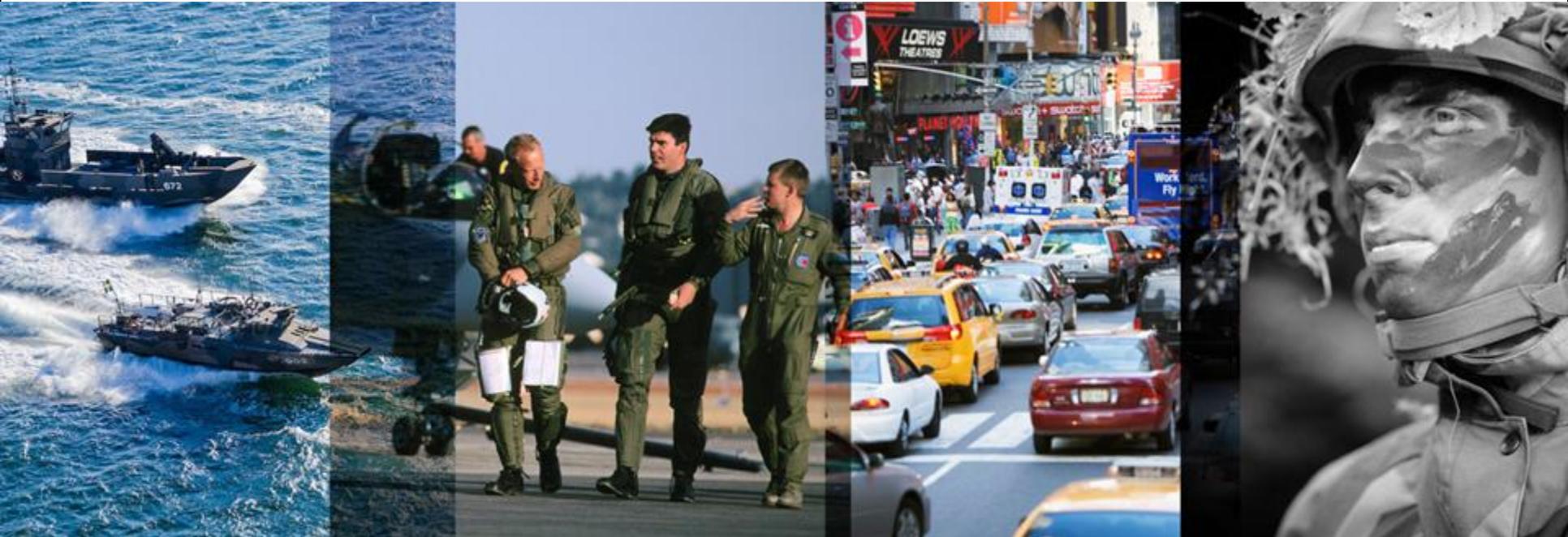




**SAAB**

# FÖRSVARSELEKTRONIKINDUSTRIN I DAG OCH I MORGON



**Hans Holmberg**

**September 25, 2014**

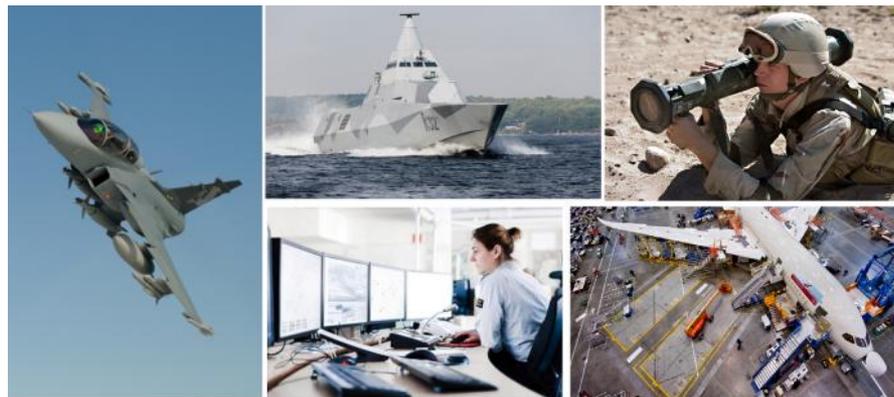
**Försvarets Historiska Telesamlingar 30 års jubileum**

# SAAB ALWAYS AT THE FOREFRONT OF CHANGE



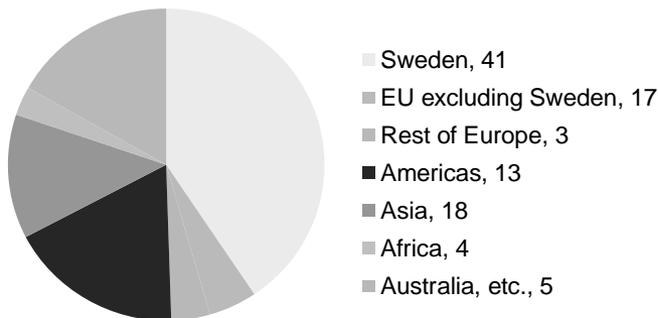
# SAAB DEFENCE AND SECURITY

- World-leading solutions, products and services for military defence and civil security
- Sales 2013: MSEK 23,750
- 14,000 employees
- Local presence in 33 countries and customers in 100 countries worldwide
- Saab's B-share listed on NASDAQ OMX Stockholm's Large Cap list since 1998 (SAAB B)

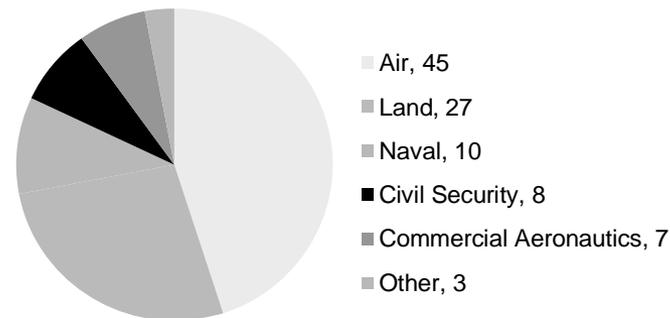


## Sales distribution 2013

Geographic markets, %



Market segments, %



# ORGANISATION



# SAAB PRESENCE WITH PERSONNEL



- ▶ Established on 32 markets
- ▶ Sales to 100 markets
- ▶ Employees 2013: 14,140 (13,968)
  - ▶ Academic degree 57%
  - ▶ Share of women 22%

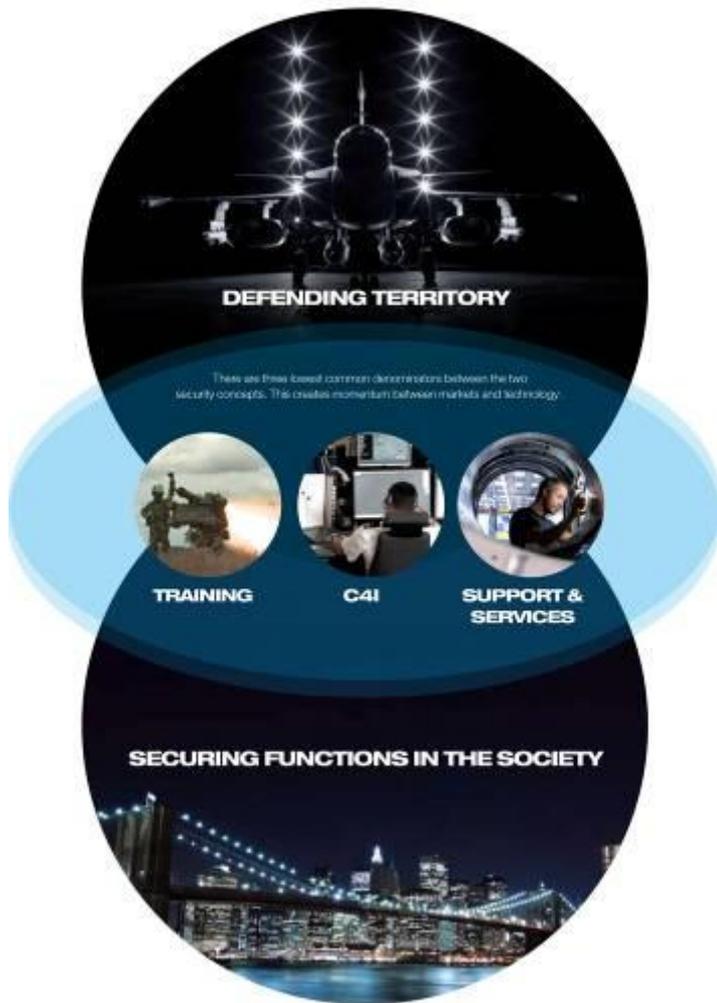
- ▶ Sales 2013: MSEK 23,750 (24,010)
- ▶ R&D Share of Sales 5.6%

# MARKET AREAS



<b>Aeronautics</b> 	<b>Dynamics</b> 	<b>EDS</b> 	<b>SDS</b> 	<b>S&amp;S</b> 	<b>Combitech</b> 
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# THE GAME HAS CHANGED



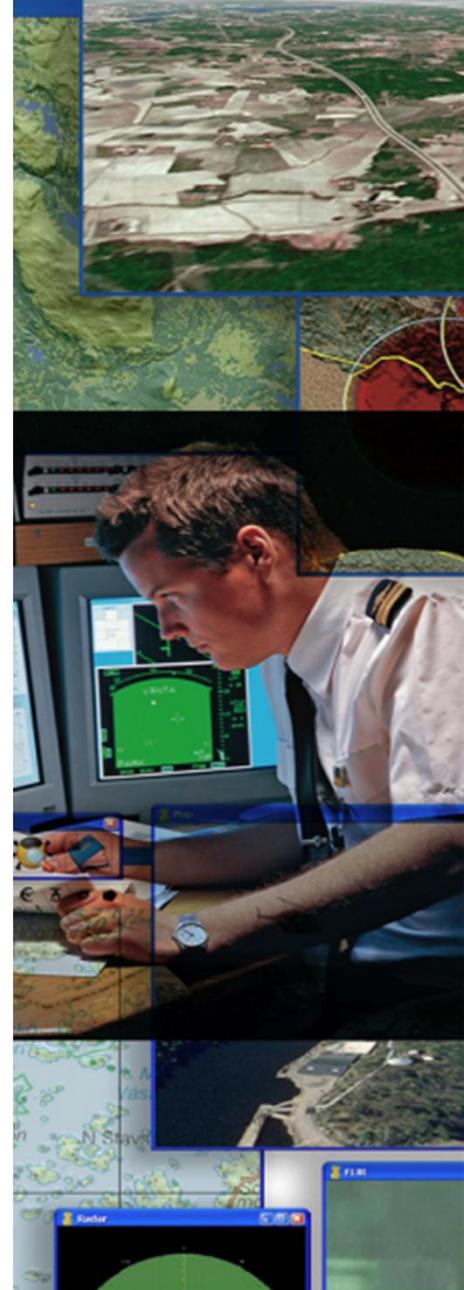
- From one customer to several customers
- International interoperability
- Off the shelf
- Defending borders and protecting flows

# SECURITY AND DEFENCE SOLUTIONS

## KEY CAPABILITIES

World leader in:

- ▶ Naval system integration
- ▶ Maritime systems and traffic management
- ▶ Critical system integration
- ▶ Sensor and weapon control
- ▶ Data and information fusion
- ▶ Live & virtual training
- ▶ Air traffic management



# COMBAT SYSTEMS AND C4I SOLUTIONS

Sensors, weapons and communications into a single, highly-integrated combat management system



# NAVAL COMBAT SOLUTIONS

- ▶ 9LV Naval Combat System Solutions feature modular and scalable command and control and fire control for naval platforms ranging from the patrol boat to the most capable frigate



# KOCKUMS PART OF SAAB

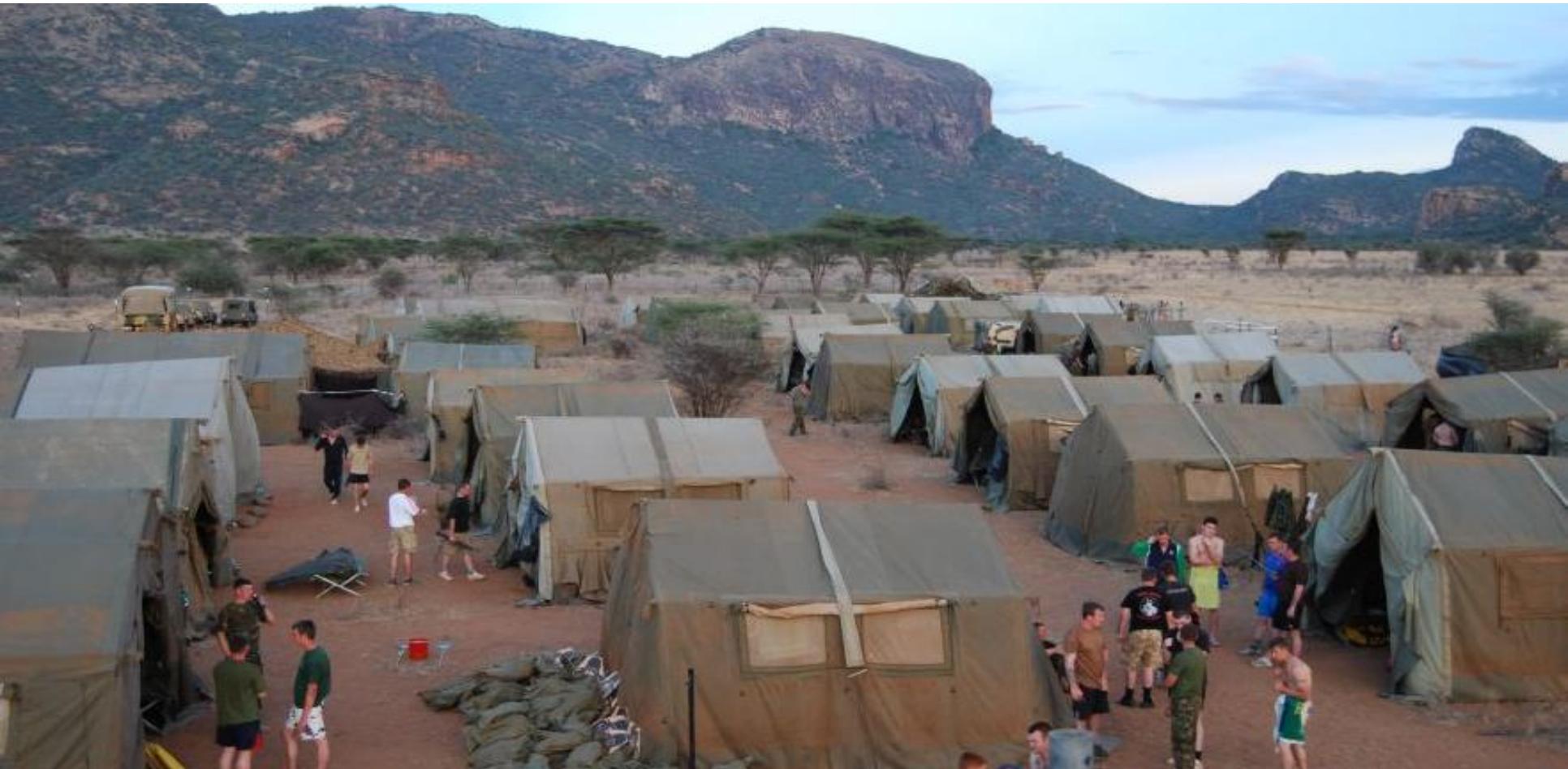
As part of Saab's commitment to strengthening our global Naval leadership, we have acquired Kockums in 2014.

*Saab Kockums provides design, construction and in-service support for advanced naval systems such as surface combatants and submarines to the Swedish Armed Forces and other customers worldwide. Other successful products are the air-independent Stirling system, mine countermeasure systems and submarine rescue systems. Naval Systems have operation in Karlskrona, Malmö, Muskö, and Singapore.*



# TRAINING AND SIMULATIONS

The Total Training Provider - from live to virtual



# REDUCE AND MANAGE RISK



# CRITICAL SYSTEMS & COMMUNICATION SOLUTIONS

Systems and solutions to provide operation center and critical communication capability

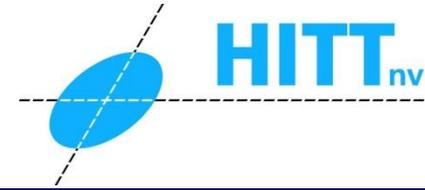


# TACTICALL OIL & GAS

Tacticall integrates all communication systems into one



# SAAB TRAFFIC MANAGEMENT



## AIR TRAFFIC MANAGEMENT

- ▶ Airport Surface Safety
- ▶ Wide Area Surveillance
- ▶ Airport and Airline Automation
- ▶ Tower Automation
- ▶ Advanced Development

## MARITIME TRAFFIC MANAGEMENT

- ▶ Vessel Traffic Services
- ▶ Coastal Surveillance
- ▶ AIS Network Solutions, AIS transponders
- ▶ Port Management Solutions
- ▶ Hydrographic Software Systems

**Operations  
Main sites**



# AIR TRAFFIC MANAGEMENT

Traffic management products and solution for air traffic control



# AIR TRAFFIC MANAGEMENT



## FACTS:

- ▶ 240 systems
- ▶ 120 airports incl 9 of 10 busiest
- ▶ 60 customers in 40 countries
- ▶ Guide 2 million aircraft movements each month (24 % of the world's flights)

# MARITIME TRAFFIC MANAGEMENT

Systems and solutions to provide Automatic Identification, Port management, Hydrographic and Precision navigation



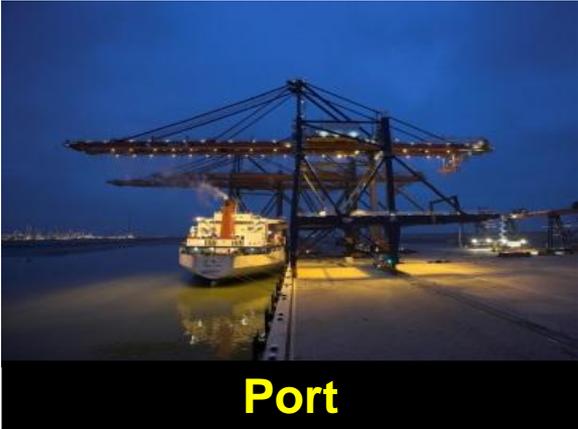
# MARITIME TRAFFIC MANAGEMENT

## FACTS:

- ▶ Over 60 systems
- ▶ 4 of top 10 container ports guiding 85 million TEUs per year
- ▶ 108 ports or authorities in 18 countries
- ▶ 700 Hydrography customers with over 10,000 licenses sold

**TEU:** Twenty-foot Equivalent Unit

# MARITIME SOLUTIONS MARKET SEGMENTS



# INCREASED GLOBAL R&D EFFORTS

## ➤ R&D centre in India

- Transfer identified programs and technologies
- Aerospace, defence and urban innovation including civil security.



## ➤ Swedish – Brazilian R&D centre

- Stakeholders from the public, academia and industry to tackle key societal challenges with technology.
- Transport and logistics, defence and security, and urban development with a focus on energy and the environment.



## ➤ Sea Gripen design centre in the UK

- 12 – 18 month concept design phase
- Using UK technical expertise in maritime jet operations

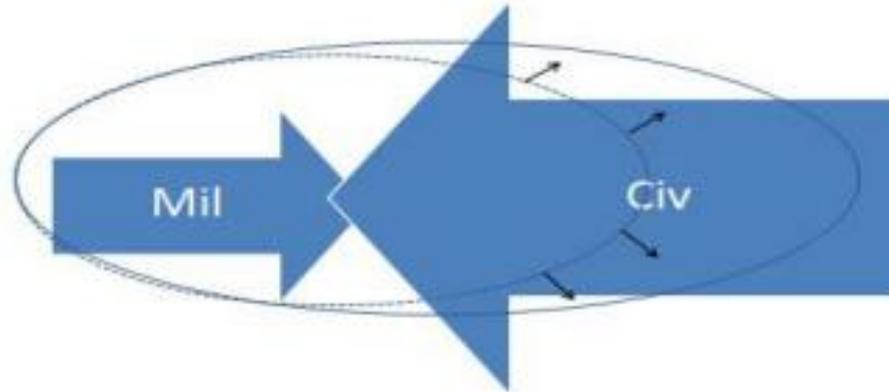


**TOMORROW .....**

# A NEW INDUSTRY FRAMEWORK: NEW CONTEXT NEW TOOLS OF CONFLICT

- A WIDENING “DEFENCE CONTEXT”
- THE BUSINESS PERSPECTIVE - STRATEGIC ADJUSTMENT RATHER THAN REORIENTATION
- NEW MARKETS NEW OPPORTUNITIES => BUT ALSO NEW COMPETITION
- THE GENERIC GEOGRAPHY OF FUTURE WARFARE - FLOW-CENTRIC, URBAN AND MARITIME
- THE BIG BLUR: SPACE & CYBER AS PRIME EXAMPLES OF CONVERGING SPHERES

## A widening defence domain



More than ever, national defence structures are obliged to protect (and be able to attack) societal functions like a nation's physical infrastructure (including airports, ports, space assets), its information and communication networks, electricity grid, logistics functions, financial systems, commercial information, trade routes etc. Especially infrastructure is a sector that tends to be co-opted into modern national security thinking, thus the sector will be discussed more in detail in chapter 3. Cyber security will also be given much attention below as a symbol of a new war domain (– true or not, in March 2013 US officials even stated that cyber –attacks have replaced al-Qaeda as the greatest threat to US national security).

## Security needs

The primary drivers in Saab's market areas are threat scenarios and security needs. This applies to the defence sector and civil society as well as to the grey zone in between. Understanding the development

of, and overlap between, the two main dimensions of security policy is critical to also understanding the opportunities, breadth and potential in Saab's market.



The three areas of training, command and control, and maintenance are links as well as the lowest common denominator between these two security dimensions. For Saab, these areas originate in a traditional border-protecting military context, but are just as relevant and possible to implement in an urban-centred, flow-protecting environment.

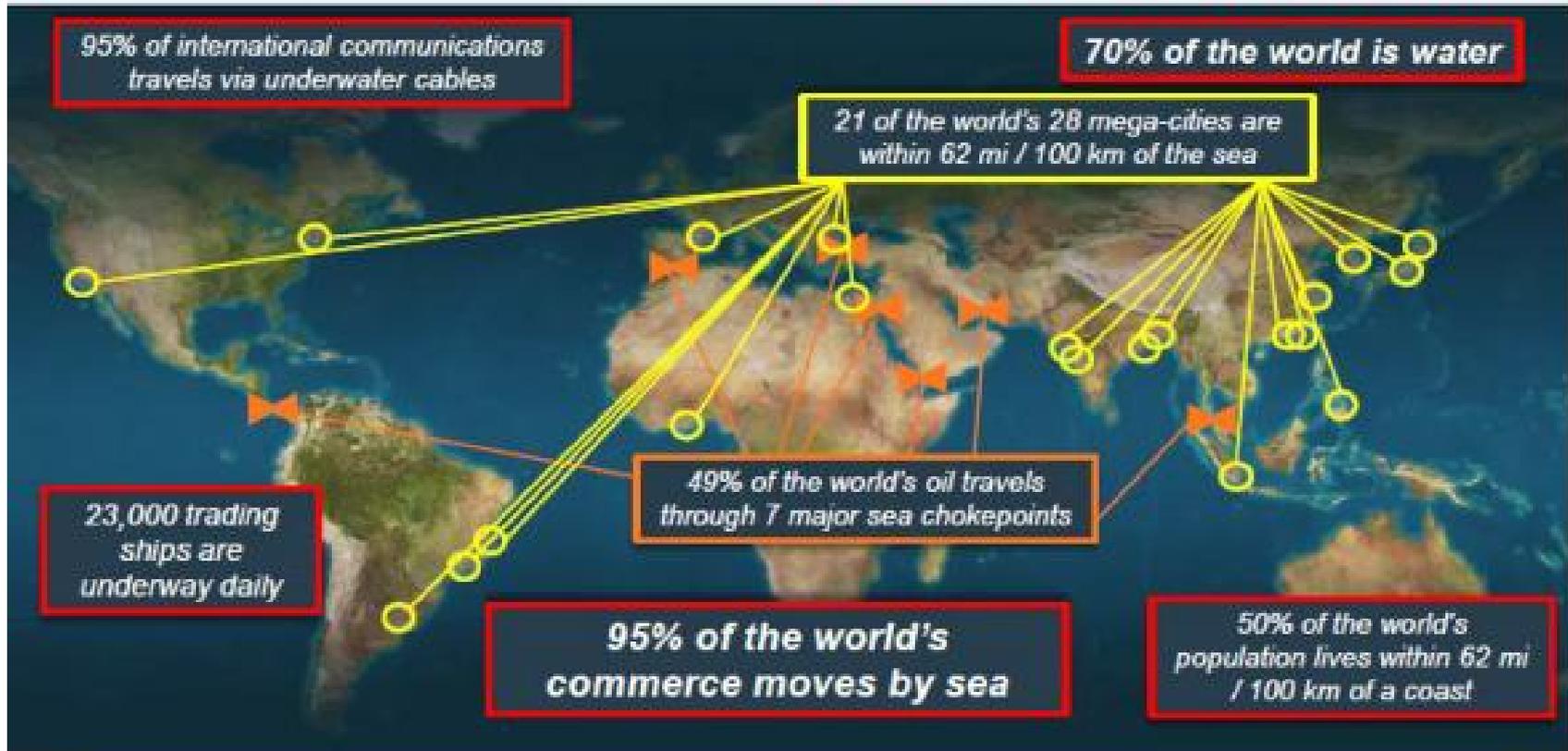
# THE BUSINESS PERSPECTIVE - STRATEGIC ADJUSTMENT RATHER THAN REORIENTATION

From a business perspective, what used to be seen as the defence market today encompasses more aspects of society than it used to. With a widening security concept there is an obvious defence domain connection when, for example, BAE team up with Vodafone to secure mobile communications, when Lockheed Martin or Raytheon engages in smart grid projects with electricity utilities or when Saab provides traffic management solutions to ports and airports. The same is true when defence companies engage in projects for civilian or dual-use communication satellites, or when they support land and maritime border security with equipment or training.

# **NEW MARKETS NEW OPPORTUNITIES => BUT ALSO NEW COMPETITION**

Naturally, the resulting increase of the overlap or convergence between defence and civilian markets bring new competitors from the civilian side, partly defending their old turf, partly pursuing new opportunities with high-tech products and services now relevant to the military.

# THE GENERIC GEOGRAPHY OF FUTURE WARFARE - FLOW-CENTRIC, URBAN AND MARITIME



**“...At the Geo-Strategic level, it's all about the littorals.”**

# THE BIG BLUR: SPACE & CYBER AS PRIME EXAMPLES OF CONVERGING SPHERES

## **Space**

One domain where civil and military affairs have already been converging for many years is space, with both military and civil owners/operators operating a large number of satellites, most of which are used for both military and civil purposes and in both domestic and international contexts (GPS, weather, photos, communications etc.).

## **Cyber - remains prioritized business area**

Together with the space domain, cyberspace is maybe the best example of an increasing overlap between civil and military affairs. In both these global domains, characterized by their abstract character with no natural or geographic borders and with outdated or non-existent international rules and regulations, military and civilian affairs converge in many ways.



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