COVID-19 VACCINE DISTRIBUTION

Lessons learned from a logistics perspective:
Challenges & opportunities to enhance pandemic resiliency

DHL | WTO Technical Workshop Covid-19 Vaccine | February 11, 2022
Covid-19 challenged all of us – We had to adapt quickly

CHALLENGES & IMPLICATIONS FOR COVID-19 VACCINE SUPPLY CHAIN

• With the development of the first COVID-19 vaccines, the global vaccine supply chain and its key players faced various challenges, including:

  - An estimated 10 billion doses were needed in 2021. Estimates indicate the need of 7-9 billion doses for 2022 and beyond
  - Strict cold chain storage requirements
  - Need for trade facilitation measures to assure supply chain effectiveness
  - Leveraging from lessons learned during import/export of PPE at the beginning of COVID-19 outbreak

• Many countries implemented measures warranting the efficient and expedited import of vaccines by removing import tariff and non-tariff barriers

Estimated additional vaccine quantities for 2022 and beyond (Billions)

Gov. authorities play a key role to ensure efficient/effective delivery of vaccines

- Trade regulatory & enforcement agencies face the challenge to ensure safety/security, whilst guaranteeing an expedite clearance of goods
- WTO and WCO created dedicated websites raising awareness and assisting authorities and stakeholders on the measures to facilitate the export and import of vaccines and related products
  - Many steps needed are already covered by international instruments/tools, e.g. TFA, RKC, Immediate Release Guidelines
    - Pre-arrival processing/clearance (advanced electronic data)
    - Digital risk-based Customs clearance (expedite clearance + protect health by minimizing human contact)
    - Coordinated border management
    - Exemption from export restrictions, fiscal charges & regulatory procedures for import permits
    - Stakeholder engagement
      - Engaging key stakeholders such as the WHO and ICC was crucial
      - Setting up a central taskforce
DHL has globally leading capabilities in logistics for Life Science and Healthcare goods

### AIR THERMONET
- **118** life sciences–certified air freight stations (IATA CEIV)

### OCEAN THERMONET
- **30+** certified reefer competence center for ocean freight

#### Good Distribution Practice (GDP) COMPLIANCE + VISIBILITY + ANALYTICS
- Customer specific operational procedures & GDP compliant SOPs
- Global validated life sciences dedicated IT platform (LifeTrack)
- Trade lane risk assessment & data analytics

---

#### AIR THERMONET
- **170+** GDP-qualified warehouses in 43 countries
- **23** clinical trials depots serving 80 countries
- **150** countries served via Medical Express
- **250** pharmacists in our warehouses

#### TEMPERATURE
- **15-25°C**
- **2-8°C**
- up to **-196 °C**

...to tackle the challenge of Covid-19 we have founded a global task force and upgraded in key areas
The complex global vaccine supply chain was ramped-up successfully

TRUSTED PARTNER FOR COVID-19 VACCINES LOGISTICS WORLDWIDE

KEY CONTRIBUTIONS TO DATE:

- 2 B. doses distributed
- 175 countries served
- 350 facilities involved in the process
- 50 collaborations with pharma & public sector
- 10 new and dedicated services introduced
Lessons learned from a logistics perspective

- DHL data shows that there have been no major challenges or delays pertaining to clearance of COVID-19 vaccines (Most shipments pre-cleared and released immediately due to the well-coordinated logistic effort between all stakeholders, regulatory engagement, high visibility and importance of vaccine imports for countries).

- A short term adaption of border management processes will not be sufficient to counter the current or future pandemics in the long-term.

- No globally or regionally standardized and harmonized border processes are in place for vaccine imports, resulting in the need to establish SOPs for each country.

- Unlike COVID-19 vaccine supply chains, the import of COVID-19 related ancillary supplies (e.g. needles, dilutes, PPE) and medicines is still subject to clearance and import processing delays.
A more connected world offers the best prospects for a healthy, prosperous, and sustainable future

Key recommendations

1. **Rethink the approach to border management** and revisit the long known challenge to **expediting the clearance of essential medical equipment and humanitarian aid** (Coordinated border management + well-coordinated public-private logistic effort)

2. Keep **streamlined and digitalized processes**, and further support the cross-border movement by accelerating the implementation of the TFA and adopting standard procedures based on international standards like WCO

3. **Adapt the regulatory framework and guidelines** accordingly and allow the private sector to comment prior to introduction

4. **Extend facilitation measures beyond COVID-19 vaccines** also to related products as they have proven their value and benefit during the pandemic and will support to build back better economically and to tackle future crises
THANK YOU