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FOREWORD

TrainForTrade special course on Building Port Resilience Against Pandemics

Background of the project

In the global pandemic we are currently living through, various United Nations entities combined their efforts to propose a joint project that will implement standards, guidelines, metrics, tools and methodologies to immediately help national governments, including Customs and other border agencies, port authorities, and the business community worldwide, to keep transport networks and borders operational. This will facilitate the flow of goods and services, while containing the further spread of the COVID-19 virus. One of its components focuses on port resilience against invisible threats and on keeping ports safe and operational during pandemics.

TrainForTrade's project includes the exchange of best practices and new safety standards and the design and delivery of a training package to build essential skills for port community managers to help protect people and secure vital trade in ports (TFT Special Course "Building Port Resilience Against Pandemics" or "BPR"). More details on this special course can be found here: tft.unctad.org/port-management/building-port-resilience/.

Additionally, a dedicated webpage on the TFT platform has been set up to provide information on port responsiveness against pandemics, including best practices, recommendations, crisis protocol and reference documents: ftt.unctad.org/ports-covid-19.

Design of the course curriculum (eDACUM Process)

The purpose of the phase in the TrainForTrade methodology called Design a Curriculum (DACUM) is to brainstorm on the subject of the new course being designed, i.e. "Port resilience against pandemics". The goals are to define the objectives and content of job aids to be developed, write training objectives, define the target population, and describe what the trainees would be able to do as a result of the training. Furthermore, DACUM proposes how to design tests for each objective and how to sequence the objectives and group them into modules to form a curriculum.

The DACUM process for this special course was held virtually for the first time in June 2020 and over three 75-minute sessions via Microsoft Teams and with the use of Padlet platforms. A total of 21 representatives from 14 port entities around the world took part in the working sessions.

Objective

The objective of the BPR special course is to support the implementation of measures to prepare for and alleviate contingencies related to a pandemic in a port, port terminals, and other seaport actors.



More specifically, at the end of the course, participants will be able to:

- Describe and prepare crisis protocols
- Prepare communication strategies and implement effective digital communication tools
- Appreciate the potential impacts of pandemics on staff well-being and address any mental and emotional distress-related issues
- Identify appropriate technology solutions for alternative work arrangements
- Assess disruption scenarios for cargoes and passengers
- Identify legal and financial risks
- Define appropriate mitigation measures

Course target population

This special course is addressed to all actors involved in international trade, especially those involved with port operations. The primary and secondary target population for the course are representatives from the following organizations:

Primary target:

- Port Authorities: these include middle and senior managers
- Private port management companies
- Port community operators: these include freight forwards, hauliers, customs agents, ship agents
- Port agents: pilots, harbour masters
- Line Ministries: Ministry of Transport, Ministry of Health, Ministry of Commerce

Secondary target:

- · Trade Facilitation Committees
- Port safety and security officers
- Trade unions
- Stevedores
- Local authorities



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LIST OF ABBREVIATIONS

BPR Building Port Resilience Against Pandemics

TFT TrainForTrade

UNCTAD United Nations Conference on Trade and Development

WHO World Health Organisation

CDC Centers for Disease Control and Prevention

PC Personal Computer

VPN Virtual Private Network

VDI Virtual Desktop Infrastructure

RDP Remote Desktop Protocol IPSec Internet Protocol security

SSL Secure Sockets Layer
LAN Local Area Network

WOL Wake On Lan

NAC Network Access Control

MDH Maritime Declaration of Health

FMEA Failure Mode and Effective Analysis

CAPEX Capital Expenditures





INTRODUCTION

At the time of writing this document, the whole world, almost without exception, has been hit by the COVID19 pandemic, also known as the coronavirus pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARSCoV2). While it can be said that no country anticipated the extent and consequences of the pandemic, there is a foreseeable economic crisis that may substantially modify the ways of operating in a globalized world.

In light of all that has happened, this document aims to synthesize and propose the elements and conditions for port organizations to increase and strengthen the factors that allow them to withstand the disastrous effects of pandemics and to recover as quickly and efficiently as possible. In short, the aim is to turn ports into resilient organizations.

The declaration by the World Health Organization (WHO) of a coronavirus pandemic was preceded by a multitude of information suffering from a variety of biases, which ruled out a uniform strategy in the face of the challenge of preventing or minimizing contagion and its effects on different countries. Another problem with the information, which therefore influenced the approach to tackling the problem, was that the danger-ousness of the disease was downplayed, with many comparing it to the common flu. At the same time, there were certain events—large-scale outbreaks in cities in China and Italy—which should have done more to alert the responsible authorities.

The reality that eventually prevailed was the lengthy global paralysis of activity (which has not yet ended), except, of course, for the necessary provision of food and sanitation.

Precisely because of this need to provide essential food and services ports have become critical elements for the assurance of the supply chain. For this reason it is vital to ensure that ports are resilient and prepared to withstand such severe attacks, and have the necessary elements and sufficient momentum to be drivers of a prompt and effective recovery.

Scope

The World Health Organization declared the novel coronavirus outbreak a public health emergency of international concern – in other words, a pandemic – on 11 March 2020.

The effects of a rapid outbreak of a pandemic, on our personal lives and on society as a whole, modifies our behaviour in all areas, both at home and at work. Numerous studies on said impact, from a multitude of different perspectives, produced a large amount of information, changes in regulations, protocols, recommendations, etc. This excess of information makes it extremely difficult to manage correctly, especially when trying to apply it. Consequently, it can have a negative impact on decision-making.

Keeping ports operating is of vital importance in a pandemic. Ports ensure that the world's medical supplies, food, fuel, and raw materials, as well as manufactured goods and components key to the preservation of employment, continue to reach their intended destinations. In this context, the scope of this Special Course is to provide



port managers with precise information so they can understand what they are facing and how to act to curb the potential spread of infectious diseases. The objectives are:

- To guarantee the health of workers and users of the port. This guide presents
 a series of recommendations and good practices to prevent or minimize infections in the port areas, taking into account activities and operations, as well as
 an assessment of the main risks.
- To facilitate the preparation of the ports' capabilities to implement the protocols to guarantee the health safety of operators, users, and visitors. The technologies are evaluated, as well as the flow of goods for the development of procedures and safe spaces.

This manual therefore aims to analyse and evaluate available information by collecting both scientific evidence and relevant information articles for port managers, providing examples and lessons learned in the implementation of good practices (in the case of the Port of Valencia as well as other ports).

Its main objective is to support the implementation of measures to prepare for pandemic-related contingencies in a port, port terminals, and other seaport structures. Furthermore, the measures compiled in this document are aimed at encouraging broad collaboration to mitigate the adverse effects of the pandemic. In doing so, this **manual** serves as a tool to inform and harmonize recommendations and instructions given at the international and national levels in pandemic preparedness and response.

This manual is divided into four sections in order to give a precise and ordered view of the different aspects to be taken into account by a port or port community in a pandemic situation. It provides a general overview as well as sets out specific actions, psychological and emotional aspects, technological tools, and actions related to ensuring the continuity of cargo flow, as the main activity of a port. The manual is structured around the following sections:

SECTION 1 Crisis protocol and communication strategy

SECTION 2 Staff management, well-being and resilience

SECTION 3 Technology preparedness

SECTION 4 Cargo flow continuity

