PORT AUTHORITY STRATEGY/BUSINESS MODEL
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CONTENT

- BACKGROUND ROADMAP
- UNDERLYING PRINCIPLES
- APPROACH
BACKGROUND TO ROADMAP
ROADMAP

- COMBINATION RHV AND RSM
  - HENK VOLBERDA
  - FRANS VAN DE BOSCH
  - RICK HOLLEN
  - LARISSA VAN DER LUGT

- INVOLMENT POR: CORPORATE STRATEGY
THE CORE CHALLENGE IN PORT MANAGEMENT

THE CORE ISSUES IN PORTS GENERALLY ARE NOT ABOUT TERMINAL OPERATIONS, BUT ABOUT:

- PORT PLANNING (INCLUDING HINTERLAND CONNECTIONS)
- ASSET UTILIZATION
- FUNCTIONAL INTEGRATION
- PROCEDURES OF CUSTOMS (AND OTHER INSPECTION AGENCIES),
- INFORMATION EXCHANGE, INTEGRATED PORT CALL OPTIMIZATION
- INNOVATION
PA BUSINESS MODEL

**REVENUES**
- LAND RENT
- PORT DUES

**AIM**
- TO ATTRACT AND KEEP PORT INVESTORS

**DRIVERS**
- LAND VALUE
- VALUE OF TRANSPORT NODE

**VALUE PROPOSITION**
- HIGH QUALITY PORT CLUSTER
  - EFFICIENT PORT
  - LICENCE TO OPERATE
  - LABOUR MARKET
  - ICT AND INFORMATION
  - INNOVATION

- HIGH QUALITY INTEGRATION OF PORT IN CHAINS
  - EFFICIENT PORT
  - CHAIN INFORMATION AND COMMUNICATION
  - INTERFACE TERMINALS – INLAND CONNECTIONS
  - INLAND NETWORK
BACKGROUND: DRIVERS OF CHANGE
DRIVERS OF CHANGE: IMPACT

- ENVIRONMENT: ENERGY TRANSITION, LNG AS FUEL FOR SHIPS
- PORT RELATED INDUSTRIES: HOW DOES A CIRCULAR ECONOMY IMPACT FREIGHT FLOWS?
- INFORMATION TECHNOLOGY: WHAT WILL DRIVERLESS TRUCKS MEAN FOR THE ‘MODAL SHIFT’?
- TRANSPORT: EVOLUTION OF MARITIME NETWORKS? DIRECT SHUTTLES?
- SUPPLY CHAINS: 3D PRINTING?
- ENERGY: THE PACE OF THE ENERGY TRANSITION.
- GEO-POLITICS: WHAT IF EUROPE REALLY AIMS FOR ENERGY INDEPENDENCE?
- GLOBAL ECONOMICS: REGIONALIZATION, TRADE OF SERVICES?
- SOCIETY: AGING, REPLACEMENT OF LABOUR BY CAPITAL
MOST IMPORTANT DRIVERS OF CHANGE

ENERGY TRANSITION

DIGITALIZATION

LOGISTICS & PORTS
SHARE FOSSIL FUELS

2013: 74%

2040: 44%

source: International Energy Agency, Energy Demand in European Union in 2040 scenario)
INFORMATION TECHNOLOGY

- INFORMATION–EXCHANGE
- INTERNET OF WHAT?
- 3D PRINTING
- BIG-DATA
SHIPMENT VISIBILITY

Track your shipments and receive notification updates.

Manage all your company’s global freight shipments through a simple online dashboard. Your dedicated customs broker and logistics experts will manage the movement of your goods while you optimize your supply chain down to the SKU.
Sharing, not growing
Worldwide forecast

Shared cars*
As % of total on road

Vehicle production
% change on a year earlier

Source: Morgan Stanley
*Including taxis, excluding car rental
The impact of 3D printing on supply chains

Whilst modest at present, 3D printing has the potential to transform certain parts of manufacturing, and supply chains, over the longer term. In addition, instead of taking place in bespoke factories, 3D printing will create demand for smaller and more standard premises, opening up opportunities for developers and investors.

A traditional supply chain

- Long lead time
- High transport costs
- Large carbon footprint

A 3D printing supply chain

- Locally printed and distributed
- Shorter lead time
- Minimal transport costs
- Low carbon footprint

3D-PRINTING: LARGE IMPACT ON SUPPLY CHAINS:

- LOCAL PRINTING AND DISTRIBUTION
- PRODUCTION TO INDIVIDUAL CUSTOMER ORDER
- SHORT LEAD TIMES
- LOW TRANSPORT COSTS
- LOW CARBON FOOTPRINT

IMPACT PORTS?
INTERNET OF WHAT?

...SHIPS

...CONTAINERS

...NOSES

...EQUIPMENT

...WATER & WIND

...DRONES
SOMETHING HAS TO CHANGE...

CONTEXT:
- BIGGEST PORT OF EUROPE
- BEST PORT INFRASTRUCTURE IN THE WORLD (WORLD ECONOMIC FORUM)
- ACCESS TO 350 MILLION WEALTHY CONSUMERS AND HIGH POPULATION DENSITY

BUT:
- 80% OF THE ASSETS ARE ECONOMICALLY (AND TECHNICALLY?) WRITTEN OFF
- 60% ACTIVITIES ARE FOSSIL-FUEL BASED
- HIGH ENERGY PRICES IN EUROPE
- HIGH LABOR COSTS (+BATTLE FOR TALENT)
- HIGH LAND LEASE COSTS
ROADMAP STRUCTURE

- 3 PROJECTS DEFINED
UNDERLYING PRINCIPLES
CONTEXT CHANGE

INTERNAL
- FROM LANDLORD TO DEVELOPER
- FROM INVESTMENTS IN INFRASTRUCTURE TO NETWORK

EXTERNAL
- END OF FOSSIL FUEL
- GEO-ECONOMICAL AND GEOPOLITICAL DYNAMICS
- SUPPLY CHAIN CHANGES
- DIGITALISATION
NEW STRATEGIC SCOPE AND BUSINESS MODEL

BUT: CAN WE CONSIDER A PORT AUTHORITY LIKE ANY OTHER COMPANY?
PA CHARACTERISTICS

- GEOGRAPHICALLY TIED
- PUBLIC OWNERSHIP (BUT ACTING ON COMMERCIAL GROUNDS)
- MARKET DISCIPLINE ONLY LIMITED
- MIX OF PUBLIC AND COMMERCIAL GOALS
- STRONGLY RELATED TO PRIVATE COMPANIES IN THE PORT
STRATEGIC GOALS

- CREATION OF SOCIAL VALUE WITHIN FINANCIAL CONSTRAINTS,

  OR,

- CREATION OF FINANCIAL VALUE WITHIN SOCIETAL CONSTRAINTS

YOU NEED TO MAKE A CHOICE FOR BEING ACCOUNTABLE!
VALUE

- **FINANCIAL VALUE: METRICS AVAILABLE**
- **SOCIETAL AND STRATEGIC VALUE**
  - GEOGRAPHICAL PERSPECTIVE?
  - TIME HORIZON?

**HOW TO INCORPORATE THESE VALUES IN STRATEGY MAKING PROCESS?**
SCOPE OF ACTION IN CLUSTERS AND NETWORKS

- CONDITIONED BY STRATEGIC DEVELOPMENT OF COMPANIES WITH THE CLUSTER/NETWORKS
- INTERACTIVITY WITH ACTORS WITHIN PORT COMPLEX REMAINS KEY ASPECT FOR DETERMINING SCOPE OF ACTING
- MONITORING, SIGNALLING, REACTING
EXAMPLE: START-UPS

PORTXL
world port port accelerator

www.portxl.org
Global port operator PSA joins venture capital crowd

Monday 09 May 2016, 12:30
by Katherine Espina

PORTS & LOGISTICS

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Newly created venture capital unit PSA unboXed will provide money and testbed for start-ups

SINGAPORE-headquartered PSA International, operator of the world's largest transhipment hub, has unveiled its new corporate venture capital arm, PSA unboXed, with an initial fund size of S$20m ($15m).

PSA unboXed will invest in and nurture about 10 to 20 start-ups keen on creating innovative logistics solutions in container and cargo-handling operations and transaction solutions for the maritime trade and finance ecosystems. PSA International group president chief executive Tan Chong Meng said PSA has "the unique platform to instigate and support game-changers" in the industry, given that it is one of the world's largest port operators.

"With the internet of things, artificial intelligence, imaging capabilities, automation and robotics developments over the past few years, we feel that now is a good time to provide PSA as a testbed, a collaborative platform to harness the possibilities that are enabled by these technologies that may have been developed for other purposes but can then be extended to this space," Mr Tan said at the launch of PSA unboXed.

Asked why PSA resorted to creating a venture capital arm, Mr Tan said: "We want to try to create a culture change for ourselves, that we should be open. Any other way feels like we are controlling as much as possible. We are still going to innovate and do what we know but at the same time we are willing to bring in other stakeholders and provide a voice and work together with them."
FINDINGS ANALYSIS INTERNATIONAL STRATEGY

ARGUMENTS:

- PROVIDES BENEFITS
- DRIVEN BY KNOWLEDGE AND COMPETENCIES
- MARKET FOR PORT MANAGEMENT?

FINDINGS FROM CASE RESEARCH:

- LIMITED POSSIBILITIES YET, DIFFICULT PROCESSES
- OPPOSITION FROM STAKEHOLDERS
PA’S ACTING IN CLUSTER

Value Creation

Initiate
Finance
Stimulate

Facilitate
Condition

Discipline
Transform

Start-ups
Renewables
Data-centra

Transhipment/
Hinterland/
Chain
Offshore
Cruise

New
Small Scale
High Risk

Mass, Growth
Clear Revenues

Downturn
Decline
Negative Impact

Time
PORT AUTHORITIES BENEFIT FROM ACTIVELY MANAGE THE ‘BUSINESS DEVELOPMENT FUNNEL’. NOT ALL IDEAS WILL END UP IN A DEAL, SO PORT AUTHORITIES NEED A HEALTHY FUNNEL.

PORT AUTHORITIES MAY LEARN FROM OTHER COMPANIES TO ‘FAIL FAST’: NOT TO HAVE IDEAS FLOATING AROUND FOR YEARS, BUT ACTIVELY PUSHING PROGRESS, AND BE COMFORTABLE WITH IDEAS THAT FAIL – BUT FAST AND WITHOUT HUGE DEVELOPMENT COSTS.

Source: Peter de Langen
ISSUE

- HOW DO THE CONTEXT CHANGES CHANGE THE BUSINESS MODELS OF ESTABLISHED PORT CLUSTERS/SEGMENTS

- WHAT NEW CLUSTERS/SEGMENTS COULD DEVELOP

- WHAT IMPACT ON POR BUSINESS MODEL
  - NEW INVESTMENTS
  - NEW SCOPE OF ACTING
  - NEW ASSET BASE
  - NEW REVENUE STREAMS