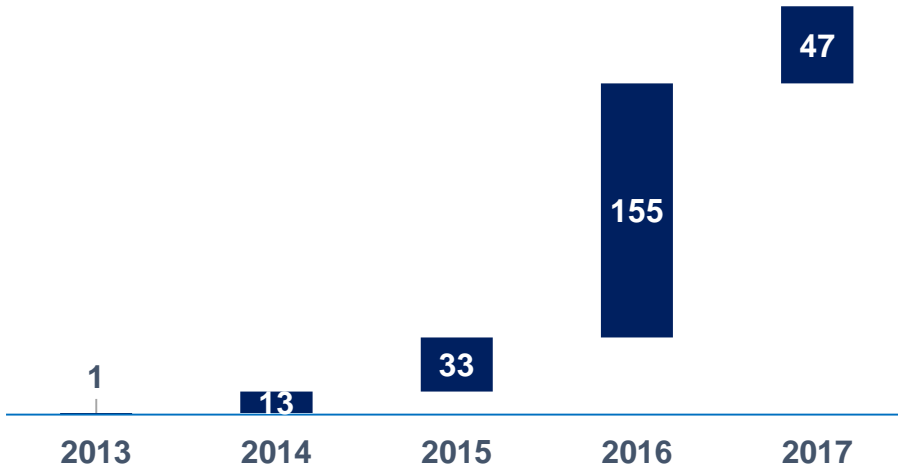
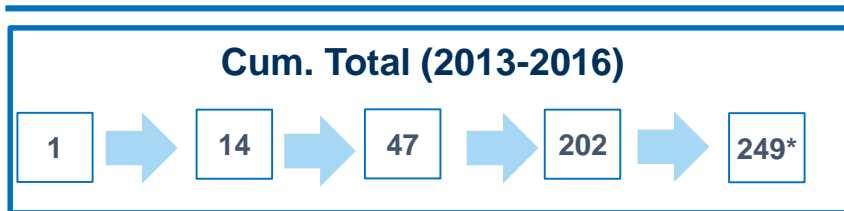
### Locations

- 14 Certification Completed
- 4 Certification in Progress

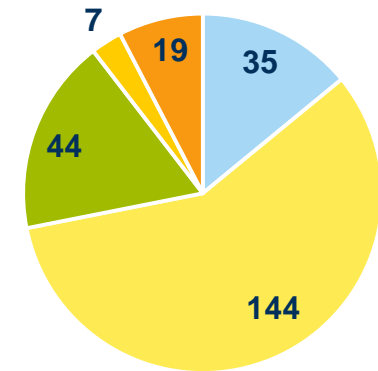
## Number of Entities Assessed

IATA expects to have assessed 249 entities by end of 2017 ...and counting

Entities assessed 2013 - 2016;  
in no. of entities assessed



Entities assessed / region in 2013 -2016;  
in no. of entities assessed



■ Area 3 ■ Area 2 ■ Area 1 ■ Area 4 ■ Area 5

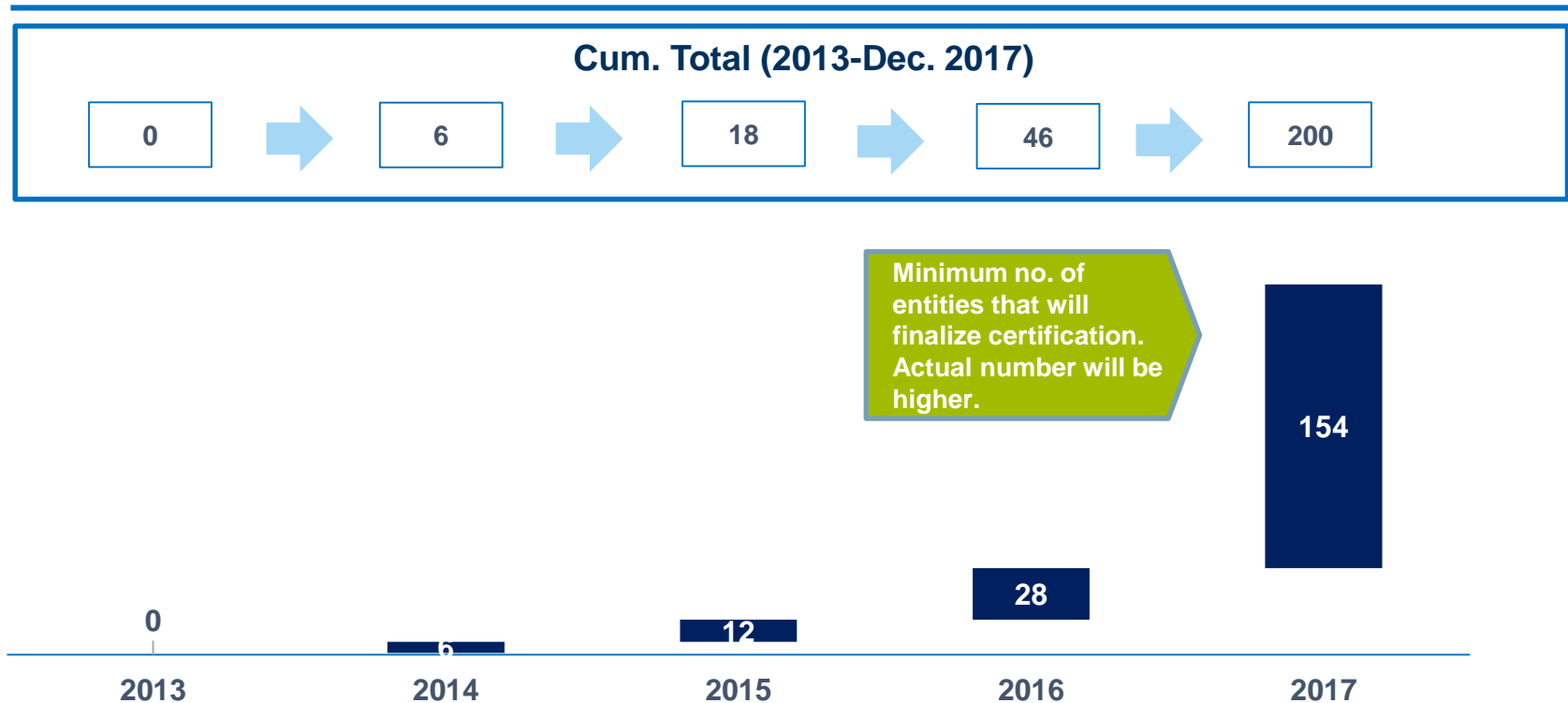
Area 1: The Americas  
Area 2: Europe / CIS  
Area 3: Asia / Pacific  
Area 4: MENA / Africa  
Area 5: North Asia

Source: IATA

## Number of Entities Certified

IATA expects to have a minimum of +190 entities certified by the end of the year... and counting

Entities certified 2013 - 2017;  
in no. of entities certified



Source: IATA



# Thank you!

**Beverly Seebach**  
Campaign Manager /  
Regional Cargo Manager

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+49 (0) 69 2425 3651

**For further information, contact:**

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Assistant Director, Cargo/Ground Operations  
+ CEIV Consulting, IATA  
Miami, FL

[SchaeferR@iata.org](mailto:SchaeferR@iata.org)  
+1 305 779 9873



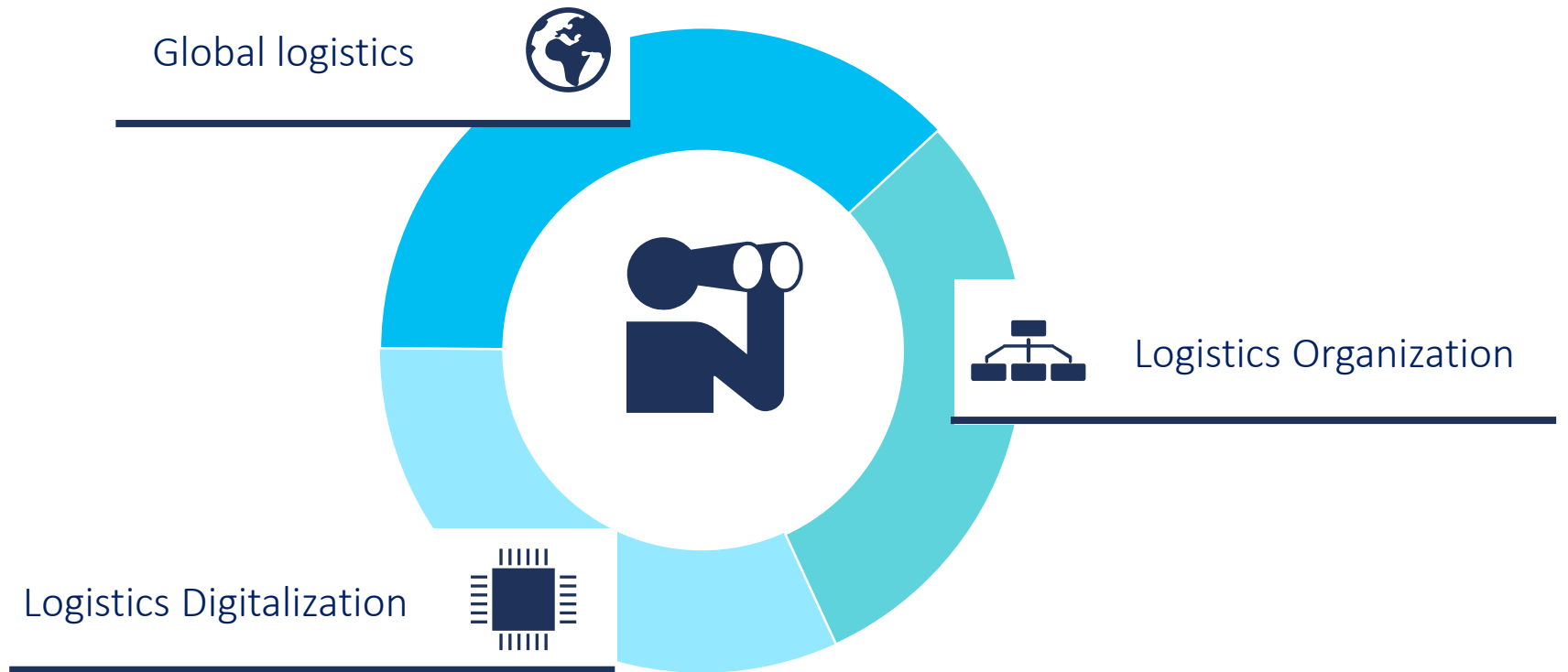
# Trends in Pharma Logistics

Constantin Reuter

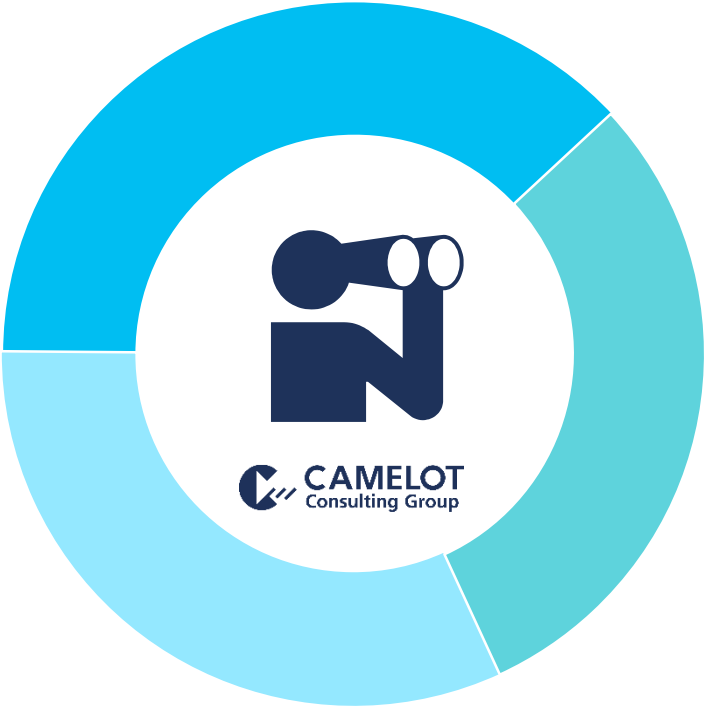
Frankfurt, November 2017



## Pharma Logistics Trends



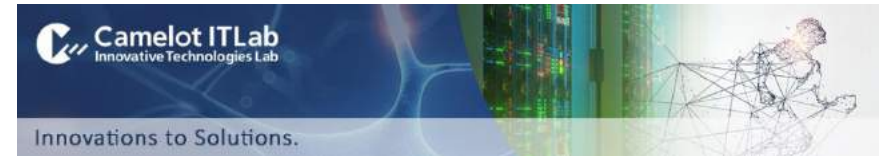
# Pharma Logistics Trends



## Value chain management at the leading edge – from strategy to solutions



- ▶ CAMELOT Management Consultants: Thought Leader in **Value Chain Management** for more than 20 years
- ▶ **Global industry specialist** in Life Sciences, Chemicals, Consumer Packaged Goods and Industrial Manufacturing
- ▶ Specialized expertise for **superior project quality** and results

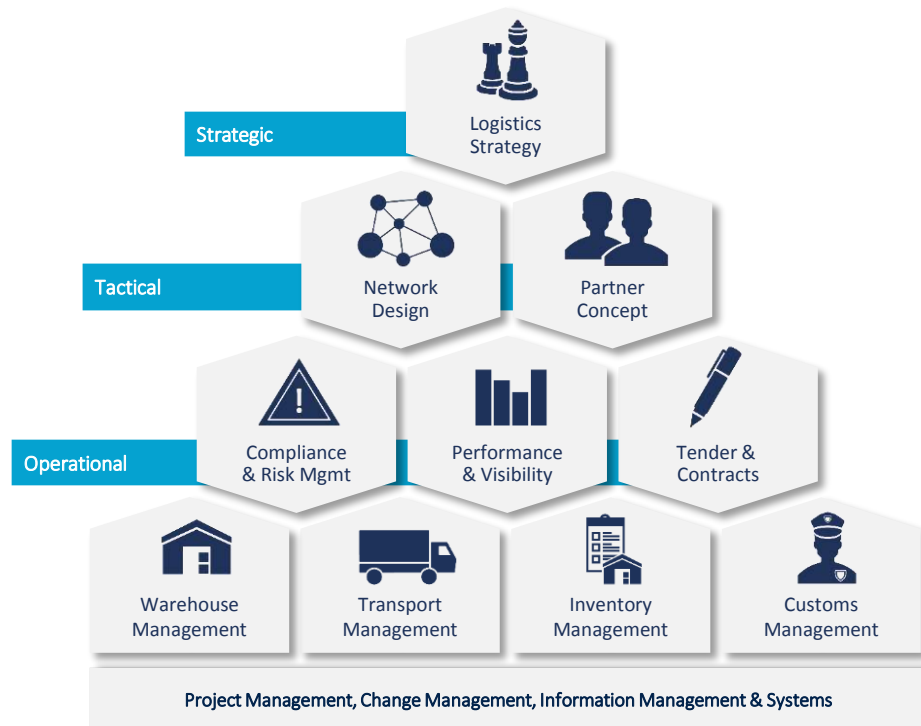


- ▶ Camelot **Innovative Technologies Lab** is our incubator for **Digital Innovations** and business applications
- ▶ **Co-Innovation Partnerships** with the leading software providers such as SAP SE & IBM
- ▶ Data-centric and **digital business solutions**



# Camelot gets regular latest market insights through client projects and regular pharma trends survey “Pharma Management Radar”

## Logistics Projects with Life Science companies



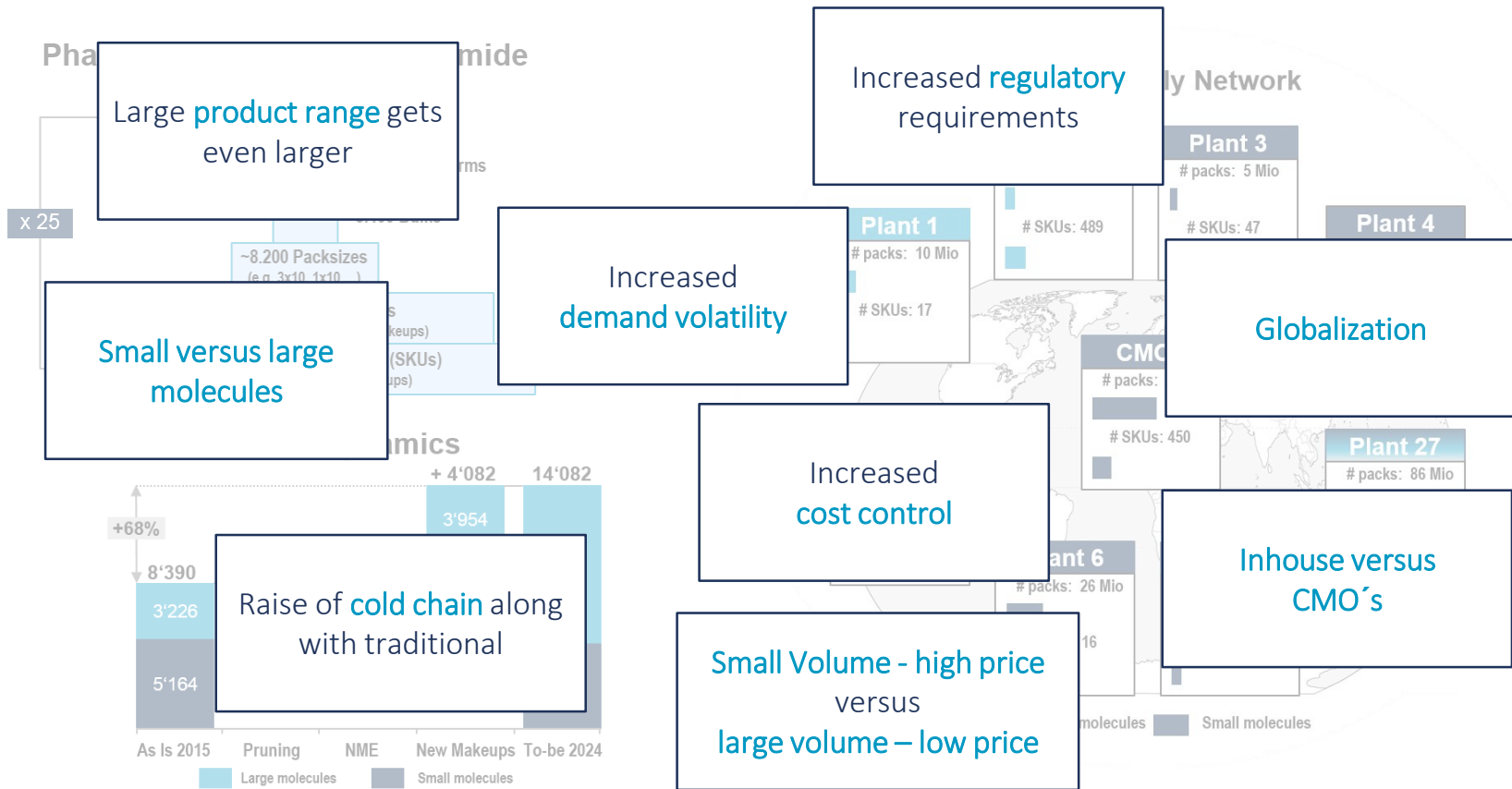
## Market surveys



## Pharma Logistics Trends



# Three “real life” examples illustrate the complexity of Pharma Supply Chains



## In global logistics network design projects we often see typical regional differences

### North America

- ▶ Mature markets, limited growth
- ▶ Growth with new products
- ▶ **Customer centricity – new services?**

### Latin America

- ▶ Emerging markets
- ▶ Difficult distribution & conditions
- ▶ **Free-trade zones, regional hubs?**

### Europe

- ▶ Mature markets, free circulation
- ▶ Often still historically grown setups
- ▶ **Consolidation, service levels?**

### Middle East & Africa

- ▶ Growing markets
- ▶ Different maturity, complexity
- ▶ **Transparency, alternative solutions?**

### Asia

- ▶ Mix of mature & emerging
- ▶ Local production tax benefits
- ▶ **Regional hubs, country setups?**

- ▶ **Regional import/ export hubs/ consolidation hubs?, Interregional flows, air versus sea?**

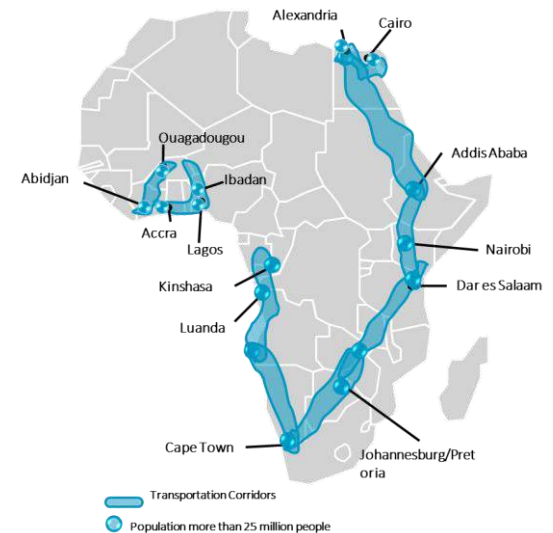




Camelot visited over a dozen countries to assess pharma distribution situations



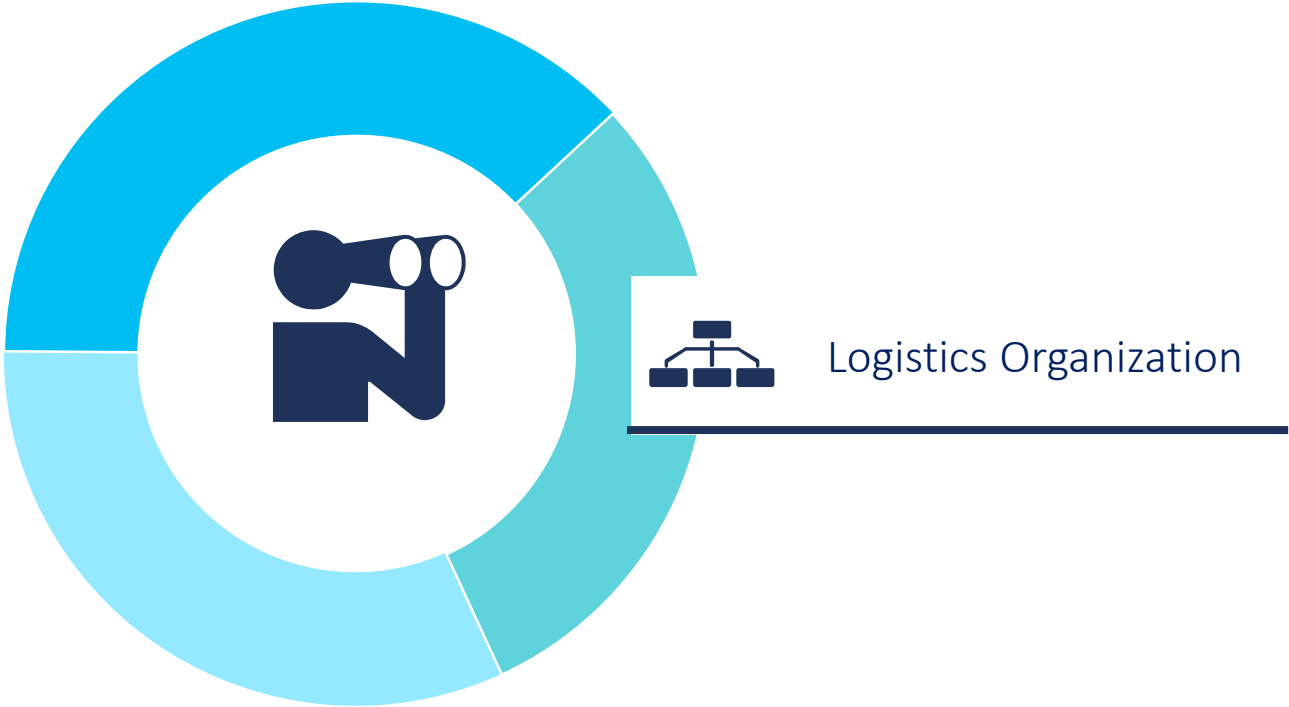
- ▶ Important **growth potential** for pharma
- ▶ Future opportunities with fast **growing cities**
- ▶ **Direct sell-to-distributor** model
- ▶ Issue of **limited transparency** in the market
- ▶ **Volatility & uncertainty**
- ▶ High **distribution costs and mark-ups**
- ▶ Logistics **infrastructure is developing**
- ▶ More **regional possibilities** and secure transport corridors



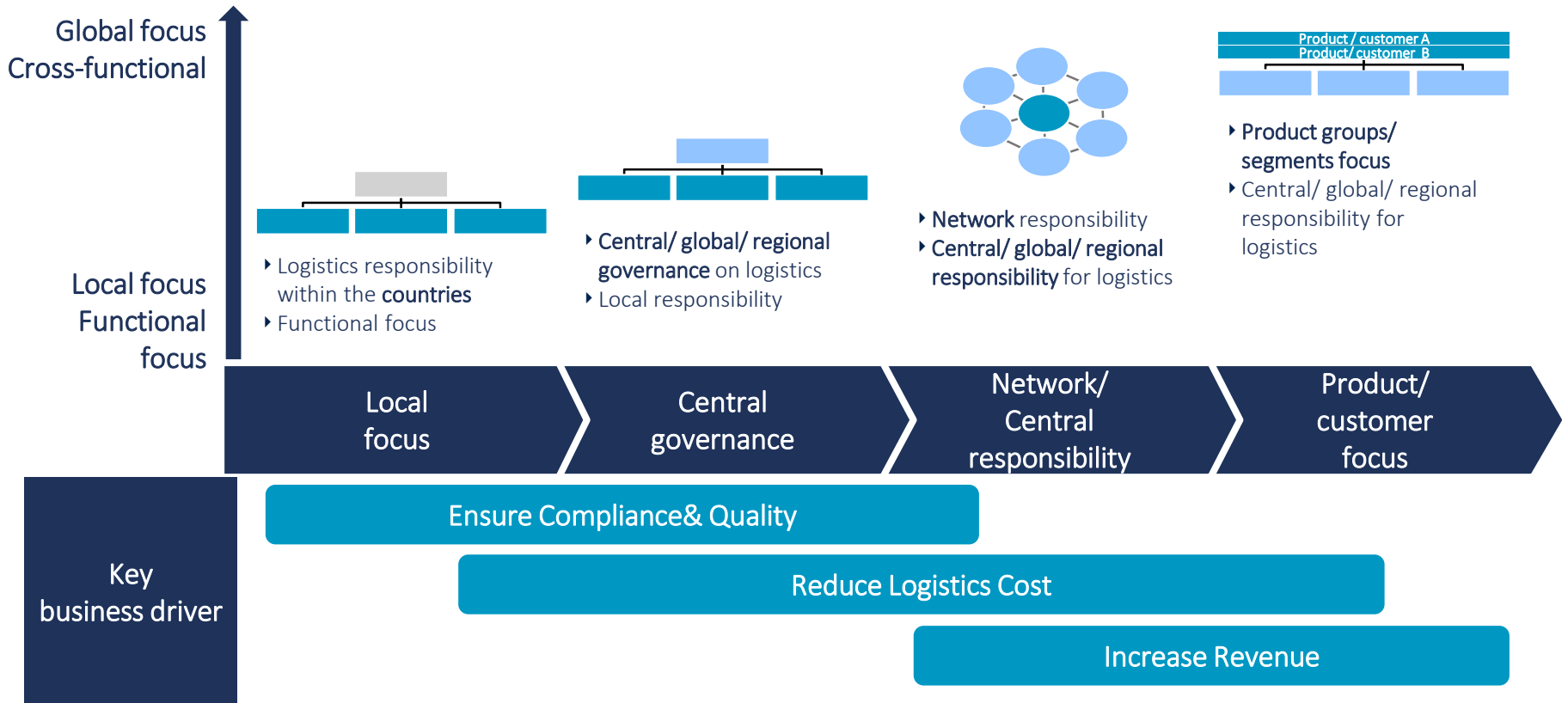
Source: Camelot Management Consultants – “Navigating the labyrinth of Pharma Distribution in Africa”



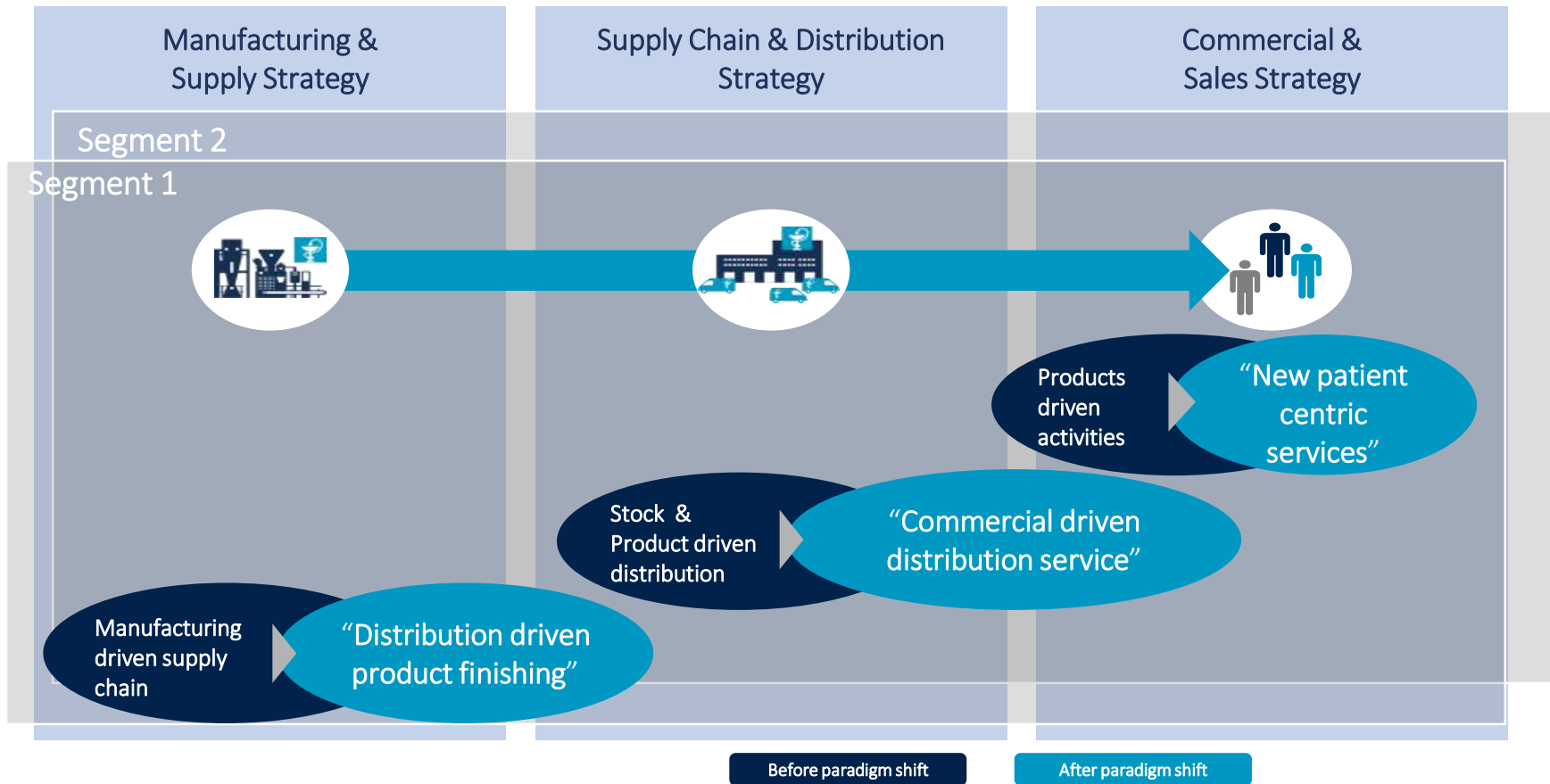
# Pharma Logistics Trends



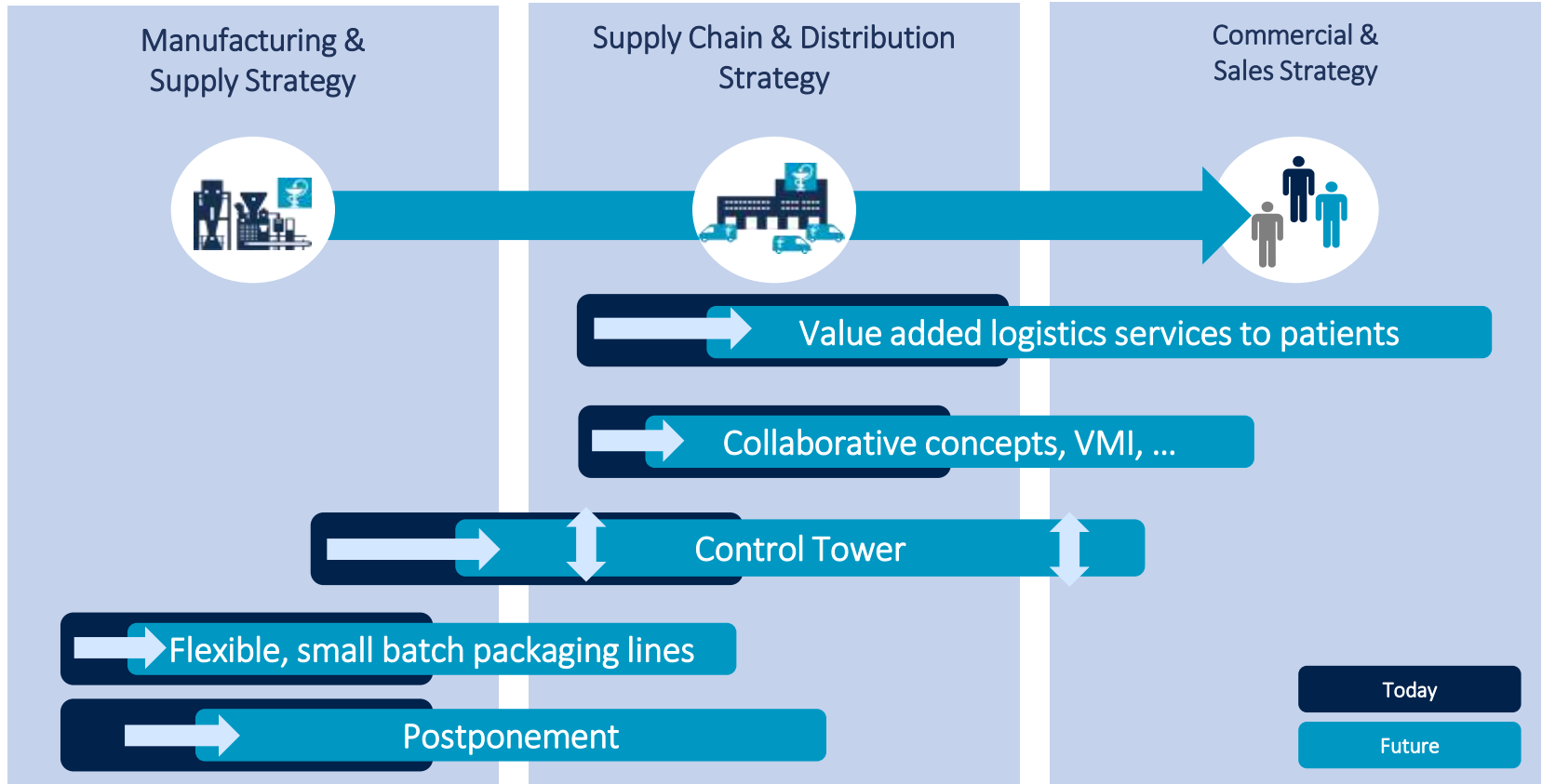
From Various Pharma Logistics Projects Camelot observes, that the Logistics responsibilities are increasingly centralized



# Paradigm shifts: Integrated strategies enable new value creation across the value chain



## Increased end-to-end supply chain focus requests new concepts from logistics

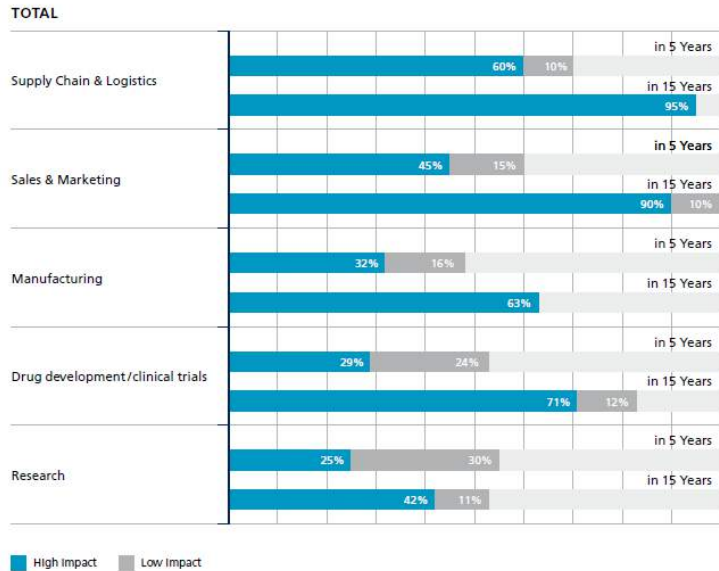


## Pharma Logistics Trends



# Pharma Logistics Digitalization

## Camelot Pharma Management Survey 2015 (IOT)



**Question 8:**  
In which functional area will IoT have the strongest impact in the Life Sciences industry in 5 and 15 years?

## Camelot Pharma Management Survey 2017

### IMPACT OF DIGITALIZATION TODAY



### IMPACT OF DIGITALIZATION IN 5 YEARS



We see different maturity levels when talking about digitalization

## Automate & Connect

### Automation of processes

Electronic data exchange

Products with digital features  
(e.g. sensors)

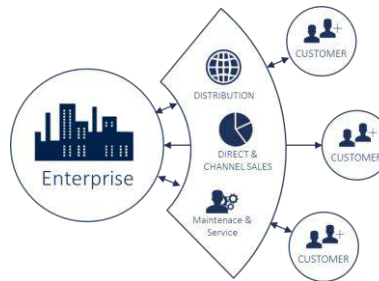


## Integrate & Innovate

### Process innovation

Digital products and data services

Customer centric solutions

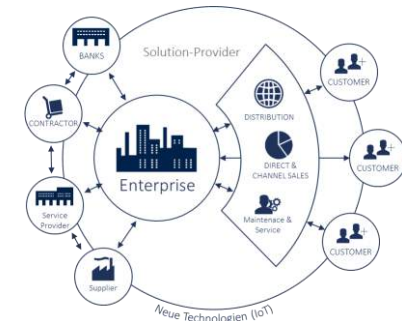


## Collaborate & Convert

New/ enhanced **business models**,  
**different services**

Business Partner collaboration  
to offer complete solutions

Customer centric eco-  
system solutions



Digital Transformation process





# Digital Transformation for Pharma Logistics

## Automate & Connect



- ▶ Automation logistics processes
- ▶ Tracking & Tracing
- ▶ Smart sensors

## Integrate & Innovate



- ▶ Extended Supply Chain Visibility and control towers
- ▶ Serialization, risk monitoring
- ▶ Machine Learning, advanced analytics, predictive

## Collaborate & Convert

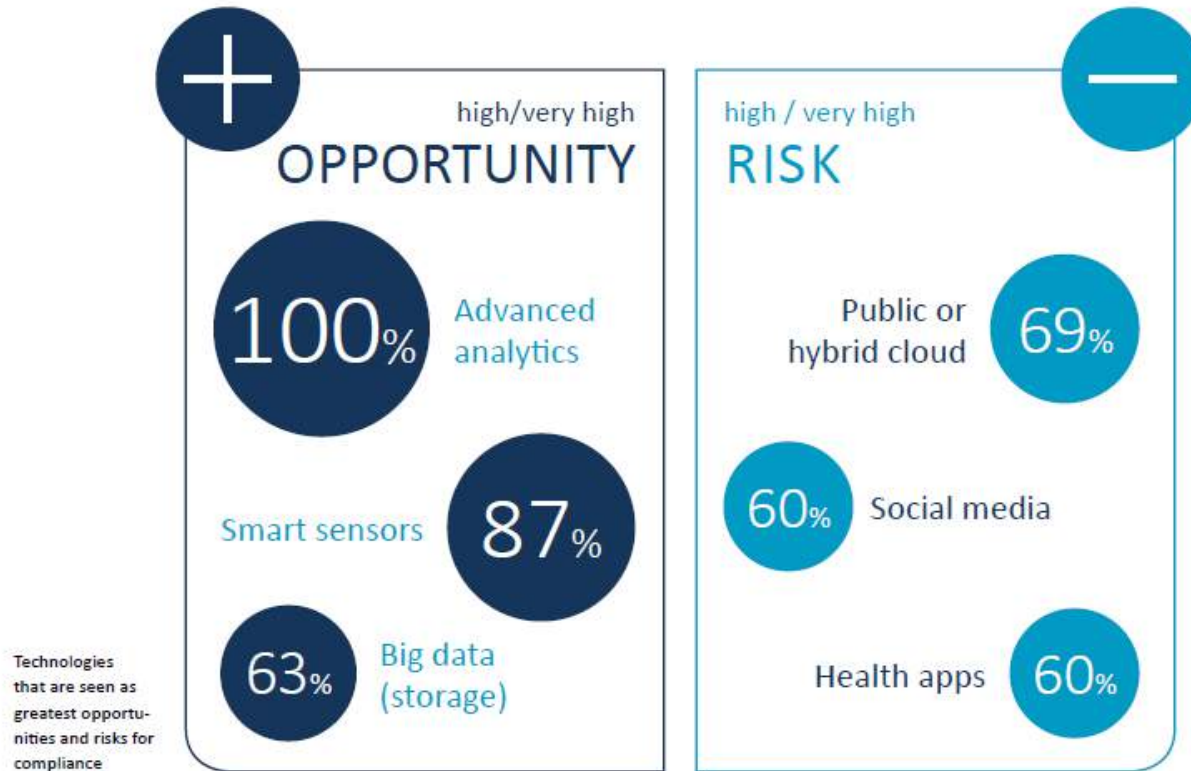


- ▶ Patient centric health services offering value added logistics services for end-customers
- ▶ Blockchain platform solutions e.g. exchange of patient data
- ▶ New companies entering Healthcare e.g. Amazon

Digital Transformation process



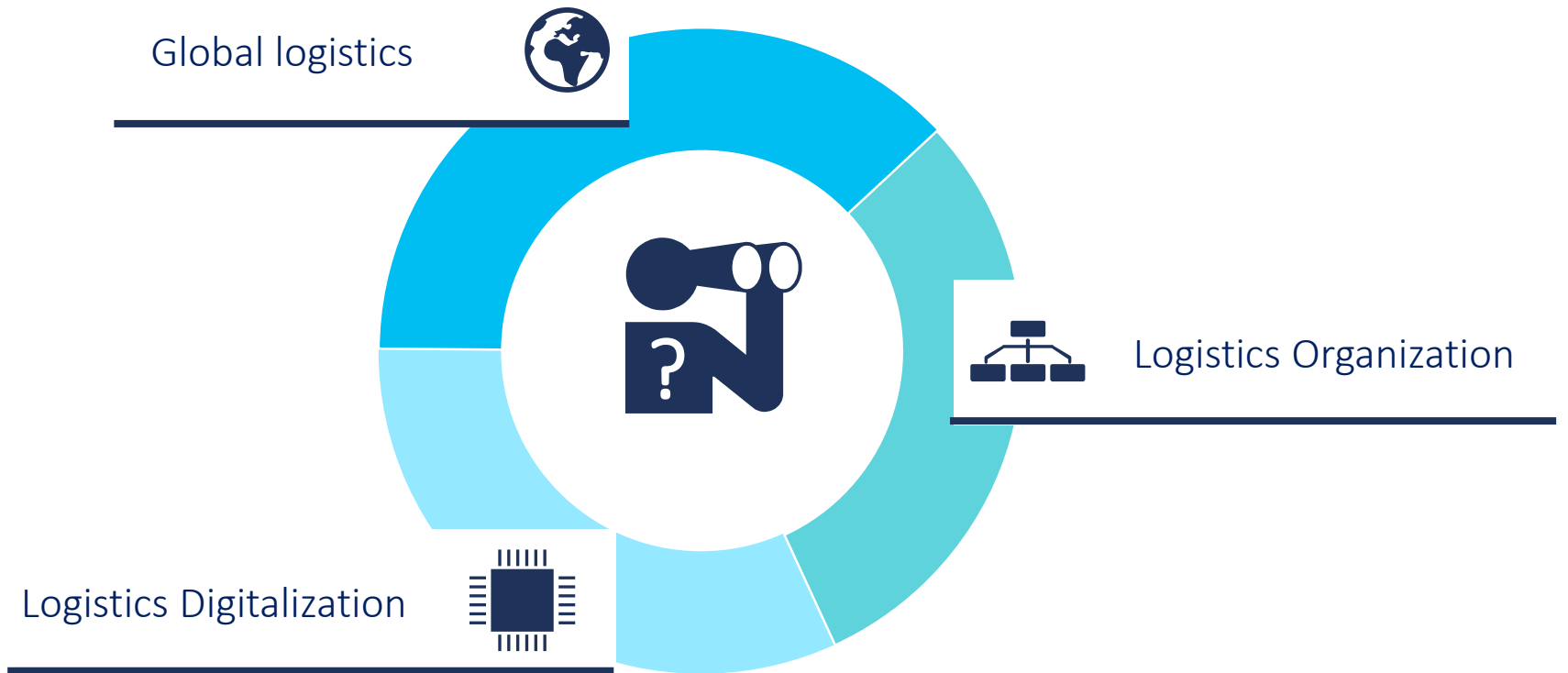
## Technologies that are seen as greatest opportunities and risks for compliance



Source: Camelot Management Consultants – “Navigating the labyrinth of Pharma Distribution in Africa”



## Pharma Logistics Trends



# Contact

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## Andreas Gmür

Partner – Head of Logistics Practice

CAMELOT Management Consultants

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**Ziel:** Austausch zwischen der Pharma-Industrie und den Luftfrachtmachern (FRA)  
zu vier verschiedenen Fachthemen

**Gruppen:** 4 Gruppen à 7-8 Personen  
50% Pharmazeuten / 50% Luftfrachtmacher

**Zeit:** Rotation mit dem Uhrzeigersinn nach 15 Minuten

**Doku:** Dokumentation der wesentlichen Aussagen auf den Flipcharts

## World Café (Themen)

**Wie definieren Sie eine state-of-the-art Abfertigung von PIL in der Luftfracht?**

Infrastruktur?  
Personal?  
Prozesse?

**Welche Bedeutung haben Zertifizierungen (z.B. IATA CEIV / GDP) für die Pharma-Industrie?**

Vertrauen in die Zertifikate?  
Relevanz bei Ausschreibung?  
Reduzierung von Audits?

**Wie kann die Zusammenarbeit zwischen Pharma-Industrie und Luftfracht verbessert werden?**

Dialogplattformen?  
Datenaustausch?  
...

Schutz der Produktintegrität ↑



Geschwindigkeit ↑

Kosten ↓

**Beverly Seebach** (Rednerin)

**Andreas Gmür** (Redner)

**Joachim von Winning** (Redner)

**Sebastian Hering** (Check-In u. Back-Office)

**Mandy Anslinger** (Back-Office)

**Elke Stöber** (Back-Office)

**Marion Hildreth** (Back-Office)

**InterCity Hotel** (Location & Catering)



WIR SIND DIE

**LUFT  
FRACHT  
MACHER**

WE ARE THE

**AIR  
FREIGHTERS**