



Introduction and How we are Powering DP World Terminals

Baltic Ports and Shipping 2021-

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CARGOES TOS+

An end-to-end Terminal Operating Software (ZODIAC) and service provider, specialising in digital trade solutions for marine terminals.



What is CARGOES TOS+?



- TOS+ solution based on **ZODIAC** - enhances performance and optimizes operations for efficient cargo and container handling to port and terminal facilities that includes **CFS** (container freight stations), **General Cargo**, **ICDs** (intermodal container depots), and more.
- Our flagship product **ZODIAC OPS**, is a heavily supported, highly scalable operations and planning module; It is proven for marine terminals exceeding **10 million+ TEU per year** in volume.
- Our software can be **hosted on-site premises** or in **the cloud**, offering a feature-rich backend that can be integrated into real-time systems and terminal automation. machine learning, AI tools and IoT platforms to provide greater efficiency and better solutions to our clients.
- We **constantly drive research and development** efforts in machine learning, AI technologies and IoT platforms to provide greater efficiency and better solutions to our clients in the challenging world of global trade.

Introduction to the Vision



MISSION

Provide the tools and technologies that enable our customers to improve performance in an efficient, resilient and sustainable way.



VISION

Add value to Global Supply Chains by providing tomorrow's world-class solutions for today's needs.



DNA

We speak your business – we know ports & terminals!

WHO IS CARGOES TOS+?



Leading global trade enabler

We have a full range of CARGOES Terminal Operating System products including our cloud-based solutions.



We know “YOUR” business

Proven software solutions built by people with a wealth of practical port operation experience.



Global Footprint

Zodiac has offices worldwide, with hundreds of employees comprising veterans in the logistics industry, software development, support staff, and professional services personnel.



Digitalization

Specializing in digital trade solutions for freight and marine terminals.



Port solutions providers








We have a full range of CARGOES Terminal Operating System products including our cloud-based solutions.



Professional Customer Service

The team works with customers directly at each stage of the implementation and installation process.

CARGOES TOS+ COMPETENCY CENTRES – 24/7

-  Vancouver
-  London
-  Dubai
-  Cochin
-  Hong Kong
-  Lima
-  Seoul



DP WORLD TERMINALS 100% RUNNING ON ZODIAC - 2023



CARGOES TOS+ SUMMARY



39+

Active sites running on
CARGOES TOS+
(Zodiac)



18

CARGOES TOS+
(Zodiac) products



7

Region
Across
the globe

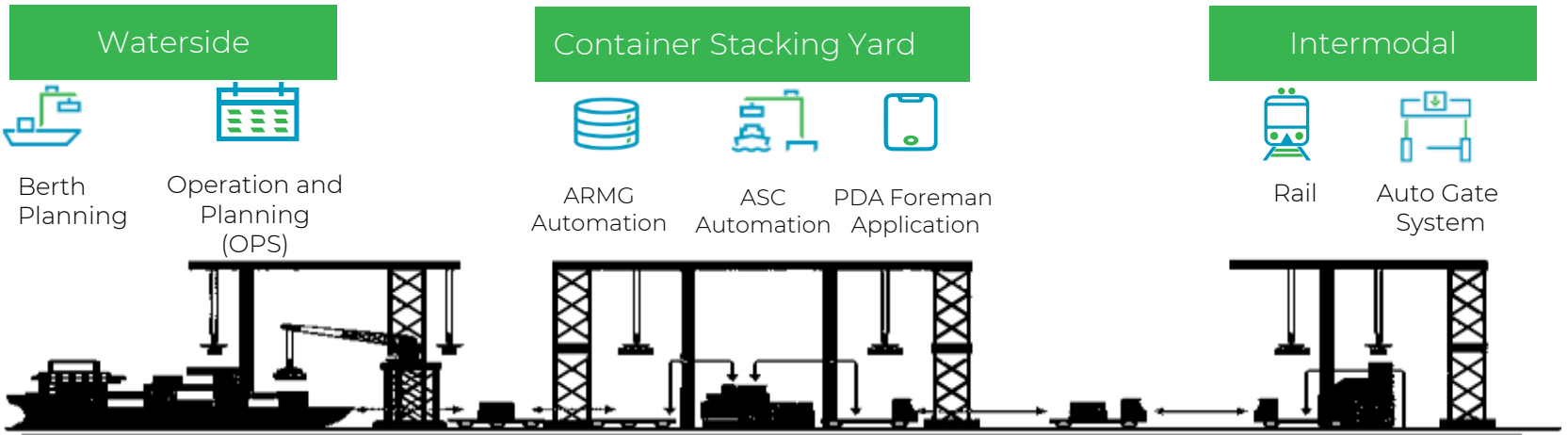


70%

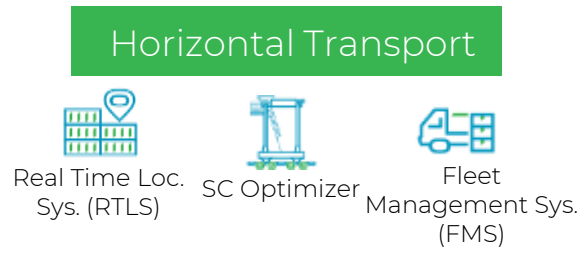
Of DP World
Terminals covered

2020 – 2021 Q1 Completed Projects

Limassol / Jebal Ali T3 / Sokhna / ATI South Harbor / ATI Batangas / Luanda



- Ship to Shore Cranes.
- Mobile Harbor Crane
- Terminal tractors
- AGVs
- Straddle Carriers
- Rubber Tire Gantry Crane Rail.
- Mounted Gantry Crane.
- Automated Stacking Cranes
- Auto Shuttle Carriers
- Reach Stackers
- Intermodal Cranes



How Can We Repeat Success Stories Together?

Zodiac 7.1 full suite for Cloud – Limassol, Cyprus

- Zodiac 7.1 full suite for Cloud with new architecture under implementation to cover multi-purpose terminal
- Target to go-live Q1. 2021 (subject to Covid19 travel ban)



Zodiac Semi-Automation – Jebel Ali T3, UAE

- T3 reopened for Zodiac staffs on the ground from September
- Zodiac operates the following areas
- Strip yard, empty yard fully
- All 197 ITVs commanded by Zodiac
- ARMGs blocks in Parallel run
- STS rollout went LIVE in December 2020



REPUTATION BUILD ON PRACTICE WITH PORTS



Rodrigo Sanchez

- Responsible for managing ATI container, general cargo and passenger terminals; two inland depots with trucking services

ATI Locations

Delivering Efficiency through Port Synergy.

DP WORLD
Limassol

Migration to Zodiac

Terminal Operating System

22 April 2021

Enable Smarter Trade

Dubai Redefining TOS as Digitalization Solutions for Ports and Terminals

Francisco Pinzon
CEO
Past experiences: Panama, Bahrain, Peru, Georgia, Djibouti, Dubai, Argelia.
Career: 21 years.
Nationality: Panama

DP World Luanda
Concession: 20 years from Jan 2021.
Immediate Investment: USD190 Millions.
Type of Terminal: Multipurpose.
Linear quay: 610 mts
Depth Alongside: 12.5 mts

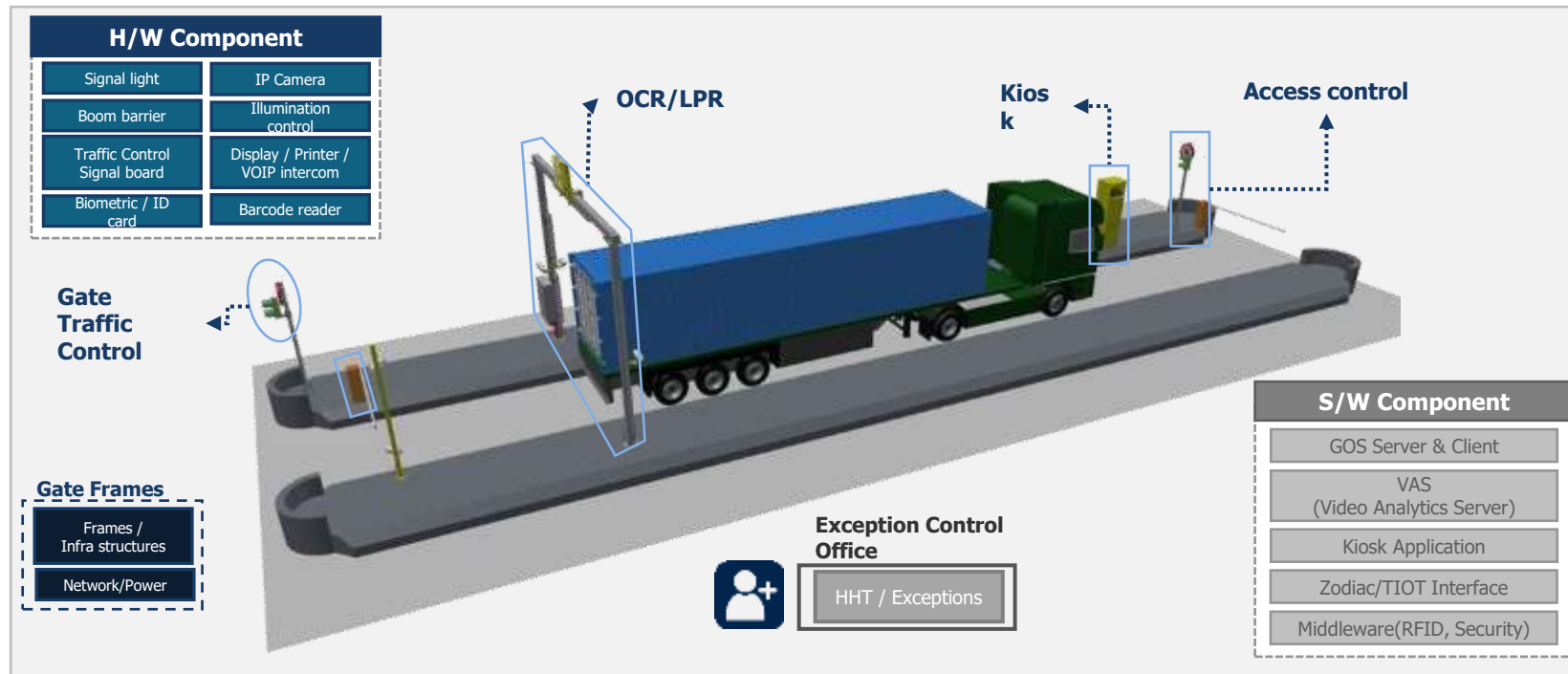
Zodiac Automated Gate System (AGS)

22 September

ZODIAC AGS

Auto Gate System (AGS)

- Integrated IT solution designed for capturing truck, container, and driver information automatically
- Deep learning Video Analytics technology is adapted to increase accuracy of recognition by self-learning.
- Automate terminal gate process with integration with Zodiac(TOS) and security system.



Test Images



Truck detection and Start/End signal control



License plate detection & Recognition



Container / ISO code detection & Recognition

Image Stitching

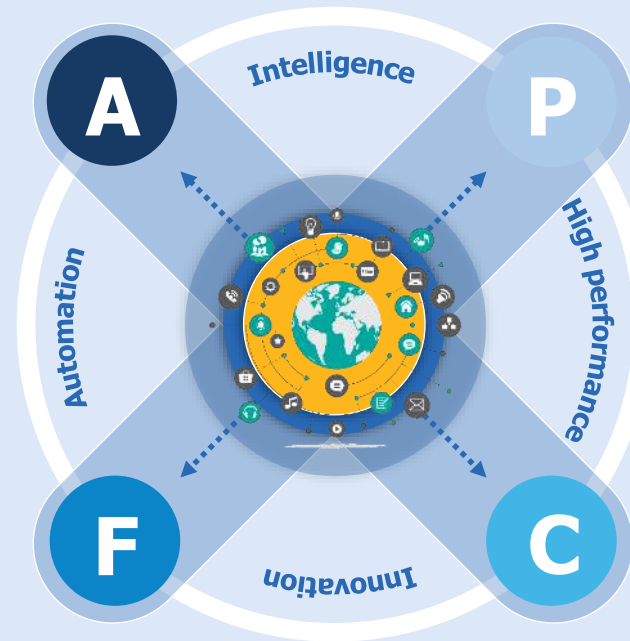
Key features of Zodiac AGS

Artificial Intelligence(AI)

- Continuous self-learning, self improving (target over 99%)
- Software driven with minimum H/W dependency
- Strong potential to future improvement (Facial recognition for safety, Automatic damage detection, Unregulated License Plate)

Flexible Design

- Support flexible gate operation process (Single gate, Double Gate layout)
- Reusing existing H/W.
- Mobility support (Mobile gate, Mobile slip)



Performance

- Accuracy increase as per size of data without any further S/W changes.
- Less maintenance, less human intervention
- Enabled with IOT concept (Real-time device monitoring, remote control, history & Statistics)

Cost-effectiveness

- Minimum H/W, less infra requirement
- Complete technological governance without any license cost.
- IP, Design are all owned by ZODIAC, product overhead cost is minimum.

Delivering Smart Solutions for Today's Terminal Operating Systems with Tomorrow's Technology

Key Pointers

- ✓ Over 18 years as an in-house port and terminal software solution –2021 available to the market.
- ✓ Many updates and lessons learned from working hand's on at over 34+ terminal around the globe
- ✓ Deploying Smart solutions with latest A.I., Machine Learning and Optimization tools in order to reach efficiency.
- ✓ To be the preferred solutions provider for the cargo and container handling industry that includes ports, terminals, ICDs, Container Yards, and more.



World Footprint



Scope



Automation



Architecture

Tomorrow's Software solutions for Today's Ports

- Zodiac to be the 'TOS of Choice' covering all applicable terminals.
- Zodiac to evolve 'beyond the gate' to support logistics operations and an end to end control of cargo
- Zodiac to supports port automation with advanced features built for artificial intelligence, machine learning and robotics
- Microservices architecture, allowing faster development and deployment more closely aligned to diverse business needs

CARGOES

TOS+

COME MEET US :



ENABLING TRADE IN PORTS AND TERMINALS

NOVEMBER 7 – 11, DUBAI



CARGOES

TOS+

In your digital transformation journey

We are your partner

Thank you