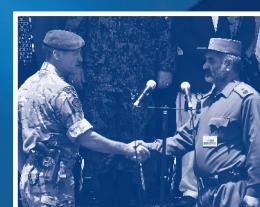




SAFEGUARDING
**FREEDOM
AND SECURITY**

A new sense of common purpose



An official publication of the Atlantic Treaty Association



Towards a safer world.

AW159 YOUR SOLUTION.

As a global leader in helicopters, AgustaWestland offers you complete solutions designed specifically for you and your mission. From vertical lift support of military and police forces to corporate and offshore transport, to the demands of disaster relief, SAR and air medical operations.



AgustaWestland tailors solutions for you.



AgustaWestland
A Finmeccanica Company

SAFEGUARDING FREEDOM AND SECURITY

A new sense of common purpose

Editor

Editor-in-chief

Managing editor

Sub-editors

Matthew Andrews, Clare Cronin, Erica Moss

Art editors

Jean-Philippe Stanway, James White

Production and distribution manager

Editorial production assistant

Simon Michell

Colette Doyle

Barry Davies

Malcolm Green

Elizabeth Heuchan

Sales director

Sales manager

Sales executives

Martin Cousens

Peter Barron

Richard Osterfield, Richard Verden

Managing director

Chief executive

Chairman

Andrew Howard

Alan Spence

Paul Duffen

Pictures: Crown Copyright, Getty Images, ISAF Media, Lockheed Martin, NATO, NH Industries, PA Photos, Reuters, Rex Features

ISBN: 978-1-906940-54-6

Printed by Buxton Press

Published by

newsdesk media

www.newsdeskmedia.com

130 City Road, London EC1V 2NW, UK

Tel: +44 (0) 20 7650 1600 Fax: +44 (0) 20 7650 1609

700 12th Street NW, Washington DC 20005, US

Tel: +1 (202) 904 2423 Fax: +1 (202) 904 2424

Newsdesk Media Group publishes a wide range of business and customer publications. For further information please contact Alan Spence, chief executive, or Paul Duffen, chairman

Simon Michell

Colette Doyle

Barry Davies

Malcolm Green

Elizabeth Heuchan

Martin Cousens

Peter Barron

Richard Osterfield, Richard Verden

Andrew Howard

Alan Spence

Paul Duffen



An official publication
of the Atlantic Treaty Association

Atlantic Treaty Association

Quartier Prince Albert

Rue des Petits Carmes, 20

B-1000 Bruxelles

Tel: +32 2 502 31 60

Fax: +32 2 502 48 77

Email: info@ata-sec.org

Website: www.ata-sec.org

© 2012. The entire contents of this publication are protected by copyright. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher. The views and opinions expressed by independent authors and contributors in this publication are provided in the writers' personal capacities and are their sole responsibility. Their publication does not imply that they represent the views or opinions of the Atlantic Treaty Association or Newsdesk Communications Ltd and must neither be regarded as constituting advice on any matter whatsoever, nor be interpreted as such. The reproduction of advertisements in this publication does not in any way imply endorsement by the Atlantic Treaty Association or Newsdesk Communications Ltd of products or services referred to therein.

PUT YOUR EQUIPMENT IN OUR NETWORK



Use of this image does not imply or constitute DoD endorsement.



L-3 Communication Systems-West's Interactive Networking Simulation features our hardware-in-the-loop capability. This enables you to place your own hardware in a simulated networking environment to validate performance, examine effectiveness, and reduce program risk and cost. Look to L-3 for the best in network simulation.

For more information, visit L-3com.com/csw.

Contents

SAFEGUARDING FREEDOM AND SECURITY: A NEW SENSE OF COMMON PURPOSE

FOREWORDS

09 **Anders Fogh Rasmussen**

NATO Secretary General

15 **Hillary Rodham Clinton**

United States Secretary of State

19 **Dr Karl A Lamers MP**

President of the Atlantic Treaty Association

21 **Troels Frøling**

Secretary General of the Atlantic Treaty Association

23 **Admiral James Stavridis**

NATO Supreme Allied Commander Europe

25 **General Knud Bartels**

Chairman of NATO's Military Committee

27 **Frederick Kempe**

President and CEO of the Atlantic Council of the United States

29 **Simon Michell**

Editor

NATO MEMBERS AND PARTNER COUNTRIES

30 **NATO's growing global network**

Highlighting the 28 NATO member states and the many countries with which the organisation cooperates around the world



THE CHICAGO SUMMIT

32

The Chicago Summit – strength in austerity

Simon Michell identifies the four main priorities that have to be addressed if the summit is to be deemed a success

34

Global security: pivoting and partnerships

Franklin D Kramer proposes four key themes that it would be useful to consider at NATO's Chicago Summit

38

The security environment

Robert Fox examines some of the growing threats facing NATO and asks what the Alliance should do to address them

40

Progressing the Lisbon Summit

Jamie Shea reviews the progress that the Alliance has made since the 2010 Lisbon Summit

ENDURING PURPOSE

44

Collaborative defence and constant vigilance

Julie Lindhout and Thomas Aagaard examine the core strength of the NATO defence alliance

48

Capacity building and long-term partnerships

Alan Dron looks at NATO assistance to nations that have joined the campaign to counter piracy off the Horn of Africa

THE EVOLVING STRATEGY

54

NATO's New Strategic Concept – from Lisbon to Chicago

Dr Jorge Benitez assesses how recent events have affected NATO's New Strategic Concept

58

Smart Defence: ensuring greater security with less money

Jill Taylor explains why the present climate of financial austerity means that NATO has to spend its funds more efficiently

61

The transatlantic bond: relevant or relic?

Harlan Ullman assesses the strength of the bond between the US and Europe

64

Developing bigger, stronger partnerships

Simon Michell considers whether the process of NATO enlargement is nearing an end

68

Supporting arms control – SALW and New START

Duncan Lennox explains how NATO supports attempts to limit the proliferation of weapons

71

Global perspectives on transatlantic issues

A look at how the North Atlantic region can improve its dialogue with global partners

74

Open channels – connecting to the global village

Dr Stefanie Babst reveals the work of NATO's Public Diplomacy Division

GOVERNANCE

80

NATO's new Military Command Structure

Grant MacDonald on NATO's plans to restructure its command and control organisation

86

The new NATO Command HQ

Ian Goold examines NATO's new headquarters in Brussels, currently under construction

89

The price of freedom

Jill Taylor looks at how NATO's financial responsibilities are being met amid budget cuts

OPERATIONS

94

NATO's soft-power operations

How a softer touch is applied to operations in the Mediterranean, Kosovo and the Horn of Africa

99

The NATO ISAF presence in Afghanistan

Tim Ripley takes a closer look at what is happening on the ground as the NATO mission continues

102

Libya: Operation Unified Protector

NATO's response to the United Nations' call for assistance to protect the citizens of Libya during last year's uprising

105

Libya, one year on: how NATO could help

The continued support needed to help Libya rebuild and take its place in the international arena

ADDRESSING THE CHALLENGES

110

Countering the cyber and terrorist threats

Denise Hammick looks at the scope of the NATO Defence Against Terrorism programme

115

The NATO Counter-IED Action Plan

Christina Mackenzie talks to Dr Franco Fiore from the NATO Counter-IED Task Force about progress in the war against the improvised explosive device





118 **Disaster response and the EADRCC**

Giles Ebbutt looks at the work of NATO's Euro-Atlantic Disaster Response Coordination Centre, set up to improve relief efforts

MAINTAINING CREDIBLE FORCES

122 **Airborne defence**

Thomas Withington explores NATO's new Air Command and Control System – one of the most ambitious programmes in the Alliance's history

127 **Airborne surveillance – manned and unmanned**

Pierre Tran reveals the aircraft that provide this crucial capability to NATO forces

130 **Airborne transport**

Alan Dron highlights the efforts being made to improve NATO's capability in the vital area of transport aircraft

134 **Missile defence**

Recent NATO advances in developing a system to defend against ballistic missile attack

138 **Precision weapons**

Robert Hewson details the range of precision guided munitions that were available to NATO forces during their Libya mission

141 **Maritime poise and reach**

The role of NATO's standing maritime groups, which carry out a variety of tasks worldwide

FOCUS ON THE FUTURE

144 **A youth vision**

Kristin Durant, President of the Youth Atlantic Treaty Association (YATA), explains how young people can work together for a peaceful future

146 **Index of advertisers**

ATA PERSPECTIVES

Individual Member State Associations discuss their work and share their views of current issues

52 **Denmark**

Troels Frøling, Secretary General of the Danish Atlantic Treaty Association

78 **Estonia**

Marko Mihkelson, Chairman of the Foreign Affairs Committee of the Riigikogu

92 **FYR Macedonia**

Lazar Elenovski, President of the Euro-Atlantic Council of Macedonia

108 **Slovakia**

Tomas A Nagy, Research Fellow of the Slovak Atlantic Commission's Central European Policy Institute



SHIELDING YOU FROM ATTACK

At Streit Group we have grown to become the world's leading privately - owned vehicle armoring company, a success built on the proven performance of our customized security and civil armored vehicles in some of the most testing conflict zones.

Today our range of up-armored, and armored vehicles, on display at Counter Terror Expo 2012, incorporates many of the key lessons we have learnt from saving multiple lives over the past 20 years.

STREIT GROUP

ARMORED VEHICLES
MANUFACTURER

OUR COMPANY SHIELDS YOU

A TAILORED APPROACH TO PROTECTION

Streit's growing vehicle portfolio includes everything from personal protection luxury sedans to specialised APCs (Armored Personnel Carriers). In practice each vehicle can be tailored to address your specific operational needs, whether it be for policing, personal protection, cash-in-transit, or military use, and the associated threat level.

FUTURE EXPANSION

The opening of our new manufacturing facility in the UAE based in Ras Al Khaimah is an example of our commitment to the security and defence market place. Built on a 1.5 million sqft site it is the world's largest privately - owned vehicle armoring facility. This is phase I of the build, work is still scheduled to continue throughout Phases II and III where further capabilities and space will be added. Target date for completion is 2014.

TESTING TIMES

Crucially, you have the reassurance with Streit that all of our vehicles undergo extensive terrain and ballistics testing and comply with key certification standards. A case in point is our up-armored Land Cruiser 200 Series which secured the prized VR7 and Typhoon APC which secured Stanag 3 certification after withstanding multiple live fire and blast scenarios.



Log on to www.armored-cars.com or Email: sales@armored-cars.com

NATO Secretary General **Anders Fogh Rasmussen** considers the commitments that member countries will make in Chicago and highlights the importance of expanding the organisation's global partnerships to address the security challenges of the future

Towards NATO's Chicago Summit



ANDERS FOGH RASMUSSEN NATO SECRETARY GENERAL

For over 60 years, NATO has successfully protected our populations and our principles. The transatlantic bond has been a wise investment that has delivered security dividends year after year. At our NATO summit in Chicago we will shape an Alliance that is capable of overcoming the economic crisis of today, while guaranteeing security for tomorrow.

With more than 130,000 troops, the NATO-led International Security Assistance Force in Afghanistan remains our most important mission. Fifty Allies and partners are determined to ensure that the country will never again be a base for global terrorism. At our last NATO summit, in Lisbon in 2010, we agreed to a process of transition of our security responsibilities to the Afghan authorities by the end of 2014.

That process is now under way and making progress. As Afghan security forces grow more confident and capable, our main effort will gradually shift to support, training and mentoring. At the Chicago Summit, we will demonstrate our commitment to a long-term partnership with Afghanistan, together with the whole international community, beyond 2014.

We will also agree on a package of defence capability measures to ensure that NATO remains strong and capable through 2020 and beyond. European Allies and Canada led our operation to protect the people of Libya last year, but the United States deployed critical assets, such as drones, precision-guided munitions and air-to-air refuelling.

To respond effectively to the challenges of the future, such capabilities must be available more widely among the Allies. In the current economic climate, that will require greater prioritisation, specialisation and multinational cooperation. It requires a change of mindset to what I call

DEFENSE SOLUTIONS
FOR THE FUTURE

Highest Survivability and Combat Proven Technology



GENERAL DYNAMICS
European Land Systems



PROSPECTS FOR PEACE AND STABILITY: NATO Secretary General Anders Fogh Rasmussen meets leaders of Libya's National Transitional Council forces

■ *NATO is determined to develop its vast network of partnerships. Our Libya operation would not have been possible without the political and operational support of our partners in the region, and beyond*

Smart Defence. In Chicago, we will deliver on a range of concrete projects, and commit to Smart Defence as a long-term strategy for improving our capabilities

At our Lisbon Summit, we agreed to develop an Alliance capability to defend European Allies' populations, territory and forces against the growing threat posed by the proliferation of ballistic missiles. This project embodies transatlantic solidarity, and it is Smart Defence at its best. Along with a prominent and phased US contribution, several Allies have announced their own important contributions that

will be gradually brought together under a NATO command and control system. I expect the initial components of this key capability for NATO to be in place by the time of our Chicago Summit.

Finally, NATO is determined to develop its vast network of partnerships. Our Libya operation would not have been possible without the political and operational support of our partners in the region, and beyond. In Afghanistan, 22 partners have troops or trainers on the ground, and in Kosovo, seven partner nations operate shoulder to shoulder with NATO forces.

In Chicago, we will meet with partner nations from across the world to recognise their valuable contribution to our shared security. It will send a strong signal that, at a time when security challenges are becoming more complex and unpredictable, cooperation is not a luxury, but a necessity.

Our Chicago Summit will be a crucial meeting at a crucial time. It will showcase an Alliance that is committed to transatlantic solidarity and cooperation; capable of dealing with the security challenges of the future; and connected with its partner nations and the rest of the international community. ■

Revision Batlskin: leading the fight against wartime head injuries

The changing nature of warfare, namely the widespread use of improvised explosive devices (IEDs), is resulting in a disproportionate number of head injuries. As reported in *The Journal of Trauma* (2008), "Up to 30 per cent of all casualties now present with facial and neck injuries, although the face, head and neck represent only 12 per cent of total body area." The same study suggests that the enemy may actually target these vulnerable and unprotected areas of the armoured soldier¹ – with devastating results. The types of combat head and face injuries are as broad as they are numerous. The result of blunt force, blast and ballistic impacts, they range from hard and soft tissue maxillofacial wounds to traumatic brain injury (TBI), coined "a signature injury of the wars in Iraq and Afghanistan."²

Leading the fight against wartime head injuries, Revision's Batlskin Modular Head-Protection System uniquely addresses the soldier's need for a single, integrated head-protection solution that is scalable and adaptable to the multidimensional nature of modern warfare. More specifically, the

■ Revision's Batlskin Modular Head-Protection System uniquely addresses the soldier's need for a single, integrated head-protection solution

Batlskin System enables the soldier to "up armour" from a basic shell in most situations, to a helmet and visor configuration useful during high-risk activities such as route clearance, and to a complete helmet, visor and mandible guard system during breaching, cupola, or similar combat operations. This allows the soldier to adopt the perfect balance between enhanced protection and lethality.

The Batlskin Multipurpose Front Mount is the cornerstone of the Batlskin Head Protection system. It is a robust and lightweight universal NVG mount that triples as the visor dock and mandible guard attachment point. It offers greater stability than current NVG mounts with a three-point helmet attachment assembly and it provides the mechanism for mounting



A combat helmet shown with the deployment of the Batlskin Front Mount and Visor



The Batlskin Front Mount and Mandible Guard in use on a combat helmet. The Visor is seen in the up position

advanced protective equipment. A force-wide rollout of the Batlskin Front Mount could singlehandedly convert standard-issue helmets from a simple shell structure to a capability-enhancing soldier-systems platform.

The Batlskin High-Threat Mandible Guard provides lightweight blunt-force, blast and ballistic protection for the lower jaw. Its durable, low-profile design is engineered for rapid attachment and removal while on the run. It can be donned with or without the Visor.

The Batlskin Three-Position Visor is an optically correct face shield that can be worn one of three ways, from maximum coverage to maximum breathability: locked, vented or up. It is designed to provide maximum field-of-view and can be worn with or without the Mandible Guard. It is scratch, fog and chemical resistant.

Known for their widely used military protective eyewear products, Revision officially announced its expansion into the head-protection arena in July 2011 when the company was awarded a three-year contract to develop the US Army's next-generation head-protection system. The company followed this announcement with the release of their Batlskin Modular Head-Protection System, which is now ready for fielding. For product inquiries, please email batlskin@revisionmilitary.com



The Batlskin Front Mount triples as a universal NVG mount, Visor dock and Mandible Guard attachment point



Revision's Batlskin Front Mount in use with standard NVGs and the Batlskin Mandible Guard

Footnotes:

1. Petersen, K; Hale, RG; Hayes, DK; Blice, JP (2008). 'Prevention and management of combat-related infections of the maxillofacial, head and neck region: a review.' *The Journal of Trauma*, (64)3, S265-76

2. Hoge, CW; McGurk, D; Thomas, JL; Cox, AL; Engel, CC; Castro, CA (2008). 'Mild traumatic brain injury in US soldiers returning from Iraq.' *The New England Journal of Medicine*, (358) 5, 453-63



REVISION.

THE ULTIMATE HEAD PROTECTION



The ultimate protection from trauma—



Blunt force, blast and ballistic.



With a lightweight wearability...



That allows for peak performance.

INTRODUCING BATLSKIN™

THE WORLD'S FIRST FULLY INTEGRATED, FULLY MODULAR HEAD PROTECTION SYSTEM.

More science. More technology. More protection. Less weight.

And you can tailor the system to the mission.

So a soldier can do what a soldier does.

BE REVISION READY.®

revisionmilitary.com/batlskin



REVISION.®

An impassable mountain range?



Mina Group is the petroleum company that took up the challenge of supplying one of the world's most strategic commodities to some of the world's most inaccessible places.

It was 1999 when a group of traders joined forces with some kindred spirits in trade finance. The traders had been dealing in commodities from Russia and Central Asia since the early 1990's. Now they focussed on refined petroleum products, their sourcing and the upstream logistics required to deliver them. Mina Group was born.

It was a niche business and at the same time an epic trans-continental one. Two of Mina's first contracts were to supply jet fuel to US air bases in Manas, Kyrgyzstan and Bagram, Afghanistan. The challenges were not just geographical (the routes covered thousands of kilometres and at

certain points rose to 4000 metres) but also financial, political and security ones.

Millions of gallons later, to the Manas and Bagram bases, Mina has a global reputation for reliability under any conditions. Its portfolio of private and public sector customers covers Europe, Asia, the Middle East and Africa. They all rely on Mina's ability to trade, transport and deliver. Re-affirming its expertise, Mina recently won another two year contract to supply Bagram.

Perceptive, commercial decisions are not Mina's only consideration. It believes growth also comes from contributing to the countries and communities it has become part of. Most notably in Afghanistan and Kyrgyzstan, supporting women in business; university education; enterprise and entrepreneurship; and fostering international relations.

Now the company is looking into new businesses and new markets, especially in Asia. But whatever it does (business or CSR) will be underpinned by the values that have brought it this far. Meeting the highest ethical and social standards. Complying with every single law and regulation in all that it does. Being a responsible employer. Acting with respect and courtesy everywhere it operates. Making a meaningful contribution to every society and community it touches. Delivering maximum value to customers at all times.

Mina is a petroleum company but the commodity it really trades in is opportunity. Looking ahead the pipeline is full.

Mina Group

To find out more go to www.minagroup.com

US Secretary of State **Hillary Rodham Clinton** reflects on the enduring transatlantic bond between North America and Europe, as well as looking ahead to the decisions that will be made at NATO's Chicago Summit and the organisation's continued evolution

Working together for peace and security



HILLARY RODHAM CLINTON US SECRETARY OF STATE

We live in a time of sweeping change. Emerging powers are taking centre stage; new actors are influencing events; and the spread of technology is connecting more people in more places and empowering them to influence global events like never before. And this is all occurring against the backdrop of an economic system recovering from the worst recession in recent memory. So it is incumbent upon us – citizens and leaders alike – to chart a firmly founded future, based on the values we cherish and the kind of world we want to leave to our children.

Despite all this change, there are still enduring relationships we can count on. One is the unbreakable bond between North America and Europe, a bond created by shared values and common purpose. In virtually every challenge we face today, Europe is our partner of first resort. We're working together in the Middle East and North Africa, in Afghanistan, and reaching out to emerging powers and regions, such as those nations in the Asia Pacific.

This transatlantic partnership is strengthened every day through our cooperation on a wide range of issues and our bonds of friends and family. But the way we work together must change when the times require it. We have to test ourselves regularly, making sure we are focusing on the right problems and putting our resources where they're needed most.

Fortunately, the NATO Alliance is no stranger to change. Fifty years ago, it was created to lay the foundation for the re-emergence of Western Europe and to stand as a bulwark against Soviet aggression. After the Cold War, NATO's mission evolved to reforming and integrating Central and Eastern Europe as they rose from decades of communism. Then two years ago in Lisbon, the leaders of NATO set a new course for our Alliance by adopting a strategic concept that takes on the security threats of the



FUTURE PLANNING: US Secretary of State Hillary Rodham Clinton at the NATO ministers' Defence and Foreign Affairs meeting in Brussels in April 2012

21st century – from terrorism to cyber attacks to nuclear proliferation. Later this month, we will take another step in this evolution when President Obama hosts the NATO Summit in Chicago.

As complex and unpredictable as the future may be, we must be guided by our own very clear-eyed view of what is in the best interests of our countries, and then chart a path along with our partners in NATO and other nations who share the values that

we believe represent the best hope for humanity – freedom, democracy, and respect for the dignity and human rights of every person.

The work that NATO leaders will take on in Chicago – defining the next phase of the transition in Afghanistan, outlining a vision for addressing 21st-century challenges in a period of austerity, and

expanding our partnerships – shows just how much NATO has evolved over the past six decades. But it should also remind us that we must continue to evolve. Transforming any institution isn't easy, and it doesn't happen overnight. In fact, it is a project that never really ends. But we have strong leaders and the right strategies in place. And everything we have accomplished so far points toward how much we can achieve in the days and years to come.

If we stay nimble,

work together, and continue to invest in the enduring vitality and strength of the transatlantic Alliance, we can help make the world more peaceful and secure. We, of course, will have no guarantee of what the future holds. But we will once again make the right bet – a bet on our shared ideals – just as we always have, for the next century and beyond. ■

■ *Transforming any institution isn't easy, and it doesn't happen overnight. In fact, it is a project that never really ends*



PROTECTING YOUR MISSION

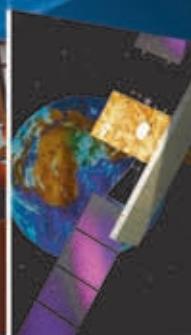
CBC is one of the world's premier ammunition manufacturers, with expertise in production of small and medium calibers since 1926. With operations in Brazil, Germany, Czech Republic, and the United States, the company strives to fulfill all needs for training, service and special ammunitions, with a consistent combination of high quality products and services. **CBC prides itself in being a major ammunition supplier to several NATO countries.**

www.cbc.com.br export@cbc.com.br





Our technologies, your force multiplier



Finmeccanica is Aeronautics, Helicopters, Space, Defence Systems, Defence and Security Electronics, Cyber Defence. Many areas of expertise with one common aim: to build a safer future together



FINMECCANICA
Proven performance. Worldwide.

Laying the foundations for a successful future



DR KARL A LAMERS MP
PRESIDENT OF THE
ATLANTIC TREATY
ASSOCIATION

■ “One of the most important summits in the Alliance’s history,” was the unanimous verdict on the last NATO summit of heads of state and government, which took place in Lisbon in November 2010. In addition to adopting a New Strategic Concept, the meeting in Portugal took pivotal security-policy decisions that set the future course of the Atlantic Alliance.

For a long time, it seemed likely that the next NATO summit, which is due to take place on 20 and 21 May this year in Chicago, would concentrate merely on implementing the decisions taken in Lisbon. The developments of recent months have abolished these expectations, and the forthcoming summit will play a vital role in determining NATO’s future direction.

Last year was an eventful one, both in terms of international security and defence policy and for NATO itself. The security-policy agenda was dominated by the revolution in the Arab world and its diverse consequences, as well as the civil war in Libya. NATO itself was busier than it had been for a long time. Alongside its existing commitments – ISAF in Afghanistan, operations off the Horn of Africa and in the Mediterranean, and its mission in Kosovo – on 31 March 2011, NATO began its operation in Libya to protect the civilian population.

Another important issue for NATO in 2011 was the international financial and economic crisis. Last year, it became increasingly clear what a drastic impact the crisis would have on national defence budgets and, thus, on the work of the Alliance.

Three subjects will therefore be on the agenda when the heads of state and government meet in Chicago: the implementation of the decisions taken in Lisbon, the developments that took place in 2011, and new challenges that require an appropriate response.

Regarding the implementation of the decisions taken in Lisbon, there are five areas in particular where concrete measures will need to be presented: the review of NATO’s deterrence posture; intensification of the Alliance’s partnership policy; cooperation with Russia; missile defence; and a long-term partnership between NATO and Afghanistan.

Furthermore, Afghanistan will be an important topic when the summit examines the developments of the past year and the lessons that NATO must learn. The summer of 2011 saw the start of the transfer of responsibility for security in Afghanistan to the country’s security forces. By the end of 2014, they are due to take responsibility for security throughout Afghanistan. In Chicago, a decision must be taken on what contribution NATO will make beyond 2014 in the areas of training, advice and support.

The Chicago Summit must also look at the developments in the Arab world and the Libya

mission – the first practical test since the adoption of the New Strategic Concept.

Admittedly, the agenda to be discussed in Chicago will be challenging – particularly since we will in future be facing the

additional task of maintaining our common defence capability with less funding. But while these are challenging issues, they are not unsolvable.

Over the six decades since it was founded, NATO has repeatedly and convincingly proved that it rises to the challenges it faces and emerges stronger from them.

The Chicago Summit will be the first NATO summit to have been held on US soil since 1999, when the Alliance celebrated its 50th anniversary by adopting a Strategic Concept. I am confident that the forthcoming summit in the United States will prove highly significant and lay the foundations for a successful future for the Alliance. ■



MISSION ACCOMPLISHED

On the morning of October 25th 2011, five Swedish Gripen fighters completed their contribution to NATO's operation in Libya: to maintain the no-fly zone, help ensure the arms embargo and conduct extensive reconnaissance. In their 650 missions the five aircraft delivered over 150,000 images. At Saab we are proud to have been able to help support this effort.

Saab's offer covers a wide range of defense and security areas. On land, at sea and in the air. We provide tools to detect, decide and engage, knowing that initiative and awareness make a difference. Our drive to push boundaries will help you accomplish your mission, protect your forces and meet future threats. We strive to anticipate tomorrow.

www.saabgroup.com



SAAB | **75** YEARS OF
DEFENCE AND SECURITY

A community of common values



TROELS FRØLING
SECRETARY GENERAL
OF THE ATLANTIC
TREATY ASSOCIATION

■ What will NATO be in 2020? What are the future capabilities that the Allies will need in order to guarantee the security of their people during the coming decades? How should partners be integrated into the transatlantic security discourse? What are the lessons to be learned from ISAF? These are just some of the questions that we at the Atlantic Treaty Association (ATA) have tried to answer in this volume, with the support of our subject-matter experts and scientific community.

The ATA promotes greater transatlantic integration through a network of non-governmental organisations committed to supporting greater knowledge and understanding for transatlantic dialogue among policymakers, public opinion and civil society. Our Senior Ambassadors in Ankara, our military experts in Estonia and our young professionals in Toronto, they all share the same idea: that cooperation between Europe and North America is paramount for global stability and development. Like modern sailors, in this volume we will be riding some of the conceptual waves of NATO, with the autonomy and innovative spirit of our Association, its history and ambitions.

Some 63 years after the provisions of the North Atlantic Treaty were set they remain as valid as ever: NATO's mission is to safeguard the freedom, common heritage and civilisation of its peoples, founded on the principles of democracy, individual liberty and the rule of law, as well as to promote stability and well-being in the North Atlantic area.

New global threats and challenges have emerged over the past 20 years, such as crisis management, international terrorism, proliferation of weapons of mass destruction and cyber-security. New strategies have been developed and old ones adapted to confront changing global security scenarios. The role of the ATA is to initiate a dialogue about such strategies with policymakers, military experts and public opinion, and to create a synthesis between the doers, the thinkers and the observers, which we proudly present to you in this publication.

We must take a proactive stance on NATO's future. We must ensure the relevance of the Alliance by continuing to make use of it in new and better ways. During the Cold War, NATO acted as a security guarantor, symbolising the weapon of last resort. We did not want to make use of NATO's tools, and the non-use in the end functioned as the ultimate guarantor of the freedom of the West.

The past 20 years, however, have taught us the great value of making use of the Alliance in a much more proactive way, both in political terms and militarily. The new members and partners realise this. The Alliance has made interoperability a reality, involving partners in the process; it has contributed to the ending of conflicts in the Balkans and North Africa, and the stabilisation of a troubled Afghanistan. Were NATO to disappear tomorrow, our countries would be less safe, our peacekeepers unable to operate, and today's sailor would become a pirate.

NATO is an unfinished project, as the future of the Alliance is constantly developing. Some believe NATO ought to get back to the core business of collective security; others see it as a hub of global security networks. Either way, we must ensure that the NATO acronym does not begin to denote 'Nisi actio, tardius oblivio' (without action, slow decline).

A strong message emerges ahead of and beyond the 25th NATO Summit in Chicago: the world needs NATO. This has also been demonstrated by the numerous requests for assistance and collaboration that the Alliance has received from a broad range of global actors, such as the United Nations, the European Union, the Arab League and several nations around the world.

Personally, I believe that the four 'Cs' that many are portraying in NATO's future shall become five: a collective defence mechanism, a cooperative security approach, a common capabilities standard and a crisis-management procedure should be accompanied by a community of values, which will always remain the long-lasting legacy of the Alliance. ■



Need visibility and clarity
on your telecom invoice?

Let Tam Tam dig out every detail



Tam Tam Consulting is an independent Telecom Expense Management and consultancy company, combining best-in-class technology with human expertise on both the strategic and operational levels. We advise you on fixed and mobile telephony, mobile data, Internet and datacom (IP telephony, WAN, etc.), as well as the latest emerging technologies.

TELECOM AUDIT

A telecom audit is an assessment of your current telecom expenses, providing immediate savings without impacting your organisation.

"Tam Tam Consulting tools are a real differentiator. They stand for transparent and speedy audits, for independent benchmarking and for advice that can be put into practice immediately"

Maria Mandjes, Contract Manager ICT, STORK

TELECOM EXPENSE MANAGEMENT

Keep your telecom costs under control with transparency, reporting and ongoing audits.

"Tam Tam Consulting not only possesses the knowledge to detect previously unnoticed billing issues and errors, but has also the network to ensure that the customer actually receives the credit notes from the operators."

Tom Vervoort, Director Service & Vendor Management Business IT, DHL Express Benelux

We free you from your concerns with our full range of services: Telecom Audit, Telecom Expense Management, Sourcing Management, Inventory & Reporting, Fleet & Usage Management, Advice & Guidance, and more. More information: www.tamtamconsulting.com

NATO: a cornerstone of collective defence



ADMIRAL JAMES
STAVRIDIS NATO
SUPREME ALLIED
COMMANDER EUROPE

In this turbulent 21st century, security will ultimately come from building bridges, not walls. Frankly, we saw what 20th-century security, which focused on walls, brought us: the Maginot Line, the Iron Curtain and the battle formations of the Fulda Gap – 60 million dead in the 20th-century's wars.

The 2012 NATO summit in Chicago will allow our nations to take stock of progress and shape the Alliance's future to ensure that we have the right military capabilities for the 21st century. NATO is experiencing a period of tremendous change, both within the broader historical context and also in terms of defining moments within the Alliance itself.

Since the Lisbon Summit, Allied Command Operations (ACO) has worked to develop new capabilities for crisis-management operations, emphasising a comprehensive approach, cooperative security through Allies and partners, missile defence, and cyber-defence. We have also begun significant restructuring of

ACO headquarters to rationalise resources, optimise capabilities and remain cost-effective.

Over the past year and a half, we have executed several major operations, demonstrating an impressive array of Alliance

capabilities. As many have said, Operation Unified Protector (OUP) in support of UN Security Council Resolutions 1970 and 1973 has been one of NATO's most successful operations. The Arab Spring and rapid escalation of violence against innocent civilians in Libya took many by surprise. Responding quickly, NATO Allies led an unprecedented coalition of contributors from 24 March to 31 October 2011, enforcing an arms embargo by air and sea, maintaining a no-fly zone and undertaking specific operations to protect civilians and civilian-

populated areas. The long-standing political-military relationships developed through Alliance operations, exercises and partnerships permitted and facilitated the coordinated and rapid commencement of operations within an unprecedented timeline.

Today, more than 140,000 NATO personnel are operating in Afghanistan, the Balkans, the Mediterranean, in the seas off the Horn of Africa, and, until recently, in Iraq and over Libya. The ISAF mission in Afghanistan remains our most significant operational commitment. Last year, we began to transition security to Afghan authority and continued to train thousands of police and military personnel as part of this process. Successful transition of security to Afghan authority has progressed well and continues to rely upon increased Afghan National Security Force (ANSF) capabilities.

The Strategic Environment continues to evolve at a rapid pace. A lot has happened since our last summit

and the Alliance has been busy. Global operations and engagement prove NATO's continued relevance and increased effectiveness as a mature Alliance.

NATO is working as it was designed to do, with our Allies and partners sharing the burdens and

■ A key challenge facing us today is to maintain our ability to face threats as they emerge and evolve – often unpredictably

responsibilities of operational missions, but a key challenge facing us today is to maintain our ability to face threats as they emerge and evolve – often unpredictably – with a smarter and more precise application of the instruments at hand. The summit in Chicago is an opportunity to showcase some of our achievements and progress towards this end, but also to further develop and operationalise the concepts of the 2010 summit. In doing so, NATO will remain the cornerstone of collective defence and a force for good in the world. ■

International School for Security and Explosives Education (ISSEE)



ISSEE provides consultancy and training to help your organisation protect itself from terrorist or criminal attack and fulfil its corporate responsibilities towards staff and shareholders. Military, police and industry leaders around the world turn to ISSEE's training and explosives logistics services to fulfil their requirements and statutory obligations with respect to safety, duty of care and the establishment of competency in explosives-storage, handling and manufacturing environments.

The ISSEE brand is renowned worldwide for the credibility and quality of its services. Our outstanding reputation is built on a consistent delivery standard for consultancy, service and training that is without parallel and is certainly significantly more advanced than the services currently offered by other military or commercial providers.

■ Quality training and services in explosives and security for government forces, police and commercial organisations

Our training and support services can be accessed either at our UK-based training centre at Chilmark in southern England – a short train journey from London or a short drive from either Bristol or Southampton airports – or in a preferred location. These services extend to full turnkey solutions for counterterrorism organisations and explosives and munitions management facilities. We deliver a wide range of practical basic ammunition training services, from graduated ammunition technical training, explosives manufacturing, storage, movement and disposals, through to high-level IEDD, EOD, search

and weapons intelligence training and post-blast investigation, as well as providing risk assessment and traveller advice.

Our training is externally accredited by the City and Guilds of London Institute, and our explosives and search technical training is mapped to the UK National Occupational Standards, which are recognised throughout Europe by the European Explosives Certification Association. It is this proven academic and vocational standard-setting that sets ISSEE apart and provides clients with quality assurance about the training that they will receive. ISSEE can deliver to meet your business needs.

ISSEE is compliant with all legislation for the disposal of explosives and can offer a wholly UK solution if required. In addition, we are proud of our innovative, environmentally friendly disposal and demilitarisation services, which enable military or commercial customers to reduce their stocks of surplus or outdated explosives and ammunition.

We can provide risk assessments for insurance, blast mitigation, client protection and business continuity and have a wide range of customers from NATO and PfP countries, ISAF participant nations, international armed forces, international and UK government ministries and defence manufacturers to private companies, NGOs and charities operating in more than 20 countries.



UK Centre for Homeland Security, Chilmark,
Salisbury, Wiltshire SP3 5DU UK
Tel: +44 (0)1722 717979 Fax: +44 (0)1722 717897
Email: admin@issee.co.uk Web: www.issee.co.uk

A soldier's tribute to those on the front line



GENERAL KNUD BARTELS
CHAIRMAN OF NATO'S
MILITARY COMMITTEE

As we approach the important milestone of NATO's 2012 Chicago Summit, as a soldier, my thoughts are with the men and women in uniform who continue to bear the responsibility of the difficult and challenging missions of the Alliance in several regions of the world.

Service members from each of our nations possess a common bond – their unparalleled commitment to our shared values of freedom, peace and security. As conflicts and crises develop in distant reaches and our soldiers are deployed far from home, the sacrifices of our military personnel frequently become detached from the difficult circumstances at home occupying the forefront of our countries. The harsh conditions and demanding environments that our soldiers face are often only seen in brief headlines of daily news coverage, thus overlooking the incredible contributions that our soldiers make every day.

Our soldiers are the foundation of the Alliance. They protect and guarantee our principles of individual liberty, democracy and human rights through unity, solidarity, strength and resolve.

The Alliance, as a political-military organisation, provides a unique forum for consultations on Euro-Atlantic security through diplomacy and cooperation. However, sometimes tensions deteriorate into a crisis, and when other efforts fail to resolve the issue, the use of military options is considered.

When NATO is involved, we remain firmly committed to addressing the challenges to the defence and security of the member nations,

and the soldier is the guardian of stability in our dynamic and unpredictable world.

In this context, when NATO decides collectively to employ its military members, the responsibility is tremendous. Yet, the Alliance is reassured by the knowledge that generations of soldiers have never failed to answer the call, and today's service member remains dedicated to preserving the world's most successful political-military Alliance in the future.

In all fields of competence, the Alliance is forging exponential improvement in its ability to adapt to the emerging challenges of the complex and evolving security environment, by maximising the use of technology and enhanced training to deliver robust, deployable forces.

Able to operate in any environment, our soldiers continually demonstrate professionalism and a capacity to integrate in austere situations – the

nucleus for the concept of 'Connected Forces'. Meanwhile, our military-to-military relationships continue to expand opportunities to work with partners around the globe.

Every day, thousands of our service members stand 'shoulder to shoulder', and for that we owe them a debt of

gratitude. Their pride and spirit exemplifies the ideals of a soldier, and is truly a valued treasure for each nation and for NATO alike.

As we approach the Chicago Summit, I would like to convey my sincere appreciation to every military member of the North Atlantic Alliance for their service to our nations and citizens – enabling NATO to safeguard our freedom and security. ■

DATA CENTRES WORLDWIDE: 3,000,000 AVERAGE DAMAGE PER HACK: € 2,500,000 ONE PARTNER FOR SECURITY SOLUTIONS

CYBER SECURITY. In the globalised world of today, governments, institutions, companies and public authorities share their information through IT-based infrastructure and communication networks. At the same time, the number of sophisticated cyber threats, attacking vital IT systems, damaging sensitive data and stealing knowledge, has increased. We are proud that operators worldwide have selected us for our outstanding cyber security capabilities. www.cassidian.com

DEFENDING WORLD SECURITY



CASSIDIAN

Meeting the challenges of a transformed world



FREDERICK KEMPE
PRESIDENT AND CEO
OF THE ATLANTIC
COUNCIL OF THE
UNITED STATES

The May 2012 NATO summit in Chicago will serve as a memorable occasion for the United States and the Alliance. It will be the first time that NATO heads of state and government have met in the United States since 1999, and will mark the first occasion that they have met in a US city other than the nation's capital. The summit will also be the first gathering of NATO's top leadership since the Arab awakening and the Libyan conflict, and the first since the United States announced its new defence strategy listing the Asia-Pacific region and the greater Middle East as top US security priorities.

An even more immediate set of challenges will face Alliance leaders at Chicago. A transatlantic debt crisis has produced deep defence cuts in both Europe and North America, which led former US Secretary of Defense Robert Gates to warn of a "dim and dismal" future for the transatlantic alliance if European nations fail to take more interest in their own security. Meanwhile, the endgame for NATO's mission in Afghanistan is increasingly uncertain; tensions with Iran and mounting violence

against civilians in Syria threaten renewed conflict in the Middle East, and the return of Vladimir Putin to the Kremlin and his absence at the Chicago Summit calls into question the nature of NATO's future relationship with Russia.

Yet despite all those major strategic challenges, Chicago was originally intended to serve as an implementation summit that would allow the Alliance to act on the important decisions taken at the Lisbon Summit in November 2010. Therefore, even as Alliance leaders seek to take stock of the implications

of the international tumult of the past two years, implementing important NATO commitments on Afghanistan, missile defence, defence capabilities and partnerships will remain crucial to whether or not the summit is viewed as a success.

It therefore gives me great pleasure to introduce the thoughtful and stimulating essays in this collection. This compendium of articles captures the breadth and depth of the challenges facing NATO, from the strategic questions of how the Alliance should adjust to the challenges of a transformed world to critical operational questions of how to maximise defence capabilities in a time of austerity. Its practical findings and recommendations can serve as an important primer for decision-makers, experts and the general public alike.

I am proud to associate the Atlantic Council with this important publication of the Atlantic Treaty Association, of which we are a proud member. Its themes are consistent with the Council's mandate to advance Atlanticism and our mission of

■ This collection makes an important contribution to ensuring the continued cohesiveness and relevance of the transatlantic Alliance. It should be read with interest

renewing the Atlantic community for 21st-century global challenges. The articles featured in this compendium reflect the major subjects of our programming over the past year, which has been intended to shape the public and private debate on the Chicago Summit agenda (please see our website at www.acus.org for full details).

This collection makes an important contribution to ensuring the continued cohesiveness and relevance of the transatlantic Alliance. It should be read with interest in capitals across the NATO membership. ■



ATLANTIC COUNCIL

IDEAS. INFLUENCE. IMPACT.



For the past half century, the Atlantic Council has been a preeminent, nonpartisan institution devoted to promoting transatlantic cooperation and international security. Its founders developed an ambitious agenda to engage Americans with their European partners and global friends on matters of mutual concern.

Under the leadership of its Chairman Chuck Hagel and President and CEO Frederick Kempe, the Council is now harnessing that history of transatlantic leadership and applying its founders' vision to a broad spectrum of modern global challenges ranging from violent extremism to financial instability and from NATO's future to energy security. As we face an inflection point in history, the Council provides an essential forum for leaders to navigate dramatic shifts in economic and political influence.

The Council is home to nine programs and centers that work together to influence policy decisions and the public debate through programs, research, publications, Congressional testimony, and media outreach. Through its International Security Program, the Council remains the most important platform for dialogue and action to ensure NATO is prepared to take on the host of new challenges and opportunities posed by globalization.

For more information, or to get involved, please contact us at 202.463.7226.

"At no other time has the Atlantic community faced such critical and complex global challenges. Whether the matter is Afghanistan and Pakistan, energy security and climate, or dealing with a rising China and resurgent Russia, transatlantic cooperation has never been more essential."

-Senator Chuck Hagel
Atlantic Council Chairman



www.twitter.com/AtlanticCouncil



www.facebook.com/atlanticcouncil

Informing the debate on future challenges



SIMON MICHELL
EDITOR

The Chicago Summit is an opportunity to further embed and strengthen the goals and vision of the New Strategic Concept that was adopted at the 2010 Lisbon Summit. It is also an opportunity to take stock and consider how the Alliance wants to address future challenges. As the ISAF operation in Afghanistan winds down, NATO member states will have a well-earned breathing space to debate whether they want, or need, to undertake such an onerous and often thankless task in the future.

The successful Libya campaign offers up a model of how NATO might differentiate between the application of hard and soft power. Supporting our neighbours in their struggles with a thoughtful application of NATO's asymmetric advantage – its air and space capabilities – may well be preferable to another embroilment in an enduring land campaign.

It would also enable them to reserve the deployment of land forces for brief surgical operations and humanitarian or peacekeeping duties.

Whatever the future has in store for NATO, there can be little doubt that it remains a vital international military capability that can be delivered via the United

Nations to help solve regional instability issues. For the time being at least, no other military force is able to deploy out of theatre in the same way with the same capabilities.

NATO's capabilities must therefore be maintained and enhanced in order to enable it to successfully undertake out-of-area missions. New threats, such as cyber-warfare and the impacts of climate change, need to be effectively countered if the values and way

of life of the 28 member states are to be protected, so the effects of the financial crisis in terms of austerity budgets and reduced military expenditure must not be allowed to weaken the Alliance. A thorough and comprehensive roll-out of the 'smart defence' concept will go some way to ensuring this, but NATO countries need to take the two per cent of GDP allocation to their military spending seriously.

The signs that the transatlantic bond may snap are no longer theoretical. America's turn towards the Pacific signals a warning shot that European states must not ignore. It is no longer clear why the United States should continue to shoulder a disproportionate amount of the financial and military burden to defend a region that is seeing its international relevance diminish as Asia continues to build upon its growing global influence.

Furthermore, robust efforts to engender a more harmonious relationship with Russia are paramount if NATO is to successfully deploy an effective missile defence shield that covers not just the member states at home, but also protects NATO troops on deployment. Enhanced mutual

trust and confidence will also enable the process of continuous membership enlargement to take place in a less confrontational manner.

All these themes and more are covered by the articles in this publication, along with a set of national perspectives from several of NATO's members. I hope that the reader finds much to ponder and debate after the Chicago Summit has come to a successful and fruitful conclusion. ■

NATO's growing global network

NATO MEMBER COUNTRIES

Twenty-eight members contribute to promoting security and stability through diplomatic, political and military means. They are committed to the principle of collective defence, which means that an attack against one member or more is considered an attack against all. NATO also develops partnerships with non-NATO countries and is involved in crisis management operations and missions.

NATO MEMBER COUNTRIES

Albania	Greece	Portugal
Belgium	Hungary	Romania
Bulgaria	Iceland	Slovakia
Canada	Italy	Slovenia
Croatia	Latvia	Spain
Czech Rep	Lithuania	Turkey
Denmark	Luxembourg	United Kingdom
Estonia	Netherlands	United States
France	Norway	
Germany	Poland	

PARTNERSHIP FOR PEACE COUNTRIES

Armenia	Kazakhstan	Tajikistan
Austria	Kyrgyz Republic	Turkmenistan
Azerbaijan	Malta	Ukraine
Belarus	Rep of Moldova	Uzbekistan
Bosnia & Herzegovina	Montenegro	
Finland	Russia	
FYR Macedonia	Serbia	
Georgia	Sweden	
Ireland	Switzerland	



MEDITERRANEAN DIALOGUE COUNTRIES

Algeria	Jordan	Morocco
Egypt	Mauritania	Tunisia
Israel		

ISTANBUL COOPERATIVE INITIATIVE (ICI)

Bahrain	Qatar
Kuwait	United Arab Emirates

CONTACT COUNTRIES

Australia	New Zealand
Japan	South Korea

ISTANBUL COOPERATION INITIATIVE (ICI)

To date, four countries of the Gulf Cooperation Council have joined.

PARTNERSHIP FOR PEACE COUNTRIES

Partnership with non-NATO countries started as early as 1991 to help often newly independent states build a solid democratic environment, maintain political stability and modernise their armed forces. Discussions on security issues of common interest take place within a multilateral forum called the Euro-Atlantic Partnership Council and practical cooperation is organised with individual partner countries through NATO's Partnership for Peace programme. NATO also maintains a special relationship with Russia and Ukraine.

MEDITERRANEAN DIALOGUE COUNTRIES

These countries participate in a security dialogue with NATO to improve mutual understanding and contribute towards regional security, through stronger practical cooperation. At present, there are seven participating countries that can consult collectively and individually with NATO.

This partnership is complemented by the Istanbul Cooperation Initiative that offers cooperation to the broader Middle East region.

CONTACT COUNTRIES

In addition to its formal partnerships, NATO cooperates with a range of countries that are not part of these structures. Often referred to as "other partners across the globe" or "contact countries", they share similar strategic concerns and key Alliance values.

NATO's Chicago Summit is an opportunity to consolidate the decisions made at Lisbon in 2010 and to steer a course for continued strength while the world is in the grip of a financial straitjacket. Simon Michell identifies the four main priorities that have to be addressed if the event is to be deemed a success

The Chicago Summit – strength in austerity

The Chicago Summit comes hot on the heels of the last NATO summit, held in Lisbon in November 2010. Lisbon was a defining moment for the Alliance in that it agreed a New Strategic Concept that was developed to refocus NATO's ability to address a future in which threats have become increasingly unpredictable and the resources to meet them are increasingly stretched.

NATO's Chicago Summit immediately follows the G8 summit at US presidential retreat Camp David. With Western nations facing unprecedented pressures and with the host, President Obama, preparing for elections, neither summit is likely to be a transformational event. Nevertheless, Chicago will provide an opportunity to consolidate the initiatives espoused in the New Strategic Concept and to look for ways to keep the Alliance strong as it endures what is likely to be an uncomfortably long period of austerity.

RETAINING MILITARY CAPABILITY

In the run-up to the summit, NATO Secretary General Anders Fogh Rasmussen stressed that, despite dwindling budgets, the Alliance has to maintain a robust military capability as, in his words: "Security is not an optional extra – even in times of austerity." There is a real need to remain vigilant, prepared and militarily strong. But, for the foreseeable future, this will have to be achieved in a 'smarter' way. The Secretary General set out his stall for the summit back in September 2011 at a speech to the European Policy Centre, in which he was passionate about the need for members to coordinate their activities

in a more focused manner and reinforce the ties that hold the Alliance together.

"We may not be able to spend more, but we certainly can spend smarter by spending together – and that is what we must do. In the current economic climate, the need for cooperation is clearer than ever. The need for solidarity is stronger than ever. And the argument for transatlantic commitment is more compelling than ever," he said.

THE FOUR KEY CHICAGO THEMES

During his speech to the European Policy Centre, Rasmussen revealed what he considered to be the four main priorities that had to be addressed if the summit was to be deemed a success. These were: Afghanistan, capabilities, missile defence and partnerships. These themes represent a route back to a reaffirmation of the Alliance's raison d'être – collective defence.

The timetable for NATO ISAF's controlled withdrawal from Afghanistan has been set as much by political imperatives as by military momentum. By the end of 2014, the massive effort that

“We may not be able to spend more, but we certainly can spend smarter... In the current economic climate, the need for cooperation is clearer than ever”

ANDERS FOGH RASMUSSEN NATO Secretary General

NATO has made in the country to build up the Afghan military and police will need to be substantive enough for NATO boots on the ground to be pared back to the absolute minimum. However, the military withdrawal will have to be balanced with a copper-bottomed guarantee of continued support. Therefore, a strategy of how this continued assistance will be delivered will need to be agreed to satisfy not just the NATO members but also the Afghan government. The internecine conflict that swept through Iraq cannot be allowed to take hold in Afghanistan, especially as the signs for this began to emerge at the end of 2011.

ADDRESSING SHORTFALLS

The withdrawal of ISAF troops from the conflict in Afghanistan should free up resources for NATO members to concentrate on filling in the capacity gaps that have long been evident. At the Halifax International Security Forum in November 2011, US Defense Secretary Leon Panetta listed his capability priorities for NATO, insisting that "we must commit to ensuring that NATO addresses key shortfalls in areas such as intelligence, surveillance, reconnaissance (ISR), precision-strike munitions and aerial refuelling and lift capabilities".

Operation Unified Protector highlighted the need for these assets to be more widely accessible via an increased number of NATO nations, be that on an individual or pooled basis. With Europe taking the lead 'kinetic' role in Libya, the US still provided many of the essential elements that resulted in such a successful campaign,



SHOWING SOLIDARITY: the NATO fleet MCMFOR SOUTH transits the Black Sea after participating in exercise Cooperative Partner 2003, in and near Odessa, Ukraine

particularly in the ISR and airborne support fields. The rest of the Alliance has to build up capabilities in these key areas. However, the issue is a little bit deeper than a capability wish list, and Panetta has stressed that there is a clear need to impress upon all NATO member states that the current trend of defence budget cuts must be coordinated to ensure that the Alliance does not hollow itself out. No country should be making future force-reduction decisions in a vacuum.

PROGRESS IN MISSILE DEFENCE

Beyond the historical capability shortfalls, the agreement to deploy a NATO missile defence system is taking shape, but more needs to be done to alleviate Russian

anxieties over the system. The successful test-firing in November 2011, as part of Exercise Rapid Arrow, represented a significant milestone on the path to extend missile defence to the citizens of the Alliance – and not just to deployed forces. With Iran becoming ever more unpredictable, the urgency to complete the system is undeniable. Rasmussen has openly declared that he hoped for a concrete step forward before the summit – something that now has come to fruition. The Chicago Summit must find a way to keep the programme on target.

As far as partnerships are concerned, NATO has always tried to entice non-NATO countries into closer ties with the Alliance through initiatives such as Partnership

for Peace, Mediterranean Dialogue and the Istanbul Cooperative Initiative. The Chicago Summit will need to reinvigorate this process, particularly with the countries of North Africa and the Middle East. The recent unrest in these regions only serves to emphasise the point. That said, Operation Unified Protector will perhaps make this easier, as witnessed by the active participation in the operation by Jordan, Qatar and the United Arab Emirates.

Chicago may not go down as a transformational summit, or one at which radical and new decisions were made. But, in the matter of finding a way to keep the world's most successful military alliance strong, capable and relevant, it may ultimately prove to be a turning point. ■

Franklin D Kramer, Board Director of the Atlantic Council, proposes four key themes that it would be useful to consider at the Chicago Summit

Global security: pivoting and partnerships

The new United States defence guidance has some substantial implications for the transatlantic nations that must be addressed at NATO's Chicago Summit. Specifically, how does the long-standing transatlantic security bargain apply in this globalised world? What are the key security challenges at this strategic turning point? How should these be met in a time of financial constraint? And what are the key actions the transatlantic nations should undertake?

The following recommendations on policy will help NATO answer these questions. First, NATO should create a Strategic Consultative Group to establish a longer-term strategy for the Greater Middle East, including the areas from Syria to Pakistan and North Africa. Second, NATO should work with the North African countries on issues of the role of the military in a democracy.

NATO should also focus on cyber as a global issue and help organise the establishment of a Cyber Security Board that can generate both military and critical infrastructure standards.

EXPANDING SPECIAL OPERATIONS FORCES

Finally, NATO should enhance its capabilities by expanding its special operations forces and undertaking an advanced research and development programme. Undertaking these actions would bring NATO strategy into

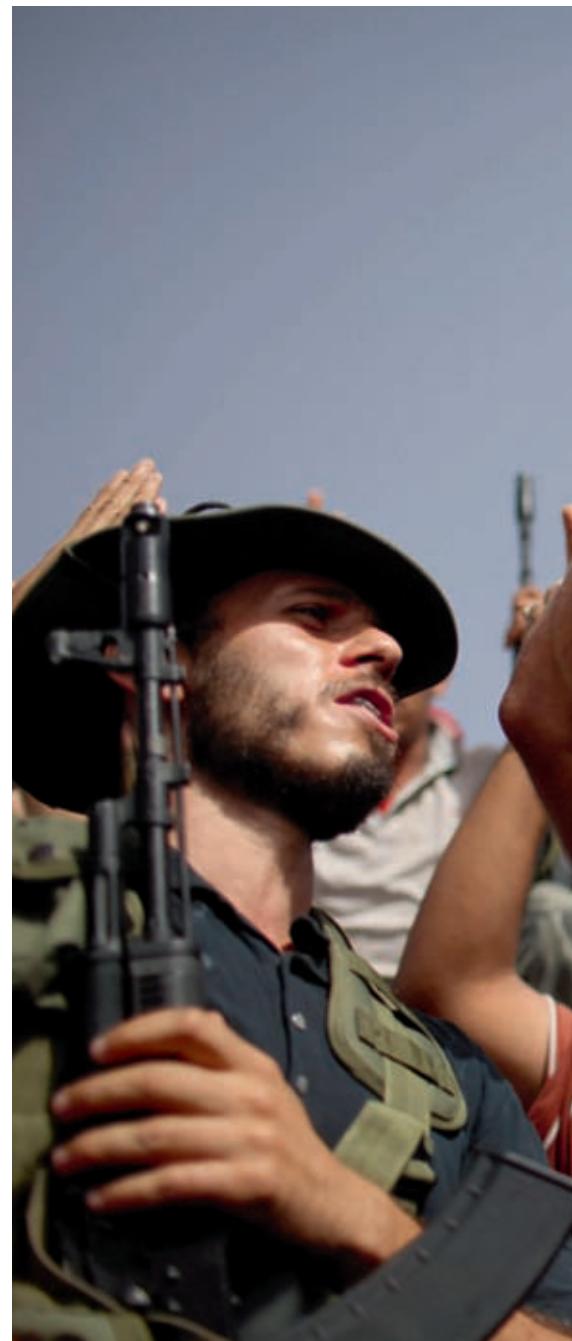
congruence with the new US defence guidance and make clear that the fundamental nature of the transatlantic bargain includes critical global issues, including the Greater Middle East and cyber, and the necessary capabilities to deal with such issues.

THE IMPORTANCE OF STRATEGIC CONGRUENCE

A critical element of the transatlantic bargain is for there to be fundamental congruence between United States and NATO strategy. The dynamic nature of the Greater Middle East and the new US defence strategy have raised key questions about whether this remains the case.

To achieve congruence at the strategic level, a first action would be to tie NATO and US strategies together at the NATO summit with an appropriate political declaration. The Alliance should create a Strategic Consultative Group to formulate a longer-term strategy utilising all elements of national power for the Greater Middle East, and particularly two arenas where the Alliance or its member nations are most heavily engaged – the theatre involving Afghanistan, Pakistan and the Central Asian countries; and the Iranian problem and the issues of deterrence, and proliferation in the Gulf.

A second set of initiatives that should be undertaken involves North Africa and the role of the military in a democracy. An important prerequisite for worthwhile



help by the transatlantic nations will be meaningful consultations with the countries towards whom assistance is directed, so that the approach is one of a demand-driven partnership. Utilising governmental and non-governmental entities might have a broader appeal than government-to-government dialogues.

In the dynamic situation that Tunisia faces, a national strategy may emerge, but it will nonetheless be important to articulate and decide issues including the mission of the military; its relationship to other security organisations, such as the police or border control; the size, budgeting and personnel requirements for the military;



ON THE ROAD TO VICTORY: rebels played a crucial part in Libya's regime change: bringing the militias within the governance structure is a key issue

how to organise the government's ministry of defence; how to deal with a civilian parliament; and how to create appropriate transparency for the population.

For Libya, the first effort should be to establish a diplomatic approach through which the Libyans choose to engage in programmatic efforts of value. Assuming that there is agreement to consult on questions surrounding the military, an obvious and highly important issue will be the critical question of how to bring the militias within the governance structure.

The Egyptian military presents the most difficult case for the transatlantic countries, since broad acceptance of the

principle of civilian control appears to remain a fundamental issue in Egypt. Given those uncertainties, it is probably premature for the transatlantic countries to undertake new programmes for Egypt.

The immediate effort should focus on dialogue, and one key aspect of the conversation should be with the civilian groups, the elected parliamentarians, the Muslim Brotherhood and other powerful political elements within the country.

CYBER AS A GLOBAL SECURITY ISSUE

NATO and the transatlantic nations need to engage on critical global security matters, and no issue is more important

than cyber security. A key point is to recognise the need for overall resilience. It must be understood that attackers may breach computer and network defences, but that operations must nonetheless continue successfully.

NATO networks themselves are only a small part of the Alliance's capabilities – national military networks also need resilience. If national militaries are a source of malware and other cyber issues, those networks would have to be cut off from NATO operations – and that would undercut NATO's greatest strength: its interoperability. A military focus is not enough, since it will be impossible to



TARGETED APPROACH: the Special Operations Craft Riverine is specifically designed for the use of US Navy SEALs and other special operations forces

assure security in the absence of electricity or telecommunications. Accordingly, those critical infrastructures must also have resilience capabilities.

Establishing the framework for such a coordinated cyber approach is a critical step for the transatlantic nations. For cyber, there needs to be established a joint standards group with appropriate military and civilian authorities in Europe, the United States and Canada. Such a step – the creation of an international Cyber Security Board – would be invaluable in achieving effective cyber security.

CREATING LEVERAGING MILITARY CAPABILITIES

Force will continue to be a factor in the future global world, but diminished resources call for highly leveraged capabilities. Two high-value areas are special operations forces (SOFs) and advanced research and development.

SOFs fit well into an 'age of austerity' because their resources requirements are relatively less substantial. A NATO

■ Establishing the framework for a coordinated cyber approach is a critical step. For cyber, a joint standards group needs to be established

initiative to significantly expand nations' SOF capabilities would have important benefits, including enhancing the Alliance's capacity to undertake effective partnerships with non-NATO countries.

It would be achievable in the context of the resources that NATO nations are likely to be able to devote to their military capabilities, and would maintain throughout the Alliance an important, land-based 'sharp end of the stick'. Advanced research and development supports the concept of leveraging

capabilities, especially since it can have both military and civilian applications.

While there can be no certainty that any military-oriented research and development programme will have civilian application, this has happened on enough occasions – with satellites, GPS, the internet – that an expectation of benefits that could also enhance private-sector competitiveness is not unreasonable. ■

The Honorable Franklin D Kramer is a national security and international affairs expert and holds multiple appointments, including as an Atlantic Council Distinguished Fellow, member of the Atlantic Council Board of Directors, and member of its Strategic Advisors Group. Mr Kramer has been a senior political appointee in two administrations, including as assistant secretary of defense for international security affairs for President Clinton, and previously as principal deputy assistant secretary of defense for international security affairs

WORLD LEADER...

...IN RENTAL POWER SOLUTIONS



Aggreko power rental equipment is purpose-built for global transportation and operation in the harshest of conditions.

Supported by 24-hour on-site service and maintenance crews, Aggreko equipment always operates at peak performance, delivering a guaranteed, independent and highly reliable power supply.

Whether you need distributed power over a large campsite or centralized baseload power for a forward operating military base, Aggreko delivers the power solutions that are right for you, whenever and wherever you need them.

Aggreko International Power Projects

Two Northpoint Drive Suites 110 / Houston, TX 77060 / USA

E-mail: rentalpower@aggreko.com

www.aggreko.com

aggreko

AMERICA

Tel +1 281 848 1400
Fax +1 281 848 1400

AFRICA

Tel +234 1 461 2988
Fax +234 1 461 2989

ASIA

Tel +65 6862 1501
Fax +65 6862 0182

AUSTRALIA

Tel +61 3 9586 5000
Fax +61 3 9586 5001

EUROPE

Tel +33 1 6015 8153
Fax +33 1 6016 5355

MIDDLE EAST

Tel +971 4 808 6200
Fax +971 4 883 4145

Al-Qaeda, al-Shabab, Boko Haram, cyber-warfare, piracy, biochemistry – the catalogue of threats facing NATO continues to grow. **Robert Fox** examines each of these dangers and asks what the Alliance should do to address them

The security environment

NATO's Chicago Summit is an important occasion for taking stock of the Alliance and determining where it is likely to have to go in the coming years. The US administration of Barack Obama, the host in Chicago, has already signalled some important changes. The US sees that its security and foreign policy is to be aimed more at the Pacific and Asia, and on hotspots such as the Gulf. Furthermore, in line with the slimming down and reorientation of US defence and security forces, Washington has indicated that it will adjust and reduce its contribution to the Alliance.

This would suggest that Washington is less focused on the North Atlantic security area, that it would like the European Allies to do more for themselves and, by implication, perhaps, that NATO as an

Alliance might do less. This does not mean that the Alliance is likely to be less busy in 2012 than in 2011, its most active year to date since its foundation in 1948. There are threats – new, old and emerging – in abundance to preoccupy the membership and its planners. From the tensions in the Gulf, the continuing campaign in Afghanistan, the anti-piracy patrols of East Africa, plus the challenges of cyber-security, and renewed scares over a bird-flu pandemic, the Alliance has enough actual threats to contend with, without having to invent new ones.

EVOLVING MISSION IN AFGHANISTAN

Afghanistan will continue to be near or at the top of the NATO agenda in 2012, and with very good reason. NATO's leadership of the International Security Assistance

Force (ISAF) is its biggest operational commitment to date. It has been running for the best part of 10 years, from when it was mandated at the Bonn Summit in December 2001, and will run to the end of 2014, when international troops are due to step down from combat operations. After that, NATO advisers and trainers are likely to be required for training and maintaining the viability of the Afghan forces. Afghanistan presents an interesting case study of how missions change, as the perceptions of new and old threats evolve.

It has become evident, for example, that a new configuration of al-Qaeda affiliate groups has been emerging in eastern Afghanistan throughout 2011. More Uzbeks and local groupings, such as the Uighurs, are now reported to be joining, and they have strong links to groups in the



central Asian republics, of which the Islamic Movement of Uzbekistan (IMU) is one of the more prominent. The resurgence of powerful anti-Shia Pakistani groups, such as Lashkar-e-Jhangvi, indicates the spread of such militancy deep into Punjab and Pakistan's south. Such groups and such militancy are of direct interest for internal as for external security of lead NATO partners, such as the UK, France and Germany.

Coupled with violent extremism, the drug economy of Afghanistan and its neighbourhood is strengthening, according to the report by the United Nations Office on Drugs and Crime (UNODC) agency in 2011, which indicated a surge in output of opium, heroin and cannabis. Afghanistan now produces about 90 per cent of the world's supply of heroin – another cause for making it a prime security preoccupation for European NATO Allies, especially.

The broadening spectrum of violent extremist groups is a major item of interest. Al-Qaeda now has a new base of operations for training recruits in the northern Caucasus, as well as across the Maghreb in North Africa, which pose as much of a threat as potential bases for mounting terrorist attacks in Europe as did the training camps in Waziristan.

Among the newly emerging groups is al-Shabab, once thought to be confining its operations to its native Somalia. Now there is evidence that it is extending its influence throughout the Somali diaspora within Europe – not least to the Somali community of London's East End, in the neighbourhood of the 2012 Olympics. The Boko Haram fundamentalist group of northern Nigeria also presents a potential threat through its British and European diaspora as it turns to more extreme violence to prosecute its message.

IMPENDING SECURITY CONCERN

The future consequences of the Arab Spring are increasingly preoccupying, as protest turns to violence in a number of countries – particularly Syria, which has a common border with a NATO member country, Turkey. Overspill from the violence is bound to reach into European NATO countries and is already a preoccupation in the security of the Mediterranean.

The biggest regional focus of tension in the run-up to the Chicago Summit must be the security of the Gulf and potential confrontation with Iran. NATO maritime forces, collectively and individually, are



TACKLING EXTREMISM: the spread of militancy and radicalised groups is of great concern to NATO members

The contentious issue of Iran's nuclear programme is unlikely to abate any time soon – in fact, the pessimists expect it to have a viable nuclear weapon within 18 months

already committed to keeping the seaways of the upper Gulf open and ensuring the flow of shipping through the Straits of Hormuz. The contentious issue of Iran's nuclear programme is unlikely to abate any time soon – in fact, the pessimists expect it to have a viable nuclear weapon, albeit in minimal and experimental numbers, within 18 months. An important decision point is likely to arrive much sooner. Iranians are due to vote for a new parliament (majlis) in March. This will be the first popular vote since the controversial presidential elections brought about protests in the form of physical demonstrations, as well as on social network media, in the summer of 2009 – and many of these continue.

Asymmetric operations using the internet have already become a major preoccupation for the Alliance. We are

now well into the era of computer viruses and the wars of Trojans and worms, such as Stuxnet – as has already been shown by Iran. Commercial, media and security interests continue to be targeted by hackers and the spawners of computer viruses. Some of this activity is criminal, but some of it is ideologically motivated, while some acts are the by-products of psychotic behaviour. This is the cue for NATO to become involved in major inter-agency initiatives to understand and combat these phenomena. Nor should the threat of biological virology be forgotten as fears grow of a new H5N1 bird-flu pandemic, which might be manipulated by malign human agency to devastating effect and, potentially, result in millions of human victims.

While most Allies are faced with the problems of diminishing funding and resources, NATO stands to widen its stabilisation activities, through soft power as much as hard power. Variants on NATO's Partnership for Peace programme, which proved successful with Eastern European countries emerging from communism in the 1990s, could be adapted for the aftermath of conflict in countries such as Libya and Afghanistan.

The complexity of challenges and threats for 2012 demonstrate a continuing legacy and role for NATO. The message is for the partner nations to adapt their ways in collective security, not to mend them. ■

Jamie Shea, Deputy Assistant Secretary General for Emerging Security Challenges at NATO, reviews the progress that the Alliance has made since the 2010 Lisbon Summit, and highlights some of the major challenges that it now faces

Progressing the Lisbon Summit

By the time of NATO's Chicago Summit in May 2012, a year and a half will have elapsed since the Alliance adopted its New Strategic Concept in Lisbon. Chicago will, therefore, be the occasion for a first stocktaking, both with respect to how well NATO has implemented its Strategic Concept, and as to whether that document is standing the test of time, as NATO adjusts to new crises and new security challenges.

Inevitably, the result of the stocktaking will be a mixed one. The New Strategic Concept is a wide-ranging and ambitious document. In some respects, it covers familiar ground – such as Article 5 on collective defence. But, in others, it breaks new ground, as in committing NATO to work on many new threats, such as cyber-criminality, terrorism or piracy. Consequently, NATO can hardly expect to receive an 'A+ grade' in every domain.

As is always the case, progress in some areas will be more impressive than in others, given the pressures of specific unforeseen events, such as the Libyan intervention. Moreover, the New Strategic Concept is arguably more of a cogent description of today's security challenges and principles of collective action than a detailed blueprint or manual for how the Allies should meet these challenges. Also, it did not represent a consensus among Allies on how the Concept should be implemented, or how far NATO's mandate and ambition would extend in its new fields of responsibility. As 19th-century Italian statesman Massimo D'Azeglio put it, albeit in a different context: "We have made Italy. Now we must make the Italians."

In assessing NATO's progress in implementing the Strategic Concept, it is useful to focus on the three key roles for the Alliance that the Concept outlines: the triad of collective defence, crisis management and cooperative security.

COLLECTIVE DEFENCE

In terms of collective defence, the key to credibility is commitment and capabilities. Certainly, the Strategic Concept reaffirmed the primacy of collective defence as NATO's core task, and the requirement for rapid-reaction forces and NATO exercises to demonstrate the Alliance's readiness to respond to aggression. The good news is that the return of forces from Iraq and Afghanistan should enable NATO to focus more on the home front in the years ahead.

The US will leave two combat brigades in Europe, even if it is moving some of its military capability to the Asia-Pacific region, and is also pushing ahead with a missile defence to cover all NATO territory.

The problem is that the range of threats is becoming broader. Today, the risks of a NATO ally becoming the victim of a major cyber-attack, or a terrorist strike, or of a major societal disruption following a natural disaster are far greater than the risk of being invaded. This broader set of threats poses the risk that Allied threat perceptions will differ according to geography or the most recent national experience with cyber-attacks, energy cut-offs or terrorist strikes. So how to maintain NATO solidarity when one ally may be affected but not others?

How, then, can NATO minimise this risk? By devoting more time to debating the implications of the new security challenges

and by improving its situational awareness of how and where new threats are evolving, and by focusing more on how to respond to the new security challenges, for example, through exercises. If Estonia suffered another devastating cyber-attack tomorrow, as it did in 2007, would NATO now be better able to assist in areas such as detection, damage assessment, and limitation and recovery? How could Article 5 be activated to trigger a collective Alliance response in situations that are more ambiguous than one territorial state attacking another?

The Alliance needs to think through the issues before it is confronted with the next attack. But one conclusion is clear: the traditional focus on deterrence has to be augmented with a stronger focus on prevention, mitigation and resilience. In short, collective defence can no longer apply to only one, rarely changing scenario, as in the past. It must encompass not only the classical threat of aggression, but also the risk of political intimidation and military coercion.

Capability development must also follow this trend. Alongside the classic nuclear and conventional forces to deter large-scale military attacks, NATO will need also to embrace cyber-defence, critical infrastructure protection, supply-chain security and intelligence sharing, in addition to the missile defence shield that NATO has already agreed to deploy.

CRISIS MANAGEMENT

Some have argued that, post Afghanistan, the era of larger-scale NATO military operations will be over. Libya demonstrates that even if long-term,



ADDRESSING CURRENT AND FUTURE CHALLENGES: NATO Secretary General Anders Fogh Rasmussen presented the New Strategic Concept at the 2010 Lisbon Summit



EXTENDING COOPERATION: the partnerships between NATO members and relations with international organisations are becoming increasingly important

'boots on the ground' missions (such as Afghanistan, Iraq, Kosovo or Bosnia) are less likely in the future – because of lack of political will, money and capabilities – more limited operations can always emerge 'out of the blue', in the short term.

Libya once again underlined the need for NATO to have the capabilities, planning and flexible command structure with the right expertise to initiate an operation quickly, and also to be able to attract partner involvement both for additional capabilities and political legitimacy.

That is why NATO must not treat the pending handover in Afghanistan as an alibi for neglecting our ability to manage crises and to weaken interoperability between the US and the Europeans, or between the Alliance and key partner contributors, such as Australia, Finland and Sweden. Even if similar operations are undertaken by coalitions of the willing in the future, it is important to maintain the pool from which to build these coalitions – and that pool will be NATO.

Given the budgetary constraints of all Allies, we need to find new, 'smarter' ways of getting returns on our defence investments. Despite many political initiatives in both NATO and the European Union, it is still worrying that over 90 per cent of European capabilities and forces are nationally owned and operated, while over 70 per cent of European defence contracts are not subject to cross-border bidding.

The only answer to rapidly declining defence budgets – including now in the US, too – is the pooling and sharing of

■ *The only answer to rapidly declining defence budgets is the pooling and sharing of resources, to achieve economies of scale*

resources, to achieve economies of scale. But another promising approach could be to focus more on proactive, preventive approaches to crisis management. This could include a new emphasis on forward presence with small, high-visibility forces. These forces would be able to engage in combined training and cooperative capacity building, according to the logic that we must enable the actors in the crisis region to increasingly take care of their own security. NATO has long been characterised by very different levels of defence spending and effort among its members. In future, the burden of security must be placed onto more shoulders.

COOPERATIVE SECURITY

The way in which the Strategic Concept redefines and broadens our understanding of collective defence, and of crisis management, points to an increasing importance of partnerships. Partners have become indispensable to the Alliance across its entire agenda, but most notably in its military engagements. "Enhancing NATO's connectivity", to use a phrase from NATO Secretary General Anders Fogh Rasmussen, helps to alleviate the problem of limited Allied resources and to provide critical niche capabilities, as well as combat forces.

Yet, as operations wind down, there is a need to engage partners in other, long-term areas of cooperation – for instance, in dealing with the new threats, since these require global solutions that reach far beyond the NATO Allies. NATO needs to give more thought to implementing partnership. Should there be a hierarchy among partners, according to their willingness to engage in NATO-led operations, or to make political and financial contributions to NATO activities? How much participation and 'decision shaping' can we grant our partners in return? And how can we avoid losing some partners that may feel less solicited or engaged than others?

Finally, NATO has to continue its efforts to deepen relations with other institutions – most of all, the United Nations and the European Union. The Strategic Concept points to a future in which NATO will deal with many things and be increasingly networked with the wider world. But it will be a world in which NATO will less often find itself the only solution to a given challenge, or always taking the lead in handling a given operation, such as Afghanistan, Bosnia and Kosovo. The future belongs to team players, and NATO will need to become a skilled and effective team player to meet 21st-century security needs. ■

Pentaq: dedicated to manufacturing quality textile products

Pentaq Manufacturing Corp. (Pentaq) was founded in February 2004 by Mr Oscar Quiles (pictured), rescuing a company that was destined to be closed. It commenced with 38 employees and currently consists of 225 employees dedicated to apparel manufacturing and related items for both the United States Department of Defense and commercial customers. Mr Quiles, President of Pentaq, had spent most of his professional life working in the sewing industry. He had a dream and was determined to achieve it!

Pentaq is a Small Business registered under the CCR, ORCA and Certified 8(a) Program Participant, Self-Certified Small Disadvantage Business and located in a Certified HUBZone in the city of Sabana Grande in Puerto Rico. The Puerto Rico Government Incentive Programs and other US agencies, such as the Small Business Administration (SBA) and the Small Business Technology Development Center (SBTDC), have been key players in Mr Quiles's journey to success.

In 2011, the SBA, in collaboration with US Department of Commerce Minority Business Development Agency, selected Mr Quiles as the Regional Small Business Person of The Year Award, and at its Annual Award Gala he was also awarded the National Minority Small Business Person of the Year Award.



As a small business, in a small city, in a small country, Pentaq Manufacturing Corp. wants to make a difference!

MISSION

“Our mission is to be recognized and accepted by our customers as a provider of excellent manufactured quality products, with on-time delivery and enthusiastic customer service.”

VISION

“Our company's priority is the total satisfaction of its clients.”

QUALITY POLICY

“To meet our customer's manufacturing requirements, expectations and more by delivering defect-free products and services in a continually improved quality system.”

www.pentaqmanufacturing.com



This year, Mr Quiles has been selected by the US Small Business Administration (SBA) as the 2012 Puerto Rico State Small Business Person of the Year. His hard work, innovative ideas and dedication to his community and country have made him succeed.

Pentaq's primary objective is to be recognised by its customers and competitors as a manufacturer of quality textile products, meeting customer specifications, on time while exceeding expectations, and delivering enthusiastic customer service. Their dedication to continual improvement and increased customer satisfaction makes them a valued asset to all they serve. Pentaq has been able to diversify its sewn products to meet the requirements of its customers.

Pentaq's commitment to the United States Department of Defense (Army, Air Force, Coast Guard, Marines) is a major factor in the company's continued success. As new uniforms are replacing all previous uniforms, Pentaq has developed the manufacturing expertise to meet the demands of military specifications, as evidenced by the company's numerous contracts and subcontracts. The same level of commitment and quality is offered to commercial customers. Pentaq has the pleasure of serving such customers as MMI Outdoor LLC and Propper International, Inc, among others.

Julie Lindhout, President of the Atlantic Council of Canada, and her colleague, research analyst Thomas Aagaard, examine the core strength of the NATO defence alliance to reveal how capability is backed up by constant vigilance in the air, from space, on land and at sea

Collaborative defence and constant vigilance

Many respected commentators predicted a bleak future for NATO in the post-Cold War era as a massive, inflexible institution suddenly devoid of purpose with the dissolution of the entity it was formed to defend against. However, as the experiences of the past two decades have proven repeatedly, from the Balkans to the skies of Libya, NATO remains the premier agency for effective international action. Only NATO provides the capability and competence to organise and conduct complex multilateral military engagements. As today's security threats are increasingly transnational, they can only be adequately addressed by a transnational response. NATO has leveraged its traditional deeply integrated multilateral organisation with a transformation of its force structure to be able to support a wide variety of security situations beyond the North Atlantic.

MULTINATIONAL FORCE

NATO has provided a structure for member nations to develop and/or acquire capabilities jointly that would be beyond the financial means of most states individually. As part of this strategy, and responding to the operational realities of the 21st century, at the Prague Summit in 2002 NATO announced a reorganisation to create the NATO Response Force, to provide a "coherent, high-readiness, joint, multinational force package" that can

respond to a diverse range of security concerns, quickly and effectively.

Approximately 14,000 personnel are part of a very-high-readiness Immediate Reaction Force, with NATO members providing additional forces, depending on operational commitments and their own constraints, to a lower-readiness Response Forces Pool. This includes a brigade-sized land component based on three Battle Groups and their supporting elements, a maritime component based on NATO's Standing Naval Maritime Groups, combat air and air support components, Special Forces, and a Chemical, Biological, Radiological and Nuclear (CBRN) defence task force.

Additionally, NATO possesses six Rapid Deployable Corps (RDC), which are high-readiness, highly mobile headquarters that can command up to 60,000 troops each. They command the NATO Response Force when deployed. The RDC leads ISAF in NATO and has been used in the Balkans. While this thrust towards cooperative and collective action predates the Strategic Concept adopted at Lisbon, the emphasis on "Smart Defence" in that document has given it new emphasis and direction.

NATO maintains the most impressive array of air capabilities ever assembled, and air power has been a cornerstone of NATO operations since the end of the Cold War. NATO members jointly

and collectively conduct air policing to preserve the integrity of European airspace. This entails radar surveillance and the identification of all aircraft entering Alliance airspace. Organising and integrating the air defence structure under the command of NATO Supreme Allied Commander Europe (SACEUR) offers a more comprehensive picture of European airspace and enables SACEUR to respond to threats much more efficiently than a number of individual national systems would allow. It also enables NATO to protect those members who have no assets to defend their airspace sovereignty.

MAXIMISING DEFENCE

The NATO Airborne Early Warning and Control Force (NAEWF) is the Alliance's biggest common project and a perfect example of cooperation to maximise defence. This is a fleet of 17 jointly owned E-3A AWACS aircraft equipped with powerful radar and sensor equipment to detect aircraft hundreds of kilometres away and direct Alliance aircraft to intercept them. One aircraft at altitude has a radar coverage area of 312,000km, enabling three to cover the entire area of Central Europe. The picture supplied by the AWACS aircraft provides NATO commanders with an unparalleled ability to manage and direct airborne resources effectively and efficiently. The ability to gain a comprehensive view of a theatre's



TESTING CLIMATE: the Cold Response Exercise in Norway prepares troops from numerous NATO countries for the rigours of Arctic warfare

airspace has proven invaluable to NATO commanders in imposing total air dominance. During the Kosovo campaign, the Yugoslav Air Force ended up just trying to hide its aircraft on the ground, since aircraft taking off would immediately be spotted by the AWACS and then engaged by NATO fighters directed by them.

Based on the success of the NAEWF, NATO members initiated two other airborne projects. A group of 12 states cooperatively formed the Strategic Airlift Capability, sharing a fleet of C-17 airlifters out of a central airbase in Hungary. The programme has already supported NATO in Kosovo and Afghanistan. The second project is the Alliance Ground Surveillance (AGS) programme. This aims to provide

a similar surveillance capability on the ground to that which AWACs provides in the air. Although contract negotiations are still in progress, once acquired, the AGS fleet of RQ-4 Global Hawk UAVs will provide the Alliance with an all-weather, high-resolution, bird's-eye view of a theatre of operations using sophisticated radar.

NAVAL TASK FORCES

At sea, NATO maintains two permanent naval task forces, each generally composed of five to 10 ships. Several nations have committed to permanently supplying at least one ship at a given time, while others rotate in and out. Standing NATO Maritime Group 1 (SNMG 1) generally operates in the eastern Atlantic, but has

been heavily involved in the anti-piracy mission Operation Ocean Shield since 2009. SNMG 2 is generally deployed in the Mediterranean. It is heavily involved with Operation Active Endeavour to detect and deter terrorism in the Mediterranean in the wake of 9/11. While both standing groups have a regular area of operations, they can be deployed wherever they are needed and provide a constantly available and robust naval capability.

NATO also continues to prepare for the future. Most people are familiar with Allied Command Operations, located near Mons, Belgium, but since 2003 NATO has also maintained Allied Command Transformation (ACT), headquartered in the United States, in Norfolk, Virginia.



EARLY WARNING: inside an E-3 AWACS aircraft, three of which can provide surveillance for all of central Europe

This command leads “the transformation of NATO’s military structures, forces, capabilities, and doctrine” to best be able to respond to contemporary security threats. This demonstrates NATO’s commitments to constantly keeping its capabilities relevant to the modern environment. For example, NATO has redirected the emphasis in the submarine community away from primarily Anti-Submarine Warfare to supporting surface joint task forces reflecting the majority of NATO’s current operations.

In addition to a heavy emphasis on training, ACT has supported the establishment of specialised Centres of Excellence – nationally or multinationally funded institutions used to train and educate leaders and specialists from NATO member and partner countries. They assist in doctrine development, identify lessons learned, improve interoperability and capabilities, and test and validate concepts through experimentation. They offer recognised expertise that is of benefit to the Alliance and supports the transformation of NATO, while avoiding the duplication of assets, resources and capabilities already present within the NATO command structure.

In 2010, NATO created the Emerging Security Challenges Division within the NATO International Staff, specifically to examine non-traditional “risks and

challenges”. With a focus on terrorism, the proliferation of weapons of mass destruction, cyber-defence and energy security, the division’s creation “underlines the determination to move new, non-traditional security challenges to the centre of Allied attention” and highlights how NATO is putting resources into these areas in order to develop the capabilities necessary to meet them.

■ *NATO has provided a structure for members to develop and acquire capabilities jointly that would be beyond the means of most states individually*

“Constant vigilance” is particularly visible in two areas: ballistic missile defence and cyber-defence. NATO had developed an initial Theatre Ballistic Missile Defence capability to protect deployed forces by early 2010. This was intended to protect them from situations similar to Iraq’s firing of Scud missiles at coalition bases in the first Gulf War. At the Lisbon Summit in November 2010, it was

decided that the Active Layered Theatre Ballistic Missile Defence (ALTBMD) regional programme should be expanded to provide a missile shield capability for Europe proper. The ALTBMD networks bring together a variety of space, land, sea and airborne sensors with land and sea-based interceptor missiles to provide a comprehensive, multilayered defence shield with command and control out of Germany’s Uedem and Ramstein bases.

The system has already demonstrated its effectiveness by intercepting live ballistic missiles over the Mediterranean under realistic conditions as part of a training exercise, Operation Rapid Arrow 2011, last August. Once it has been completed, the system will prevent Europe from being held hostage by rogue regimes, such as Iran and North Korea.

ADDRESSING THE CYBER THREAT

In the light of recent developments, NATO released its revised Policy on Cyber Defence in 2011. The document “sets out a clear vision for efforts in cyber-defence throughout the Alliance. The revised policy will offer a coordinated approach to cyber defence across the Alliance with a focus on preventing cyber-attacks and building resilience. All NATO structures will be brought under centralised protection, and new cyber-defence requirements will be applied.” Under the new policy cyber-warfare will be integrated into NATO’s wider defence planning process – recognition that it is likely to become a standard tool of war.

NATO’s cyber-defence initially focused on protecting Alliance communication systems, but since the 2007 attacks against Estonia that attacked public services this has widened. Rapid Response Teams were created to help members prepare against, and recover from, cyber-attacks. Since Lisbon, NATO has set aside €28 million (nearly tripling its cyber defence budget) with the aim of having a fully operational cyber-defence capability by the end of 2012. Additionally, the NATO Computer Incident Response Capability (NCIRC) has been fully operational since 2005, detecting and responding to cyber incidents and coordinating with national organisations in member states.

All this means that, as recently as 2010, there were more than 3.5 million personnel involved in NATO militaries, and the organisation had more than \$1 trillion in defence spending available to it to protect NATO countries. ■



FUEL AND WATER SUPPLY SYSTEMS

For Transport, Storage and Distribution



WEW Westerwälder Eisenwerk GmbH

Ringstrasse 65a
D-57586 Weitefeld - Germany

Tel.: +49 (0) 2743 - 9222-0
Fax: +49 (0) 2743 - 3411

www.wew.de

E-Mail: wew@wew-tankcontainer.de

"Our most important asset runs on water, everything else runs on fuel"

– US Army

WEW has been delivering containerised solutions to the chemical industry for some 40 years and is renowned for tailoring systems to suit special client needs. Most WEW products are destined to carry liquid foodstuffs, hazardous chemicals and toxic gases in intermodal civilian supply chains. Of the thousands of containers produced by WEW over the years, almost all remain in service today. This technology has since been applied to meet military needs.

WEW Military Background

With the robustness of its products and innovations in mind, WEW was first approached by the German Army in 1996. During the 1990s, the Bundeswehr's requirements were changing from purely homeland defence in the Cold War, to more expeditionary operations such as peacekeeping and disaster relief in areas such as Kosovo, Bosnia and Afghanistan. WEW responded to this challenge by developing a range of modular solutions for primarily handling fuel and water in Forward Operating Areas. These systems have subsequently been adopted by most NATO forces and a number of other militaries worldwide.

Further Information, contact:

Dr Ulrich Bernhardt, CEO / Peter Hughes, Export Sales
WEW Westerwälder Eisenwerk GmbH
Ringstrasse 65a, D-57586 Weitefeld, Germany
P: +49 2743 9222-0
F: +49 2743 3411
wew@wew-tankcontainer.de
www.wew-tankcontainer.de

In 2001, the US Army approached WEW for the supply of water systems for the 'HIPPO' programme, having had repeated failures from other suppliers who did not understand the very high dynamic loading involved when transporting bulk liquids. Since then, WEW has delivered fuel and water systems to seven NATO and other forces around the world and carry NSNs (NATO Stock Numbers).

WEW New Development – Ballistic Protection

In response to client requests, WEW has introduced ballistic protection up to Stanag 4569 Level 4 as an option on its fuel tanks. The ballistic protection was developed together with IBD and Hutchinson, with successful tests being carried out in conjunction with the Beschussamt München; a range of ordnance (5.56mm, 7.62mm, 12.7mm up to 14.5X114 API/B32) was fired at the pressure-vessel wall.

Ballistic protection comes in two design formats: quick release panels and coating, according to the protection level required and demands of the application.



WEW's PLS Fuel Tank - Integral Pump

Helping non-members to build up their capabilities is a core function of the NATO Alliance. Alan Dron looks at NATO assistance to the African Union, Iraq and those nations that have joined the campaign to counter the scourge of piracy that threatens merchant shipping off the coast of the Horn of Africa

Capacity building and long-term partnerships

The complexities of working as a multinational organisation have allowed NATO to generate expertise in specialised fields – such as logistics, transport and training – that not all nations possess, especially those with limited resources. The Alliance's New Strategic Concept, announced in November 2010, emphasised the importance of its partnerships with non-NATO nations, although such partnerships had been in place for some time prior to the development of that policy.

NATO is generally happy to assist other nations when asked, but 'when asked' is the operative phrase. In 2005, for example, when the African Union (AU) asked for assistance in its mission to restore calm to

Sudan's troubled Darfur province, NATO's then Secretary General, Jaap de Hoop Scheffer, suggested that, while the Alliance was prepared to help, "the principle should be that the AU is principally responsible. NATO has no ambition to be the gendarme of the world".

FINDING DOMESTIC SOLUTIONS

NATO's key aim, both in Darfur and in subsequent deployments such as the AU's peacekeeping mission to Somalia (AMISOM), has always been to encourage and assist in finding African solutions to African problems. Between 2005 and 2007, for example, NATO helped to move 32,000 AU troops and their vehicles in and out of Darfur – some 75 per cent of the

total AU troop rotations to that unhappy area – as part of the AU's Mission in Sudan (AMIS). The AU called on NATO primarily for logistical assistance, from which it was lacking within its own ranks, while airlift support quickly followed.

An AU Air Movement cell was established at AU HQ in the Ethiopian capital, Addis Ababa. Both NATO and European Union personnel provided support for the cell but, in keeping with NATO policy, the AU took the lead in the enterprise. NATO also allocated a team to assist in key headquarters functions, such as planning, coordination, communications and training.

Almost 200 AU officers were provided with training in these fields, both at the Darfur Integrated Task Force Headquarters in Addis Ababa and at AMIS Force Headquarters in El Fasher, in Sudan itself. This HQ support extended to helping provide an AMIS Joint Operations Centre.

Since then, NATO has also provided, at the AU's request, training and capacity-building support for the African organisation's long-term peacekeeping capabilities – notably, the African Standby Force – which is designed, ultimately, to be able to deploy brigade-sized AU forces to flashpoints on the continent.

Among ongoing operations, the AU has asked for strategic airlift support for AMISOM as the fledgling Somalian central government in Mogadishu attempts to restore order to the failed state.

The two organisations also met several times in 2011 for discussions on Libya, with NATO Secretary General Anders Fogh



HELPING OUT: Rwandan troops arrive in Darfur on a peacekeeping mission on a US Air Force cargo plane



SECURITY AT SEA: a number of NATO operations in the Indian Ocean have centred on protecting merchant vessels from the threat of pirate attacks out of Somalia

Rasmussen stressing the importance of maintaining dialogue with the AU as part of the international community's efforts to reach a political solution to the crisis there.

COUNTERING ILLEGAL ACTS AT SEA

Somalia has also been at the centre of another major NATO effort, trying to curb the scourge of piracy radiating out from the Somali coast, north to the Gulf of Aden and increasingly far out into the Indian Ocean. Under Operation Ocean Shield, NATO navies are patrolling a vast expanse of ocean to deter and disrupt the pirates who, at the time of writing, were holding some 300 international mariners hostage. Typically, five NATO-nation warships were patrolling the region's sea lanes at any time during 2011.

However, with vast areas to cover, an essential part of Ocean Shield involves building up the capacity of navies and coastguard services within the region in



PROTECTION: Operation Ocean Shield focuses on deterring and disrupting the actions of pirates

order that they can take on a greater role in fighting the threat to shipping. With this purpose in mind, NATO warships have been making frequent visits to the ports of neighbouring nations, not only to re-provision and make repairs, but

also to pass on their experience to the naval forces of the area.

In 2011, for example, NATO vessels made no fewer than eight visits to the Kenyan port of Mombasa and were able to share with the local authorities the importance of coastal security – even within territorial waters – to ensure that merchant vessels were as safe as possible from pirate attacks.

NATO personnel visited Mombasa's Piracy Information Sharing Centre and highlighted the work of the NATO Shipping Centre, which provides updates on the latest pirate attacks.

Further east, NATO also provided capacity-building help to the Seychelles, which has had to cope with increasing numbers of pirate attacks taking place relatively close to its shores.

Meetings with the Seychelles Defence Forces and local authorities have included counter-piracy exercises, with help being



LEGACY: NATO focused on capacity building in Iraq, training more than 5,000 military personnel and 10,000 policemen such as these, both in Iraq and abroad

given to the island state's coastguard in small boat-handling skills. Live-fire exercises were also conducted between coastguard boarding teams and the Netherlands Royal Marines, a contingent of which was stationed on the Dutch guided-missile destroyer HNLMS *Tromp*, the Ocean Shield flagship at the time.

SEYCHELLES ANTI-PIRACY PATROL

As well as naval support, last autumn the Royal Norwegian Air Force stationed a P-3 Orion maritime patrol aircraft in the Seychelles in support of the anti-piracy mission. Sorties carrying members of the Seychelles People's Defence Force Air Wing have been flown to establish and build working relationships between the two maritime air commands.

Far to the north, meanwhile, NATO has just completed a seven-year capacity-

■ *Helping to maintain stability worldwide is a fundamental NATO goal, but putting boots on the ground whenever there is a crisis is not feasible*

building effort in Iraq. After negotiations to extend the NTM-I (NATO Training Mission in Iraq) failed to reach an agreement, NATO decided to withdraw the training unit on 31 December 2011.

Up to that date, however, NTM-I had successfully trained more than 5,000 military personnel and 10,000 policemen in Iraq itself, as well as a further 2,000

Iraqis in NATO member-state facilities. Moreover, some €115 million worth of military equipment has been donated to the Iraqi government and a €7.7 million trust fund set up, with donations from all 28 NATO countries for continued training and education. This trust fund highlights NATO's determination to build on the success of the NTM-I and to retain close relationships with the government of Iraq, in order to offer support and assistance in the future.

Helping to maintain stability worldwide is a fundamental NATO goal, but putting boots on the ground whenever there is a crisis is not a feasible option. Instead, helping to build other nations' capacity makes much more sense. Not only does it strengthen relationships, it also embeds confidence in those who are faced with a destabilising situation. ■

WE ARE THE EVOLUTION OF YOUR SAFETY

15TH
CENTURY



21ST
CENTURY



YEARS OF EXPERIENCE + TOP OF THE LINE RAW MATERIALS = MEZCAL SECURITY

The materials used meet the highest market requirements and follow the international standards applicable at each stage of the process, guaranteeing bulletproofing against handguns and rifles. Our suppliers are: THYSSEN GROUP, AGP American Glass Products, HUTCHINSON and TEIJIN.

*Mezcal Security holds the right to change the brand of the materials for other of same quality and security properties.

EXCLUSIVE
IN ARMOURING BUSINESS
WWW.MEZCALSECURITY.COM



Mezcal
Security

TEL: (+34) 91435 33 55
MADRID, SPAIN.
INFO@MEZCALSECURITY.COM
NEW FACILITIES IN UAE.
TEL. DUBAI: (+971)0509284933
TOLLFREE FROM DUBAI:
800035702406

Denmark

Danish Atlantic Treaty Association

Since it was established in 1950, the Danish Atlantic Treaty Association (DATA) has informed the Danish public about Denmark's foreign, defence and security policies and NATO.

DATA is a nationally based and internationally oriented non-governmental organisation that functions as a link between politicians, researchers, students and the interested public, as well as a forum for debate on security issues. The Association organises meetings, seminars, and international courses on security policy, as well as study trips and civil society projects. The organisation has been a member of the Atlantic Treaty Association since 1954.

By Troels Frøling, Secretary General of the Danish Atlantic Treaty Association

What do we do on a daily basis? Well, we, the secretariat of Danish Atlantic Treaty Association, see it as our main task to facilitate the necessary debate on today's security issues. In contrast to universities or research institutions with a rather limited, fixed audience, DATA aims at reaching out to specialists, as well as members of the general public with an interest in security issues.

Consequently, at DATA activities you meet researchers, politicians, high-school students and the engaged citizen; this goes for debates, conferences, seminars and our publications. These are written for and read by senior high-school students, MPs and those working for and at universities.

It is the ambition of DATA to educate and challenge the Danish public to take part in the debate on security issues. Denmark is actively involved in missions in both Afghanistan and off the coast of Somalia, and we find it important that the Danish public is informed about these missions and the decisions taken by the politicians, in order to be able to take part in the public debate. Politics is too important a business to be left to politicians – this goes for Danish foreign and security policy alike.

Our work is done via publications, seminars, conferences and lectures and is carried out by interns at the secretariat or by professional researchers. Most of them work on a voluntary basis and activities are free of charge. In 2011, the Danish Atlantic Association published debate papers on cyber-warfare, Turkey's influence as a rising regional power, the situation in Syria and the Arctic – all

related to the ongoing security debate and relevant to our members.

A key target group for DATA educational activities is students and professors at senior high schools and universities. Our publications are widely used and can be downloaded free of charge from our home page or ordered in hard copies for a nominal amount.

SUCCESS OF SCHOOL LECTURES

DATA lectures on security policy and international relations have become a hit. They are presented by students, interns or members of YATA (Youth Atlantic Treaty Association), our student network. For a small fee (€150), Danish senior high schools can receive a lecture on a specific topic, which they decide together with DATA. What makes this initiative attractive to the schools is the context in which the lecture is given – the topic is presented by a university student who is specialising in the subject, and who is therefore of a similar age to the school students. Together with security policy seminars for senior high-school teachers, they are the backbone of the DATA education programme.

At the international level, DATA annually gathers some 50 students from some 22 countries in crisis for conflict solution exercises. The Danish Atlantic Youth Seminar (DAYS) in Aalborg has been taking place for 26 years and now has some 1,600 alumni.

DATA's economic foundation is partly governmental (a third) and partly private (two-thirds). Funding is increasingly important as governmental support has constantly fallen over the past decade.

DATA has proven that a small organisation with a small budget can, with the right people and a large base

■ *The Danish Atlantic Treaty Association has proven that a small organisation with a small budget can inspire the public in Denmark*



HEARTS AND MINDS: service personnel are setting up a strong foundation for Afghan civil society

of volunteers, actually inspire the public in Denmark to take part in the debate on security policy.

A Danish view of the transatlantic future would not be complete without looking at the past 10 years of engagement in Afghanistan. Denmark is the NATO country that has traditionally had the highest level of public support for the war in the Alliance, running at some 50 per cent as of the end of 2011.

Danish soldiers have consistently been at the top of NATO evaluations. The task set by the Danes in Gereshk was to demonstrate to the local citizens that we could offer a better future than the Taliban. Through a process of rebuilding and setting up a strong foundation for civil society it should be possible at the same time to build strong domestic support for operations. In spite of the bravery, heroism and tactical military successes of the allied forces – including Danish troops in Helmand – the strategy employed did not give the intended

results because of, in the view of the ISAF forces, a lack of civilian rebuilding resources – money and men. The “comprehensive approach” product did not deliver as intended from the start. On the other side, realities of life, including Afghan corruption, the role of Pakistan and the activities of the Taliban have now become clear in the harsh light of day, and set the whole Afghan mission into its own dimension.

UNCERTAINTY OVER AFGHANISTAN

It is not easy, however, to deliver when the exit time has been announced. Seen from the outside, the Taliban is waiting, and so is Pakistan. Is what has been built up with ISAF support at risk of falling apart once NATO and ISAF are no longer present? What will become of the building up of government institutions, schools and education, in particular the education of girls? Will all this be given up to religious fanatics with guns in their hands and Islamic fundamentalism on

their minds? Is Afghanistan a ‘mission impossible’? These are questions that come up more and more in today’s discussions on Afghanistan. The necessary discussion of ambitions, goals and results from the campaigns in Iraq and Afghanistan must be taken before the next out-of-area engagement.

At the transatlantic-strategic level the Afghan campaign has demonstrated that the big powers deliver and decide, that Alliance partners can contribute at a highly professional military level and that the strategic result depends on the right mix of goals and means being set by the big power(s).

With a new set of challenges – cyber-attacks, terrorists, criminal activities, the spread of weapons of mass destruction, new missile technology, to name but a few – stability both inside and outside of the NATO area is being threatened. Add to this the complicated dimension of what is the right kind of response to the new kind of threats. Identifying the attacker? Is Article 5 valid for the next cyber-attack? Then, the overall complexity of security is perhaps the real future challenge for all NATO members.

In a NATO context the overall Danish strategic goal is still to keep the US engaged in NATO, because in the end only the Americans can give the security guarantee that will prevent new military threats against Europe, including on Danish territory.

The agenda of DATA over the next few years will be characterised by an awareness of the global commons, in this way also reflecting the change in NATO from a collective-defence organisation towards a more security-political organisation with a broader, global agenda. ■

NATO's New Strategic Concept – from Lisbon to Chicago

Dr Jorge Benitez, director of NATOSource and a Senior Fellow at the Atlantic Council of the United States, assesses how the pressures of diminishing military budgets and the ISAF operation in Afghanistan have affected NATO's New Strategic Concept

The Strategic Concept is a document that articulates the mission and priorities of the North Atlantic Treaty Organization (NATO). Since the creation of NATO in 1949, the Alliance has produced seven Strategic Concepts. At the Strasbourg-Kehl Summit on 3-4 April, 2009, the leaders of NATO saw a need to revise the strategy and capabilities of the Alliance to adapt to the new challenges in the international system, especially the 9/11 terrorist attacks and the deployment of military forces to lead the UN-mandated International Security Assistance Force (ISAF) in Afghanistan. Therefore, they called for a New Strategic Concept to be adopted at the Lisbon Summit on 19-20 November 2010. US president Barack Obama promised that this would be a major document and that NATO would "transform itself in Lisbon with a new Strategic Concept".

The Lisbon Strategic Concept organised the elements of this transformation into three "essential core tasks"; collective

defence, crisis management and cooperative security. The collective defence section reaffirmed that the "greatest responsibility of the Alliance is to protect and defend our territory and our populations against attack, as set out in Article 5 of the Washington Treaty".

CONTINUED INVESTMENT

A key reason for this emphasis on Article 5 was to reassure the newest members that, as the borders of the Alliance moved east, NATO would continue to invest in the military forces necessary to deter external threats. The New Strategic Concept also strengthened collective defence by calling for the development of Alliance missile defence and cyber-security capabilities.

The crisis-management section was driven by NATO's involvement in Afghanistan. The Strategic Concept committed NATO to the comprehensive approach for Afghanistan, which relied on a combination of political, civilian and military resources to produce "effective

crisis management". However, the main progress made on Afghanistan is not part of the text of the Strategic Concept. It was, instead, a political agreement (known as the Lisbon timetable) that sanctioned the transfer of combat operations to Afghan forces by 2014 and continued training and financial support from NATO members after 2014. This was seen as a major achievement because it reversed the trend going into Lisbon of growing dissatisfaction among NATO members with the casualties, costs and duration of the operation in Afghanistan, and the fear that this might lead to a premature "rush for the exit". Instead, the Allies demonstrated newfound solidarity to a common exit date and strategy.

The Strategic Concept also addressed the issues of NATO partnerships and future members in its section on cooperative security. It announced that "the door to NATO membership remains fully open" for prospective members. The Strategic Concept also declared that the



TAKING THE STAGE: NATO Secretary General Anders Fogh Rasmussen presents the New NATO Strategic Concept to the media at the 2010 Lisbon Summit

“promotion of Euro-Atlantic security is best assured through a wide network of partner relationships with countries and organisations around the globe.” Such partnerships include improving dialogue and cooperation with nations from the former Soviet space, the Middle East, and even as far away as the Pacific, as well as international organisations such as the European Union and the United Nations. However, the partnership that receives the most attention is NATO’s relationship with Russia, and the Strategic Concept made clear that the leaders of NATO “want to see a true strategic partnership between NATO and Russia”.

ASSESSING PROGRESS

The Lisbon Strategic Concept made progress in improving NATO’s capability to adapt and succeed. But did the Strategic Concept guide the Alliance to address its most important challenges and priorities, or did it paper over unresolved problems that continue to plague NATO?

■ *Did the Strategic Concept guide the Alliance to address its most important challenges and priorities, or paper over unresolved problems?*

On the surface, collective defence appears as secure as ever. But the deepening economic crisis continues to result in ever more cuts in the national military capabilities that provide NATO’s collective defence. The promise made in the Strategic Concept that “NATO must have sufficient resources – financial, military and human – to carry out its missions” remains unfulfilled.

The loss of capabilities is so severe that Norway’s defence minister, Espen Barth Eide, recently pointed out that “Article 5

is not in such a good shape”, and additional defence cuts “may lead to a further weakening of the core ability to defend ourselves”.

LIMITED SOLIDARITY

As a result of the deteriorating situation in Afghanistan and the unexpected operation in Libya (Unified Protector), crisis management is now a term largely avoided in NATO discussions. While NATO and its partners succeeded in protecting Libya’s civilians and contributed to the fall of the Gaddafi regime, the Libya operation is widely seen as a pyrrhic victory. Libya revealed that the solidarity from Lisbon was limited, as the US tried to “lead from behind” and European Allies lacked critical military capabilities, such as air refuelling and UAVs.

Moreover, after Libya, the Lisbon timetable was threatened by the French decision to withdraw combat troops from Afghanistan by 2013. The US and NATO continue to pay lip service to the 2014



EXPERT OPINION: Madeleine Albright led the Group of Experts that helped to develop NATO's New Strategic Concept

timeline, but the evidence suggests that while the end date may remain the same, the pace of withdrawal is accelerating.

The Libya operation did demonstrate a new level of cooperation between NATO and partners in the Middle East such as Jordan, Qatar and the United Arab Emirates. Nevertheless, the key relationship between NATO and Russia has deteriorated since Lisbon. In Portugal, Russian president Dmitry Medvedev agreed to cooperate with NATO on missile defence, but since then, Russia has become increasingly opposed to the details of NATO's missile defence system.

MISSILE DEFENCE DISAGREEMENT

Even without Russian cooperation, NATO is moving to make its missile defence system operational. Medvedev has responded by threatening to target missile defence sites in Europe and "the deployment of an offensive nuclear

■ *The Libya operation did demonstrate a new level of cooperation between NATO and partners in the Middle East. Nevertheless, the key relationship between NATO and Russia has deteriorated since Lisbon*

missile group" if no agreement can be reached. While NATO stands by its Open Door policy for new members, it is not enthusiastic about admitting them, and no new entrants are expected to be announced at the Chicago Summit.

In the 18 months between the release of the Strategic Concept at Lisbon and the NATO summit in Chicago, the security environment has changed dramatically. The Arab Spring, worsening political/economic crisis in the EU, increasing friction with Russia and escalating tensions with Iran present the leaders of

NATO with more risks and fewer resources than they had when they approved the Strategic Concept in 2010. Nevertheless, the founders of NATO built the most successful alliance in history with far fewer resources and in the face of greater and more imminent danger. Will the current leaders of NATO use the Chicago Summit to tackle the important problems that they have so far swept under the diplomatic rug, or must the democracies of the West wait for a new generation to rise to save the partnership for peace built by Truman, De Gaulle and Adenauer? ■

**With NUVOLA ITALIANA
you have everything you need
connecting your company
to the future.**

Follow us on: nuvolaitaliana.it

cloudpeople.it



Enter Telecom Italia's Nuvola Italiana. The only complete cloud computing service which can give you telecoms, technological platforms and software applications all in one.

With Nuvola Italiana businesses don't have to equip themselves with dedicated telecoms services, platforms or applications because they are all included in Nuvola Italiana. Everything is more efficient, simple, and flexible because you pay only for what you really need. Thanks to the optic fibre network you can access quality guaranteed services in real time much faster and more securely. Telecom Italia's Nuvola Italiana makes Italy more innovative, efficient, competitive and richer in opportunities for every one of us.

Telecom Italia's **Nuvola Italiana**. The only cloud with its own network.



Jill Taylor explains why the present climate of financial austerity means that NATO has to spend its funds more efficiently in order to get maximum value for money

Smart Defence: ensuring greater security with less money

NATO's fundamental commitment to collective defence is serving as a source of strength for the Alliance during tight economic times. The new approach to defence spending, introduced by NATO Secretary General Anders Fogh Rasmussen in 2011, is designed not only to manage the reduction in national defence budgets, but also to strengthen cooperation and collaboration between Alliance members. The concept of Smart Defence sets out to provide greater security for less money. It is based on pooling resources and sharing capabilities, as well as better coordination.

"I know that in an age of austerity we cannot spend more," Rasmussen explained, when he introduced the concept in February 2011. "But neither should we spend less. So the answer is to spend better and to get better value for money. To help nations to preserve capabilities and to deliver new ones. This means we must prioritise, we must specialise, and we must seek multinational solutions. Taken together, this is what I call Smart Defence."

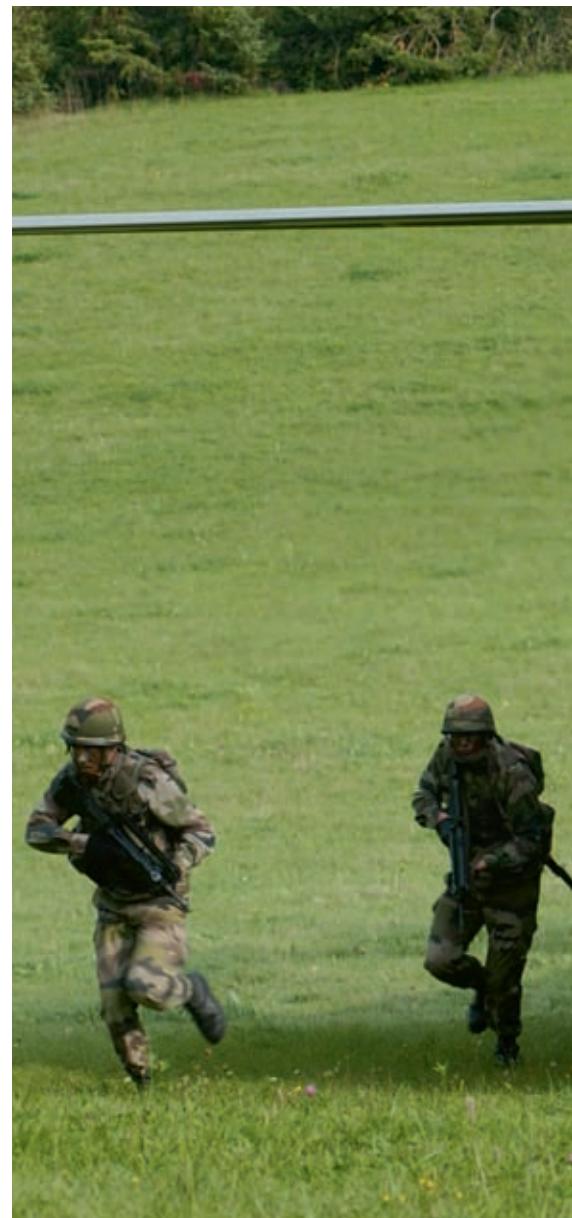
The Alliance has already started to streamline both the military command structure and NATO agencies. A thinner secretariat, and fewer committees and agencies, is among the first measures

implemented, along with forging stronger ties with complementary organisations, such as the European Union.

Only two joint force headquarters will remain, at Brunssum in the Netherlands and Naples in Italy. The one remaining air command centre, at Ramstein in Germany, takes on a missile defence role. A new NATO Procurement Agency oversees activities previously carried out by separate agencies, including the Eurofighter and NH90 helicopter programmes. A NATO Support Agency in Luxembourg is to manage multinational programmes, including the C-17 strategic airlift capability and airborne warning and control system (AWACS).

MILITARY CAPABILITIES AT REDUCED COST

NATO has also taken practical steps to build partnerships that aim to reduce the cost of fixed overheads that are associated with infrastructure and personnel. The NATO Response Force (NRF) is a single force made up of rotating member troops that first became fully operational in 2006. The force has helped to roll out military capabilities across all member countries, and the joint exercises have spread knowledge and experience to more members. Participation is preceded by



a six-month NATO exercise programme, which helps to integrate and standardise various national activities.

More recently, NATO has established resources, such as the Cyber Defence Management Authority, a Cooperative Cyber Defence Centre of Excellence and a Computer Incident Response Capability. Specifically designed to counter new and emerging threats, they offer training, intelligence sharing and access to an expert team in the case of a cyber-attack.

By May 2012, NATO expects Europe's territorial missile defence capability to reach full operational strength. This is a system based on the joint contribution of Alliance members that relies on multiple early-warning signals provided by satellites owned by several different nations. It also includes interceptors



MULTINATIONAL PARTNERSHIP: the collaborative NH90 helicopter project is a prime example of NATO member countries cooperating on industrial programmes

■ *Operation Unified Protector showed the benefit of shared resources, but it also revealed gaps in Europe's own lines of defence, as a result of declining defence spending by European nations in recent years*

located in Poland and Romania, as well as a radar site in Turkey.

In October 2011, Rasmussen appointed three senior NATO officials as Smart Defence envoys to identify multinational defence cooperation projects ahead of the NATO summit in Chicago in May 2012. Leading the Smart Defence initiative, General Stéphane Abrial, Supreme Allied Commander Transformation, is touring member

states to obtain agreement on a number of initiatives. General Abrial has identified more than 160 projects that take advantage of pooled NATO resources and are ready to put before the Chicago Summit.

Among candidate projects to be reviewed is a programme to share the maintenance of Allied vehicles, aircraft and vessels. Multinational maintenance and logistics programmes are proposed for new types of helicopter, such as the

NH90 and Tiger. The concept extends to training facilities, for example, in Belgium and France where jet pilots share their training infrastructure. Role sharing is also practised. Several nations take turns to patrol the airspace of the Baltic region, which, in turn, enables three Baltic states to invest in deployable armed forces.

JOINT PROJECT DEVELOPMENT

Another high-profile project is the joint development of a robotic vehicle to counter improvised explosive devices. One nation is leading this project and has been joined by five others.

The Alliance Ground Surveillance (AGS) system initially won widespread support from member nations hoping to pool resources to improve unmanned aerial surveillance capability. However, less



AIRBORNE SUPPORT: NATO needs to expand its logistic support in Europe, including air-to-air refuelling assets

than half of the NATO member nations have joined the initiative, which aims to procure a long-endurance unmanned system based on the Northrop Grumman Global Hawk aerial vehicle.

Important contributors, such as France, have withdrawn in order to pursue their own independent research programmes, undermining the value of

the joint venture. The lack of support for AGS is viewed by some as a setback for the concept of Smart Defence.

NATO's involvement in the conflict in Libya in 2011 served to highlight areas in which European states, in particular, lack capability. For example, a shortfall in refuelling tankers and unmanned surveillance systems meant that some

European nations had to draw heavily on US resources. Even munitions for fighter jets were sourced from the US. Operation Unified Protector, on the one hand, showed the benefit of shared resources, but, on the other, it also revealed gaps in Europe's own lines of defence, as a result of declining defence spending by European nations in recent years.

SHARING THE BURDEN

Now that the US is facing its own budgetary challenges, it is asking its European partners to shoulder their share of the military burden, especially when they are involved in conflicts on their own borders. Maintaining a credible transatlantic alliance depends upon all parties working together to achieve common goals and values. Consequently, there is continued pressure on Europe to maintain the balance in this relationship.

Some of the work needs to start at grass-roots level, early in the research and development cycle. NATO is due to establish a Science and Technology Organisation this year that will aim to improve the coordination of research efforts and strengthen links with the private sector. Currently, 80 per cent of European research and development effort is spent on national programmes. Diverting some of this to multinational projects will create greater coherence within Europe and deliver more effective results. Member states are more likely to win the 'innovation race' as a result of collaboration rather than competition. ■



TAKING FLIGHT TOGETHER: the E-3 Sentry squadron at Geilenkirchen in Germany is NATO's first multinational flying unit

Harlan Ullman, Senior Advisor at the Atlantic Council of the United States and Chairman of the Killowen Group, assesses the strength of the bond between the US and Europe, and also proposes a strategy for retaining its relevance

The transatlantic bond: relevant or relic?



General, and later Field Marshal, Lord Alanbrooke, Chief of Britain's General Imperial Staff for much of the Second World War, often complained about the lack of American strategic thinking in crafting war plans against the Axis enemy. Today, two realities underline Alanbrooke's critique: the Obama administration's new 'strategic pivot' to Asia and the reluctance of

NATO members – especially the United States – to address frontally and without caveats the opportunities, dangers and uncertainties confronting the Alliance. As a result, perhaps the critical question eludes thoughtful or even any strategic consideration – is the transatlantic bond relevant or is it a Cold War relic?

A predictable response is that the transatlantic link is relevant. Europe and

the US possess both the strongest and the largest economies in the world, and share common democratic values. Furthermore, the NATO Alliance remains the strategic foundation on which European, and much of global, security and stability rests, even if defining its reach beyond the Atlantic is an imperfect science. Yet contradictions challenge these long-standing propositions.



ATLANTIC CROSSING: US Secretary of Defense Leon Panetta is welcomed to Ramstein Air Base in Germany – home of NATO's Allied Air Command HQ

The meaning of security has expanded well beyond the traditional defence defined by Article 5 of the Washington treaty that created NATO as a military alliance in 1949. And military force, once deemed necessary to deter or defeat a military attack by the former Soviet Union, is no longer sufficient to cover all bases and outcomes in which it may be applied. Afghanistan is a principal example of the limits of military force.

As a consequence, the relevance of the Alliance, and by extension the transatlantic bond, must not be taken for granted. This bond is harmed by the decline in defence spending, likely to become more precipitous on both sides of the Atlantic, and under assault from the euro crisis that could unravel the European currency. Moreover, the sweep of potential geostrategic nightmares – from the North African coast and Egypt to Syria, Iran and the Bay of Bengal – raises profound challenges for the Atlantic

partnership and NATO. Elections in France and the US are further complications as domestic politics, and internal reactions to international crises should they occur, will trump more rational strategic analysis.

REBALANCING FORCES

Unfortunately, the Obama administration's roll-out of its new defence strategy was understandably perceived as a swing to Asia, with repositioning of its forces accordingly away from Europe, implicitly and explicitly downgrading transatlantic importance. The Pentagon has since applied the term 'rebalancing' as a better measure of American intent, implying that the US has critical interests in many regions – including Europe, the Middle East, Eurasia and South Asia – that will require military presence and assured access. However, the damage has been done among Europeans, who could use the initial presentation and pivot to Asia as cover for spending less on defence.

Russia, missile defence and the attitude of President Vladimir Putin towards Europe remain areas of interest and concern. Diplomatic resolution of Iranian nuclear intentions could, of course, have a positive effect on relations with Russia, as well as missile defence. This depends on the European Phased Adaptive Approach (EPAA) being aligned with downgrading a potential threat from Iran, as well as Russia's predilection to retain large numbers of so-called tactical or theatre nuclear weapons as an offset to what it sees as NATO's overwhelming conventional superiority on the battlefield.

That said, what can be done to ensure that the transatlantic bond will remain relevant and not a relic from the past? Alanbrooke was correct: a broad strategy is needed from both sides of the Atlantic. While NATO will hold its heads of state summit in Chicago in May, insufficient time exists to refocus planning and create an agenda to address these more critical

and broader matters of concern. Since Putin has said he will not attend, although he could change his mind, the summit will be largely pro forma and something to get through rather than to secure major Alliance decisions, as occurred at Prague in 2002 and Lisbon in 2010.

Hence, the Chicago Summit should agree to a formal and special meeting between NATO and the European Union to discuss coordinated transatlantic strategies and policies. The term and concept of 'defence' must be expanded to incorporate broader matters of security. Energy, environment, cyber, terrorism and criminality, including the trafficking of drugs and people, are part of this wider spectrum. Divisions of labour can be created and agreed between NATO and the EU as the basis for building a new strategy and assignment of responsibilities. Interestingly, this has not been done before.

■ The Chicago Summit should agree to a formal and special meeting between NATO and the European Union to discuss coordinated transatlantic strategies and policies. The term and concept of 'defence' must be expanded to incorporate broader matters of security

Regarding economic and financial crises, the institutions and structures designed to deal with these problems – such as the World Bank and International Monetary Fund – are largely creatures of the post-Second World War and Cold War period. New structures must be created to cope with the myriad problems, from regulation and oversight to structural imbalances, that produce economic and financial instability. The aim is to coordinate both sides of the Atlantic far better.

REINFORCING COMMITMENT

Regarding NATO, the best means and strategy to assure relevance is through reinforcing US commitment, and thus reassurance, to Europe. The best means to carry out this strategy is through European Command (EuCom). In the military repositioning, EuCom will lose two Brigade Combat Teams. But by thoughtful

and innovative initiatives to give EuCom more punch, Europe can be reassured.

Deploying US forces to Europe regularly to train, interoperate and work with Europe and NATO military is essential. This was done during the Cold War with a large-scale annual exercise called REFORGER (Reinforcing Germany). Numbers count for less today. Battalion or even company-sized deployments that last several months, along with deploying naval and air forces, will be the clearest sign of commitment.

The aim of these exercises is to ensure that NATO, European and American militaries operate together effectively. Some exercises should support the NATO Treaty's Article 5 commitment for collective defence, with US forces deploying to newer members for that purpose. EuCom could be given additional responsibilities for joint and combined operations through command post, war game and other training exercises.

Despite America's strategic 'pivot' to Asia, the strategy outlined above can sustain and keep the transatlantic bond relevant – especially important as interests move east. This strategy does not need an outpouring of funds that are increasingly under pressure to be reduced. But it does require imagination and creativity. Lord Alanbrooke would be pleased. ■



SPECIAL RELATIONSHIP: US aircraft carrier USS *John C Stennis* transfers cargo onto a British warship via helicopter as the ships patrol the Gulf

NATO has a history of perpetual growth, but is it approaching the limits of its European borders? Simon Michell examines the process of NATO enlargement and asks whether it is nearing an end

Developing bigger, stronger partnerships

Albania and Croatia joined NATO officially on 1 April 2009, boosting its membership to 28 nations, one more than the European Union. During the ceremony to celebrate their accession, held at NATO headquarters in Brussels a week later, the then NATO Secretary General, Jaap de Hoop Scheffer, asserted a widely held belief that the “accession of Albania and Croatia... is a testimony, not only to the appeal of our Alliance, but also to the vision and courage of its founding fathers”.

This sentiment was reaffirmed in the text of the NATO New Strategic Concept (NSC) that was accepted by the member states in November 2010, at the Lisbon Summit. The NSC declares that: “NATO’s enlargement has contributed substantially to the security of Allies; the prospect of further enlargement and the spirit of cooperative security have advanced stability in Europe more broadly. Our goal of a Europe whole and free, and sharing common values, would be best served by the eventual integration of all European countries that so desire into Euro-Atlantic structures.”

The text goes on to say: “The door to NATO membership remains fully open to all European democracies which share the values of our Alliance, which are willing and able to assume the responsibilities and obligations of membership, and whose inclusion can contribute to common security and stability.”

Despite the obvious appetite for growth, this seemingly simple concept is rarely easy to reconcile among all member states, and with major partners.

For example, bringing West Germany into the Alliance in 1955 was not seen by all as a reasonable or natural step to take. Only 16 years before, Germany had waged a costly and almost apocalyptic war against the majority of the then members. However, within a short space of time it became obvious to all that the inclusion of West Germany not only safeguarded the new entrant, but also substantially bolstered NATO’s capabilities.

TWO-STEP EXPANSION

The same can be said of the inclusion of 10 of the former Warsaw Pact nations, which caused great consternation among existing members and major partners – Russia, in particular. However, the two-stepped expansion process that allowed the addition of the Czech Republic, Hungary and Poland in 1999, and Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia in 2004, can now be seen as a continuation of a momentum for European integration that started after the First World War, but which was delayed by the Second World War and the subsequent Soviet occupation of Eastern Europe.

According to Article 10 of the Washington Treaty, in theory, any European nation is eligible for NATO



membership, as long as it enjoys unanimous support from existing members and agrees to a set of fundamental conditions such that it has:

- a functioning democratic political system based on a market economy;
- a policy of fair treatment of minority populations;
- a commitment to the peaceful resolution of conflicts;
- the ability and willingness to make a military contribution to NATO operations;
- a commitment to democratic civil-military relations and institutional structures.



FAMILY ADDITION: a flag-raising ceremony marks Albania's accession into NATO in 2009

■ *NATO's Partnership for Peace programme enables countries to enjoy many of its support functions, without becoming a member. It also facilitates closer integration and an enhanced ability to participate in NATO operations*

Again, this is not straightforward. Primarily, there is the vexed question of where does Europe end and Asia and the Middle East begin.

In addition, there is a group of seven nations – Austria, Finland, Ireland, Malta, Moldova, Sweden and Switzerland

– that have declared themselves to be neutral states and, therefore, ineligible for membership of NATO.

As recently as 2010, Ukraine also declared itself to be neutral, having previously requested admission into the Alliance. Three years earlier, in 2007,

Serbia assumed a quasi-neutral status. However, despite their neutrality, all these countries have joined NATO's Partnership for Peace (PfP) programme, which enables them to enjoy many of the support functions that NATO is able to offer, without becoming a member. PfP also facilitates closer integration and, with that, an enhanced ability to participate in NATO operations and exercises.

POTENTIAL MEMBERS

This leaves outside the fold an obvious group of potential member states comprising Belarus, Bosnia and Herzegovina, Cyprus, the Former Yugoslav



CAUSE FOR CELEBRATION: Albanians raise the NATO and Albanian flags after the country joined the organisation

Republic of Macedonia (FYRM), Georgia and Montenegro. Of these, Bosnia and Herzegovina, Georgia, FYRM and Montenegro have expressed a wish to join.

They are, in fact, part of the Membership Action Plan (MAP), which has been set up to facilitate their eventual admission, as long as agreement can be reached on a number of outstanding issues; the name of FYRM being just one example of a major stumbling block, Russia's disquiet over Georgia's membership being another.

The other two countries – Belarus and Cyprus – have different perspectives on a possible membership. Belarus joined the PfP in 1995 and has established an Individual Partnership Action Plan (IPAP), which is generally considered one of the stepping stones towards membership, although neither a guarantee of success, nor an outright indication of intent. Cyprus, on the other hand, is neither

a member of PfP, nor of the two other major NATO partnership groupings of the Mediterranean Dialogue (MD) – which embraces Algeria, Egypt, Israel, Jordan, Mauritania, Morocco and Tunisia – and the Istanbul Cooperation Initiative (ICI) – comprising Bahrain, Qatar, Kuwait and United Arab Emirates.

Another two potential member countries that are within the European sphere – albeit on the outer edges of the continent – are Armenia and Azerbaijan.

Although Armenia has not expressed a desire to join NATO, it is, nevertheless, working through an IPAP to draw ever closer to the Alliance.

Azerbaijan, however, has openly sought to achieve Euro-Atlantic standards and draw closer to Euro-Atlantic institutions. Most notably, it has supported NATO operations in Afghanistan and Kosovo – a sure sign of its willingness and ability to share military burdens.

There is every possibility that Azerbaijan may, at some stage, join NATO.

It remains to be seen which country will be the last to attempt to join the world's most successful military Alliance, but the endgame is now within sight. ■

NATO MEMBERSHIP TIMELINE

1949: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, UK, US

1952: Greece, Turkey

1955: West Germany

1982: Spain

1990: Reunified Germany

1999: Czech Republic, Hungary, Poland

2004: Bulgaria, Estonia, Latvia, Lithuania,

Romania, Slovakia, Slovenia

2009: Albania, Croatia



“Providing Stability in a Dynamic Environment”

For more than ten years, PANH Helicopters has forged an exceptional operations record in the most demanding aviation environments. Whether it was the Islamic Republic of Afghanistan, Republic of Cyprus, East Timor, Greece, Pakistan, Papua New Guinea, Republic of Sudan or Turkey, PANH Helicopters was there to provide world-class service in the most remote and austere locations. And they are still there today, delivering critical supplies and personnel to where they are needed most, when they are needed most.

PANH Helicopters is a private company that is organized under the laws of the Russian Federation and based in Krasnodar, near Sochi and the Black Sea. PANH Helicopters has been one of the premier Russian aviation companies since its incorporation in 1964. Specializing in worldwide cargo and passenger transportation, PANH Helicopters operates a diverse fleet of Russian-made helicopters, including three Mi-26. This fleet currently includes:

- 10 x KA-32s**
- 10 x Mi-17s**
- 1 x W-3 Sokol**
- 9 x Mi-8Ts**
- 3 x Mi-26s**

PANH Helicopters has been a member of Helicopter Association International (HAI) since 1991 and incorporates internationally recognized Quality Management Systems in all operations (Standard ISO 9001:2008, Bureau Veritas Certification No RU227764Q-A).

In addition to being a registered vendor for USAID, UN World Food Programme, AGIP and CPC, PANH Helicopters has been a trusted partner of major NATO/ISAF suppliers, such as Supreme Aviation, SkyLink and PME International. PANH Helicopters has also been the sole helicopter supplier for the Cyprus Government for the past nine years.

PANH Helicopters has proven to be a trusted carrier in a wide range of geographic and climactic conditions, from Afghanistan to Africa. They will be ready when you are.



As more nations join the nuclear club, establishing a viable arms-control process becomes ever more complex. Likewise, the trade in small arms and light weapons presents major problems to those engaged in stability operations worldwide.

Duncan Lennox, editor of IHS Jane's *Strategic Weapon Systems*, explains how NATO actively supports international attempts to limit both classes of weapon

Supporting arms control – SALW and New START

It would be wrong to think that writing and agreeing a treaty is ever a simple process, but looking at the development of arms-control treaties during the past 50 years, it is clear that as more nations are involved, the more difficult the process becomes. Two prime examples of this are the New Strategic Arms Reduction Treaty (START) – the latest in a series of arms-control agreements between the United States and the Russian Federation – and the Small Arms and Light Weapons (SALW) treaty, which is still waiting to be accepted, hopefully, by all nations of the world.

THE AIMS OF NEW START

According to the treaty itself, New START set out to achieve “a further reduction and limitation of strategic offensive arms” between the US and Russia. The original START 1 treaty was agreed in 1991. It limited strategic nuclear warheads to 6,000, and the number of operational ballistic missiles – intercontinental ballistic missiles (ICBM) and submarine-launched ballistic missiles (SLBM) – to 1,600 for each nation. START 2 and 3 were never agreed, and the next treaty became the Strategic Offensive Reductions Treaty (SORT), which was agreed in 2002.

SORT established a limit of 1,700-2,200 strategic nuclear warheads, but did not limit ballistic missile numbers. New START came into force in February 2011, after lengthy negotiations, and set a limit of 1,550 strategic nuclear warheads. Deployed ICBM, SLBM and heavy bombers are limited to 700, but heavy



LIMITED ARMOURY: the New START agreement will further reduce the number of nuclear ballistic missiles carried on board submarines such as *USS Ohio*

bombers are only counted as carrying one nuclear warhead each. The rationale for the heavy bomber numbers was that bombers are unlikely to be used in any surprise attack.

The New START reductions are planned to be achieved by 2017, but the technical database is updated every six months, and notifications are made whenever a system is moved or changes status for more than 24 hours. Up to 18 on-site inspections a year allow the actual number of warheads on a missile to be checked, and telemetry data can be exchanged on up to five flight tests a year. The most recent data was published in September 2011, when the US had 1,043 strategic-launch vehicles, 822 of which were operational, and 1,790 nuclear warheads. Meanwhile, Russia had 871 strategic-launch vehicles, with 516 operational, and 1,566 nuclear warheads.

The figures, which are published every six months, must be interpreted with care because the data does not include non-operational strategic nuclear weapons, any components of nuclear weapons, or any tactical nuclear weapons. These details are significant, but there are other issues that remain to be resolved.

US AND RUSSIAN CONCERN

The US is concerned about the number of tactical nuclear weapons in Russia, and the latter is concerned by the increasing number of ballistic missile defence interceptors to be deployed by the US. Both sides need to consider how to effect meaningful reductions in their non-operational strategic weapons and components.

Looking ahead, New START may well be the last of the bilateral arms-control

treaties, as it has become increasingly clear that, as the US and Russian reductions continue, the nuclear weapon stocks of the other seven nuclear nations must also be considered. While France and the UK have made pretty clear the number of weapons they hold, the remaining five – China, India, Israel, North Korea and Pakistan – have not provided any figures at all. Recently, there has been a discussion concerning the number of nuclear weapons in China, with estimates varying somewhere between 100 and 3,000.

NATO supports New START and arms-control treaties, and makes a significant contribution to global non-proliferation, arms control and disarmament. Cooperation with the Russian Federation has greatly improved since the establishment of the NATO-Russia Council in 2002, together with providing assistance





SEIZED WEAPONS: limiting illegal access to small arms will assist in stabilising volatile regions around the world

■ NATO established a trust fund to assist it and partner countries in removing and destroying legacy SALW, ammunition, rockets, chemicals and associated fuels, and land mines

to Russia for the elimination of nuclear-weapon components and the safeguarding of nuclear materials.

SMALL ARMS AND LIGHT WEAPONS

Unfortunately, the sale of small arms and light weapons continues globally. Moreover, there are also considerable stocks of these weapons that have been forgotten or simply lost from the records. Terrorists, pirates and organised gangs find such weapons easy to obtain, and these contribute directly to escalating incidents of crime and acts of armed violence. These weapons are creating problems within countries and regions, making internal development projects more difficult and increasingly dangerous.

To try to bring the situation under better control, in January 1999 NATO established an Ad Hoc Working Group on Small Arms and Light Weapons (SALW). Its main task was to examine the effect of the proliferation of these items on NATO peacekeeping operations. The Group has since gone on to actively assist with national projects, and, in particular, with the handling of surplus ammunition stocks. From 2004, the group has also brought land mines and their related issues under its scope. In a significant act of international support and stability enhancement, NATO established a trust fund, managed through the Ad Hoc Working Group, to assist NATO and partner countries in removing and destroying

legacy SALW, ammunition, man-portable air defence systems, rockets, chemicals and associated fuels, as well as land mines.

There is still more to be done before the proliferation of these weapons can really be brought under control, but in a further move, a United Nations conference is planned for 2012. This, it is hoped, will establish an arms-trade treaty that will add to the weight of opinion stacked up against the trade in small arms. It is expected that this will address concerns over the legislation, weapon destruction and tracking of illicit SALW trade.

While NATO has not entered into any arms-control treaties or agreements, it has always encouraged its member nations and partners to carry out their international obligations. Nations have extremely strong views on both these treaties and, unfortunately, there are many differences of opinion. It will be a few years yet before a final agreement is reached, but NATO is working hard to provide a stable base from which to proceed to eventual agreements. ■

In March 2012, a group of seven young professionals¹ gathered in Brussels under the auspices of the Atlantic Treaty Association to talk about “transatlantic issues from a global perspective”. The outcome of the week-long training sessions is summarised in this abridged statement presented to senior NATO officials

Global perspectives on transatlantic issues



TAKING PART: Australian involvement in Afghanistan is an example of cooperation with non-NATO members

■ How can the North Atlantic region improve its political dialogue with its numerous global partners?

We believe that while NATO should celebrate its Atlantic identity, it must simultaneously adopt a flexible partnership model that provides an appropriate level of recognition and inclusion to external powers.

While debates have raged in recent years over NATO's expansion, we believe that a flexible partnership model provides the best opportunity for the organisation to adapt to meet the challenges of international security in the 21st century.

This model could be based on an ad-hoc, bottom-up approach in which countries effectively become temporary NATO members for the duration of their commitment to a shared mission. This is the model exemplified by countries such as Australia, through their participation in the ISAF mission in Afghanistan.

SHARING THE BURDEN

There are incentives for all parties in adopting this approach. First, for NATO countries it provides an opportunity to share the burden, reducing the resources and finances required to support missions.

Second, it legitimises their activities by building in a greater number of countries than simply its standing 28 members. Doing so will not affect the expediency of decision-making, as the model effectively represents an ‘opt-in’ process, but does have the potential to factor strongly on the minds of the critical mass of existing members as to whether the



SHARING KNOWLEDGE: Afghan soldiers are given advice on vehicle maintenance by Australian troops from the First Mentoring Task Force

proposed mission is one that is likely to forge collaboration or otherwise.

For these partner countries, the benefits are also widespread. It avoids them reinventing the wheel where NATO missions are similarly conducted – for example off the Horn of Africa – but also provides them with an opportunity to provide small numbers of troops or resources they would not otherwise be able to do independently – something that has been on strong display in Afghanistan.

For many countries, fully fledged NATO membership would also be seen as a step too far – even if it were achievable – whereas this model allows for

representation where their resources are committed on a temporary basis.

We also believe that NATO should seek to drastically increase its relations with the community. A greater emphasis should be placed on concrete forums that engage both civil society and the private sector.

UTILISING EXISTING FORUMS

The G20, APEC (Asia-Pacific Economic Cooperation), CHOGM (Commonwealth Heads of Government Meeting) and other international forums have successfully utilised B20s (G20 business summits) and civil-society gatherings that bring together business and community leaders,

and whose recommendations flow very directly into the summit's communiqué. NATO should consider a similar model. APEC also utilises a think-tank consortium by funding the activities of think tanks in member countries, and this could prove a powerful catalyst to greater public discourse and research on NATO's evolving role outside the transatlantic region.

How should NATO and the European Union develop institutionally in the growing global political environment? A flawed global economic governance system is the result of this blunt failure. Norms have been sacrificed as institutions of economic relevance exploit a non-regulated

system so recklessly that the global economy is racing to the bottom.

Economic security in all its diversity has been discussed to highlight how the notion of security is conceived from the perspective of the individual and the state.

As an integral part of the global economy, the eurozone can draw useful lessons concerning regulatory reform geared at its current economic governance system. It is all about returning to the norms by leveraging the powers of the European Central Bank to deal with its debt crisis. Economic security by this logic is not just a given, but an obligation.

FINANCIAL ASPECTS OF SECURITY

The economic strength of the Alliance will determine how it can pursue its security objectives. Beyond the macro level, human security offers the best chance to safeguard the member states of the Alliance from the risk of internal

- Enforcing policies and standards that emphasise wealth creation through productivity, rather than speculative, risky financial transfers. After all, the financial system is supposed to serve industry and the economy;
- Creating a public option in banking services to hedge against the oligarchic financial corporations;
- The European Central Bank's role in crafting its economic destiny has become imperative, so that instead of borrowing from the financial markets, it should assume the responsibility of printing money for the purpose of financing public expenditure among eurozone member states. Restoring such power to the European Central Bank is long overdue;
- The eurozone's huge public debts can be eased if it takes up the responsibility of printing the funds it needs. After all, Britain and the US are currently being

cooperation in issues that helped build their domestic capacities, thus also strengthening the countries' position in that area on the international level.

The changing global political environment depicts the intertwined and interconnected nature of traditional security issues and newly emerging, non-traditional security threats. For example, the piracy issue in the Horn of Africa is also related to energy security issues, food security, illegal immigration, counter-terrorism measures, and so on.

Furthermore, we believe that the enhancement of domestic capacities should include the following:

- Inclusive crisis-management training sessions and local capacity enhancement for crisis management can be effective ways for NATO to engage with potential partners;
- Promoting skills development in dealing with both natural and man-made disasters, risk prevention and post-disaster management;
- NATO experts can establish site visits and continuing consultations with potential partner countries to increase their preparedness for a crisis and to create an effective framework for disaster management;
- Focus on gender-inclusive training and enhancing employment security within the host nations. NATO should emphasise training local women to be specialists in crisis risk prevention and disaster management;
- The engagement of local youth by providing scholarships followed by possible internships in Euro-Atlantic-related institutions for BRIC+ nations, as well as contests and competitions;
- Increasing internet/mobile political participation through social media, enhancing the visibility of the transatlantic debate on networking sites, blogger participation engaging BRIC+ and non-NATO countries;
- Including the wider participation of civil society, such as non-governmental organisations and think tanks into the NATO Corporate Conflict Prevention. ■

discontent and conflict. In pursuit of the goal of security, it is prudent to contextualise the role of governance in running the global economic system.

The future of the burden-sharing provision of the Alliance is contingent on the extent to which members perform economically. To this end, the EU, being one of the largest global economic blocs, will have to get its economic act right so as to be able to act appropriately in investing in its capabilities. Improved capabilities among EU members of the Alliance will translate into a more effective way to supplement the operational capabilities of the US.

To this end, each of the points listed below will be of utmost relevance to enhancing the economic vitality of the EU as a hub of the Alliance:

- Limiting the powers of financial institutions in fashioning the economic destiny of the bloc in consistence with the free market, through the promotion of healthy competition based on values;

served well by this policy, which offers them a comparatively lower interest rate for bonds, as opposed to that being offered to the eurozone.

The genuine aspirations of all people in the world must be respected and upheld, be it in trade and commerce, diplomacy and security arrangements or immigration policies. A world divided between the "haves" and the "have nots" is, arguably, a danger to itself.

Security should be seen as a comprehensive phenomenon that should be shared, especially when it comes to the question of economic livelihood and how that affects people's 'bread and butter'.

What specific policy areas should be in focus for decision-makers over the coming decade and what should be the overall goals for these areas?

We believe that it would be more conducive to progress if the global partners and non-NATO countries were able to maintain their strategic autonomy in the global order, and were offered

Footnote

- 1 Group members: David Alenga (Ghana – South Korea), Reshma Kamath (India – United States), Cosmina Marian (Romania), Gloria Paridi (Italy), Claudia Tani (Albania – Greece), Shihong Weng (China), Thom Woodroffe (Australia)

A full transcript of this article is available on the ATA website at www.ata-sec.org/docs

An organisation such as NATO relies on the goodwill and support of the populations that make up its member states. Keeping NATO citizens 'in the loop' is, therefore, of the utmost importance. **Dr Stefanie Babst**, NATO Deputy Assistant Secretary General for Public Diplomacy, reveals the work of the organisation's Public Diplomacy Division and its innovative use of digital and social media

Open channels – connecting to the global village

Many in the transatlantic community still believe that NATO should only matter to those in the political driving seat – government officials and parliamentarians, military and professional security and defence experts, and the media representatives who follow the Alliance's major operations.

Discussions among NATO insiders, who are familiar with each others' opinions over many years, do not often produce many big surprises.

King's College professor Sir Lawrence Freedman encapsulated what quite a few people believe, when he questioned the point of attempting to engage the public if NATO enjoys a similar reputation to the prestigious Bank of England. Taxpayers feel assured that it is a strong and capable institution, but they do not need to know what lies behind it.

Freedman's statement, made at a NATO conference several years ago in Brussels, gained sympathetic laughter and nods from the participants. Alas, his view is very much a 20th-century perspective.

The bottom line is that NATO is not the Bank of England and, more importantly, methods of communication today have changed dramatically.

In many ways the World Wide Web has become the virtual public meeting place of the 21st century, allowing people to pursue a multitude of different activities: from hunting for a new job to

promoting a business, organising a rally or commenting on the latest Hollywood gossip. For many, the social web is simply a mechanism by which they see pictures of their families, chat with their friends and send messages to acquaintances they had almost forgotten about.

But for private industry, government institutions and parliamentarians, the web has become a key tool for communicating their decisions and actions directly to people, and for generating public and political support.

In 2011, two billion people were active online – nearly a third of mankind. The most popular social networking site, Facebook, reports in excess of 800 million active users. It is the world's most-visited website, accessible in 70 languages and consuming 700 billion user minutes a month. The micro-blogging platform, Twitter, comes second with 300 million registered users, and the video-sharing site YouTube boasts almost as many active users.

SOCIAL MEDIA AS AN INSTRUMENT OF CHANGE

But social media is not just about numbers. Ever since US President Barack Obama used Facebook and Twitter during his 2008 election campaign, social media outlets have demonstrated their mobilising effect on thousands, if not millions, of people. This, in turn, has changed the way in which international

news is made, and, consequently, governments have been forced to react.

Without the 250,000 'tweets' coming out of Iran via Twitter in 2009, news broadcasters and governments would have learned little about the student protests in the country.

And without the growing number of Russian bloggers and their thousands of followers, the massive public protest against the results of the Duma elections would not have found its way onto the squares in Moscow and St Petersburg last December.

Developments in the Arab world are another compelling case. The social web plays a crucial role in organising public demonstrations and keeping the news content fresh, all the way from Egypt to Yemen and Syria. People use their laptops and smartphones to inform themselves, connect to like-minded friends, raise awareness of local events, discuss policy issues, organise public protests in support of or against national governments, and, wherever needed, circumvent state censorship.

Young activists, academics, non-governmental organisations, journalists and policymakers in the Middle East have taken advantage of the democratising nature of social media outlets. In spite of efforts to ban or interrupt internet traffic in some countries, social networking is on the rise everywhere.



But where is the Alliance in all of this? Can NATO afford to remain aloof from the millions of 'netizens', arguing that the cyber chit-chat does not really add value to the quality of a policy debate? The short answer is 'no'.

NATO'S NEW WAY OF LISTENING

In the past two years, NATO's Public Diplomacy Division has done a lot to connect the organisation to the digital world. Moreover, as we have established NATO on Facebook, Twitter, YouTube, Flickr and other social media sites, we have come to accept new ways of listening, sharing information and engaging in conversational communications with people who are interested in security and defence, and those affected by, or curious about, our policies and missions.

Through the social web, we want to encourage discussions about transatlantic

■ The social web plays a crucial role in organising public demonstrations and keeping the news content fresh, all the way from Egypt to Yemen and Syria

security issues across geographic, political and cultural borders, facilitate them where we can, and simply be a part of them.

NATO's Secretary General, Anders Fogh Rasmussen, is a strong social media activist. He runs his personal Facebook and Twitter accounts, which are updated by his staff in accordance with his

schedule, whether he is visiting troops or attending high-level meetings with foreign dignitaries at NATO headquarters.

Rasmussen's digital activities are closely aligned to those of NATO as an organisation and a number of senior NATO representatives. General Knud Bartels (Chairman of the Military Committee), Admiral James Stavridis, (Supreme Allied Commander Operations), General Stéphane Abrial (Supreme Allied Commander Transformation), and the Commanders of the International Security Assistance Force and Kosovo Force – all well trained in the sophisticated tactics of modern warfare – now make room to post updates, ask for feedback and talk about operations on Facebook and Twitter.

On the civilian side, a number of NATO ambassadors and I, in my role as Deputy Assistant Secretary General for Public Diplomacy, share information

SECURING THE FUTURE

- Ammunition
- Rocket Motors
- Shoulder Launched Weapons
- Demilitarization
- Hand Grenades
- Fuzes
- Warheads
- Pyrotechnics
- Gas Generators and Catapults
- Ballistic Devices
- Testing and Services

Nammo



and impressions about day-to-day activities. NATO's Facebook, Twitter and YouTube channels are fed with press statements, news stories and interesting background videos on a daily basis, accessible in English, French and Arabic. All important official NATO meetings and public events are now reported on social media networks, accessible to whoever is interested and wants to learn more.

SUPPORTING ONLINE COMMUNITIES

NATO's communicators have also invited bloggers from member countries, as well as Russia, Ukraine and the Middle East, to Brussels, and will continue to do so in 2012. We have started to build bonds with eminent digital activists and online journalists. We have begun to systematically place opinion pieces and background stories on international blogs, such as *The Huffington Post* and *Global Voices*. And, through social media sites, we have established direct links to people in Libya, Afghanistan and elsewhere.

We support online communities, such as www.atlantic-community.org, encouraging them to have discussions on NATO's role in Afghanistan, relations with Russia, NATO's operation in Libya, or gender issues in military operations. We are working with the national chapters of the Atlantic Treaty Association to develop a robust digital outreach strategy, as well as with universities across member and partner countries, to share their academic research in online study groups.

We even invited netizens to discuss our New Strategic Concept online. Throughout 2010, we hosted online discussions and chats with people from across the NATO family to debate how our future Strategic Concept should be shaped and which burning issues it should address.

NATO's digital discussions about the concept found a broad echo and demonstrated that transatlantic security issues must not be discussed by just a small community of so-called 'movers and shakers' in defence and security.

As we moved towards the NATO summit in Chicago, in May this year, digital outreach played a prominent role in our communications campaign – both in the run-up phase and on the margins of the event itself. We designed dedicated event pages on Facebook, hashtags for Twitter and special playlists on YouTube, featuring NATO videos in support of the summit's deliverables. We also created a special 'WE platform' that allows netizens



SATELLITE: NATO's virtual Silk Highway provides cheap internet access to the Caucasus and central Asia

■ *We support online communities, encouraging them to discuss NATO's role in Afghanistan, relations with Russia, NATO's operation in Libya, or gender issues in military operations*

to post their comments and viewpoints, and engage directly with NATO representatives on summit-related topics. In addition, a group of young people, so-called NATO I Reps, were invited to report directly about the summit.

HELP TO BECOME DIGITAL CITIZENS

But NATO is also in the business of enabling others to join the conversation in cyberspace. For a few years now, we have been running what we call the 'Afghanistan Silk Highway' – a project that provides internet connectivity to more than a dozen universities in Afghanistan.

The reason behind the project is simple: we want Afghan students to use the internet. We want to help them to connect to the rest of the world. Hence, NATO provides the technical equipment and training needed for them to become digital citizens.

In order to provide NATO's digital programmes with a proper framework, NATO's Public Diplomacy Division has developed a dedicated digital strategy, and social media guidelines, that govern the official and personal use of social web activities for all NATO employees.

Not all NATO member countries have realised the potential power of social media. There are still those who think that Facebook and Twitter are alien to international diplomacy, but they are outnumbered by the many thousands who follow NATO's policies and actions through the social web.

For the Alliance, making use of such sites is not a question of 'either/or', but a useful complement to other, more traditional, means of communication. To use them professionally, an organisation needs to put adequate staff, financial resources and, more importantly, a well-defined social media strategy in place.

We at NATO have done all of this and we will continue to learn and adapt as we go along.

NATO has, without doubt, become an actor in the global village, and recognises that there is no reason to be afraid of connecting far beyond the community of transatlantic believers. ■

Dr Stefanie Babst is NATO's Deputy Assistant Secretary General for Public Diplomacy and a driving force of NATO's digital outreach. The views expressed in this article are solely those of the author and do not represent an official NATO viewpoint

Estonia

Estonian Atlantic Treaty Association

Founded in 2001 in Tallinn, the Estonian Atlantic Treaty Association (EATA) is a non-profit non-governmental organisation uniting over 300 members that share a common goal of supporting Estonia's NATO membership.

EATA promotes democratic values and considers informing and educating Estonian society about NATO to be its main purpose. By generating open public discussion about defence and security policy, it aims to provide a forum for citizens to have their say about Estonia's defence and security issues

By Marko Mihkelson, Chairman of the Foreign Affairs Committee of the Riigikogu

The year 2011 made one thing clearer – there are few nations not affected by the tides of massive global change. These tectonic shifts started some time ago. Some think it was the disintegration of the Soviet empire in 1991, or the start of the war against terrorism in 2001. Others insist that the tipping point was the collapse of Lehman Brothers investment bank in 2008.

Naturally, it depends on the historical perspective and also on one's point of view. Thus, the Chinese could say that the current changes started in 1978, when Deng Xiaoping announced the opening up of the country. But regardless of dates, it is clear that with the added impulse of the wild speed of the technological super-revolution, the global system is undergoing its biggest change since the Second World War.

The security policy interests of the US are more and more aimed at balancing China's rise into prominence and supporting its long-time allies in the whole Asian region (from Japan and South Korea to Australia). Here, the decision of President Obama to establish a US military presence on the northern coast of Australia, near Darwin, is of significant importance.

Although US defence expenditure has increased at record speed over the past decade, cutting the budget deficit now requires reducing the Pentagon's budget. According to Obama's plan, defence-related expenditure should decrease by \$450 billion by 2020. The question as to where the expenses would be reduced was answered in the speech that the president gave in Canberra, Australia.

"After a decade of extraordinary growth in our military budgets – and as we definitively end the war in Iraq, and begin to wind down the war in Afghanistan – we will make some reductions in defence spending," he said.

"As we end today's wars, I have directed my national security team to make our presence and mission in the Asia Pacific a top priority. As a result, reductions in US defence spending will not – I repeat, will not – come at the expense of the Asia Pacific."

EUROPE IS FACING GREAT CHANGES

These developments do not necessarily mean that the role of the Western world in international politics will lose its importance. Instead, it means that the political map of the world becomes remarkably more varied. Since the influence centre of the world is shifting, it poses the biggest challenge first of all to Europe.

In the coming years, it is expected that instability, resulting in civil war in Libya, Yemen and Syria, will prevail in North Africa and the Middle East. The first elections in Tunis have shown that, most probably, the new constitutional order will be shaped by moderate Islamists. Something similar may also happen in Egypt. But a problem arises from this – how the forces that look towards Turkey can balance secularity and sharia law.

But maybe the greatest challenge to Europe in the short term lies in the East – that is, Russia's ambition to prevent any further enlargement of the European Union and especially NATO in the East. At the same time, Russia persistently attempts to increase its influence on the decisions of both organisations.

■ ***Today, in this dangerous world, we are very lucky to have more friends and allies than ever before in the history of our country***



ALLIES: Estonia's President Toomas Hendrik Ilves and NATO Secretary General Anders Fogh Rasmussen

Moscow senses Europe's vulnerability as it groans under its debt burden, and therefore Vladimir Putin, who could remain president for the next 12 years, has declared the establishment of the Eurasian Union one of his top priorities.

Brave words have not been without deeds, and the well-proven levers of energy have been shown to be the best bargaining chips. Only recently, Moscow accomplished its long-time dream of getting complete control over the pipeline going through Belarus.

ESTONIA'S INTERESTS IN THE CHANGING WORLD

This many-coloured and dynamic picture lays an additional responsibility on the diplomats and politicians shaping

the foreign policy of a small country such as Estonia. Today, in this dangerous world, we are very lucky to have more friends and allies than ever before in the history of our country. At the same time, it is obvious that the nurturing of Alliance relations requires constant attention.

Therefore, Estonia must devote its energy and attention to strengthening both the EU and NATO. In the first case, this means our greater readiness for closer integration, and as a responsible member of the eurozone we have a significant opportunity to help establish new rules of the game. But in order to achieve that, preparatory work has to be done at sufficient speed, both at expert level and in political discussions.

NATO member states' real commitment to updating their defence capacities is an important factor in increasing the cooperation potential of NATO. It is essential, because never before has NATO had so many foreign operations and such a varied list of threats at the same time.

Unfortunately, it is hard to achieve that aim at a time when the cutting of budget deficits and debt burdens has clashed with preferring to provide an over-intensified social security safety net in many places in Europe.

It is important for us that the US, despite the fact that it is reducing its defence expenditure and focusing attention on Asia, does not reduce its strategic presence in Europe. The deployment of military assets should take into account the interests of the Allies. Russia's threats to block the Baltic Sea with its own military installations in Kaliningrad and the North-Western Region, should spur the US to consider implementing a balancing component in the region. Without doubt, increasing defence cooperation between the Nordic countries and the Baltic states certainly has an important role to play.

Those who implement our foreign policy are having tense times at home, too. A significant structural reform has been taking place at the Ministry of Foreign Affairs. Besides reducing the excess of managerial positions, the reformers should seriously consider how the new structure would correspond to our long-term foreign policy interests.

At present, it seems that the impact of the changes taking place in the world on our foreign policy has not been thoroughly analysed. But time will not wait for long. ■



CHANGE OF COMMAND: French Air Force General Stéphane Abrial receives the Allied Command Transformation flag from NATO Secretary General Anders Fogh Rasmussen



NATO's new Military Command Structure

Grant MacDonald explains how NATO is implementing a plan to restructure its command and control organisation to drive down costs and simplify operations

A new Military Command Structure (MCS) that guarantees the right capabilities for a full spectrum of operations has been agreed by member states, NATO International Military staff and officials from the NATO Defence Policy and Planning Division, under the leadership of NATO Secretary General Anders Fogh Rasmussen.

Faced with the need to adapt to meet future threats while budgets are under additional pressure from global financial difficulties, NATO defence ministers agreed the plan last June. The objectives of the MCS are to be more effective, leaner and affordable.

Rasmussen says: "We have agreed to streamline the agencies that run individual NATO projects, such as ground surveillance and strategic airlift. And we have agreed to reshape NATO's command structure, making it more efficient, more deployable and more compact. Some headquarters will close, others will move or change their role. Together, these

reforms will make NATO more affordable – offering even better value for our Allies' money. They will make NATO more effective, focusing on the capabilities and command systems we need. Above all, they will deliver an Alliance that is fit for the future – defending us against the threats of today, and of tomorrow."

CORE FUNCTIONS MAINTAINED

The review process took into account the Command Structure's core functions, such as planning of operations, conduct of operations, development and transformation, military cooperation, and support activities.

It also considered new tasks stemming from the 2010 Strategic Concept and key principles, such as the ability to conduct Article 5 operations, deployability and sustainability, and Alliance cohesion. Greater interaction between NATO headquarters (HQ) and national HQs will also be developed as a result of the reforms.



HARD TALK: Supreme Allied Commander of Europe, Admiral James Stavridis, US Navy, during a visit to Kosovo

■ *NATO will retain its two Strategic Commands: Operations and Transformation. However, the original total of 17 Commands and HQs is being trimmed down to 10, with four HQs and three Command elements being closed*

MCS changes will make its Command Structure leaner by reducing the overall number of staff by about 30 per cent, from 13,000 to 8,800 posts.

NATO will retain its two Strategic Commands: Operations and Transformation. However, the original total of 17 Commands and HQs is being trimmed down to 10, with four HQs and three Command elements being closed.

The reform will also create a more deployable, streamlined command configuration. As examples of the changes being made following the MCS review,

Joint Force Command Lisbon will close. STRIKEFOR Naples is moving to Portugal. Land command elements in Madrid and Heidelberg are closing and being restructured into one Land Command HQ, which will be located at Izmir in Turkey.

The new structure will mean that land, air and maritime component commands will be reduced from two to one each, while seven HQs will have two Joint Force HQs (JFHQs). For the first time, each JFHQ will be able to deploy into theatre to exercise Command and Control (C2) up to the level of a major joint operation.

The peacetime structure will be about 850 posts, and normally NATO will be able to deploy 500 of these for such an event.

These JFHQ (Brunssum in the Netherlands and Naples, Italy) will have all the configured C2 equipment required for rapid theatre deployment. Operations over Libya energised the debate over the size of HQs, with the future favouring smaller but flexible and rapidly responsive HQs.

NEW TASKS FOR RAMSTEIN

The two Air Component Command HQs are being reduced to one, in Ramstein, Germany. In line with the NATO 2010 Strategic Concept, Ramstein will take on new tasks, such as ballistic missile defence, but will also be able to reconfigure from a peacetime to a wartime operations command structure rapidly. Civil-military planning capabilities will be reinforced to mirror the requirements of the majority of operations that NATO is likely to conduct.

The two maritime commands will be reduced to one, at Northwood in the UK, which will also focus on tasks such as maritime surveillance.

Northwood was chosen for its proximity to London, in order to take advantage of the UK capital's various maritime governmental organisations, non-governmental organisations, and private-sector expertise, such as Lloyds.

ADJUSTMENTS TO STRUCTURE

The previous structure of four Combined Air Operation Centres (CAOCs) across NATO Europe will be reduced to two. CAOCs run collective defence air policing, day-to-day NATO flight operations and air command functions across the Alliance. Two CAOCs will remain in the command structure – Uedem in Germany and Torrejón in Spain – while two (Larissa in Greece, and Denmark's Finderup) will be housed in a national or a multinational configuration.

A new deployable air C2 centre that can be detached from the CAOCs will also have air command functions. NATO will be able to call on the capabilities of the deployable air control system, recognised air picture production centre, and sensor fusion post

■ *The NATO Communications Agency will be restructured and about 1,300 staff will be tasked to support deployable HQs in the field under the operational control of NATO SHAPE – further strengthening Supreme Allied Commander Europe's operational flexibility*

in Nieuw Milligen in the Netherlands. This element will be merged with a new deployable air operations centre in Italy's Poggio Renatico, to deliver air command functions such as fighter control.

The NATO Communications Agency will also be restructured and about 1,300 staff will be tasked to support deployable HQs in the field under the operational control of NATO SHAPE – further strengthening Supreme Allied Commander Europe's operational flexibility.

STAFFING AND FINANCIAL ISSUES

It is estimated that it will take up to three years to implement MCS, because of the complexity of arrangements. The two key factors influencing the timetable are staffing and financial issues, such as

the definition of the role of each HQ and staff job descriptions.

Purchasing decisions for new equipment, the transportation of equipment from one location to another, and the transfer of MCS organisations from one country to another also present challenges, with the upheaval of families, but NATO is helping staff in making the adjustment.

These initiatives are part of NATO's drive to push itself into its new leaner, more effective and affordable MCS posture for whatever operations the future brings.

Equally as important, the MCS review is on course to generate real cost savings, as streamlining means that operations and maintenance budgets would be reduced by about \$20 million (£12.72 million) a year. ■



STRATEGY: NATO Secretary General Anders Fogh Rasmussen (left) and Supreme Allied Commander Transformation, General Stéphane Abrial



Does he look like a threat to your sensitive data?

This is Kai. He's trying to hack into your network from a dark basement somewhere on the other side of the world. Yes, he can be dangerous, but he will be blocked by the traditional perimeter security measures your IT security team has deployed.

Kai shouldn't be your only security concern. Only 8% of serious data breach incidents are caused by malicious outside hackers*. Over 70% are caused by "trusted insiders" -- employees, contractors or visitors; whether by malicious intent or just through unintentional mistakes.

DeviceLock® software can protect your valuable data from this serious insider threat for less than you might expect. With over 60,000 customers who've installed DeviceLock on over 4 million computers, DeviceLock has the experience and products to protect your data.

Contact DeviceLock today at www.devicelock.com/contacts.html or call +1 (925) 231-4400 to learn more.

DeviceLock®

Stop Data Leaks at the Source



Does she look like a threat to your sensitive data?

This is Millie. She works in your operations headquarters. She can walk right in your front door, through security and up the elevator to her desk. She has access to just about everything on your network. Millie found a 4GB USB stick in the parking lot this morning. She's going to use it to store her pictures of last week's office party. Unfortunately she's going to accidentally copy an entire folder of secret operations plans when she drags her picture album over. Then she's going to post the whole batch up on her Facebook page. Oh, and by the way ... that USB stick she found was infected with a keystroke logger. It's quietly sending every account name and password she enters to some guy named Kai.

DeviceLock® software can protect your valuable data from this serious insider threat for less than you might expect. With over 60,000 customers who've installed DeviceLock on over 4 million computers, DeviceLock has the experience and products to protect your data.

Contact DeviceLock today at www.devicelock.com/contacts.html or call +1 (925) 231-4400 to learn more.

DeviceLock®

Stop Data Leaks at the Source

A 21st-century Alliance needs a state-of-the-art headquarters. Ian Goold reveals how the new building in Brussels will reflect NATO's reputation as a consensus-driven, forward-looking, responsible organisation

The new NATO Command HQ

After a decade of planning, construction of the new NATO headquarters (HQ) is under way in Brussels. It is scheduled to open as the Alliance's political centre and the permanent home of the North Atlantic Council in 2015, almost 50 years after the organisation moved into its current 'temporary' accommodation.

When France withdrew from NATO's military command in 1966, the Paris HQ moved to Brussels, to a former military compound comprising a "rabbit-warren of 1960s' prefabricated structures".

FINGERS TOUCHING BORDERS

The HQ design has been adapted from a plan by French-born architect Michel Mossessian, his business partner Larry Oltmanns, and a team at Skidmore, Owings and Merrill (SOM). The American architectural-engineering partnership has built several of the world's tallest buildings, including the John Hancock Center (1969), Sears Tower (1973) and Dubai's Burj Khalifa (2010). Current projects include the new World Trade Center in New York.

Mossessian's design has been influenced by the idea of eight clasped fingers, the buildings converging in a high, glass-covered central atrium or agora (from the Greek for 'marketplace').

"I had to convey the notion of [NATO members'] interdependency, a sense of unity with diversity – of fingers touching across borders," says Mossessian in a European Commission interview. "By looking at social, economic and environmental dimensions, you find

something in common. Listening is the most important thing we do as architects. Now that sustainability is important, we have to be more in tune with dialogue. We listen; we do not always speak."

MODERN FACILITIES

In December 2010, NATO Secretary General Anders Fogh Rasmussen joined Belgium's Prime Minister Yves Leterme and its Defence Minister Pieter de Crem at the ground-breaking ceremony for the building, which is expected to deliver new, more efficient and environmentally sustainable office and conference space.

The HQ will be staffed by Alliance members' national delegations, including civilian and military liaison officers and diplomats, and international military staff seconded from nations' armed services. The building is expected to cost €660 million (£552.7 million), including €200 million (£167.5 million) for interior fittings.

"A modern NATO needs a modern building," says Rasmussen. "A new headquarters is essential to meet the demands of a rapidly changing security environment. Our project will serve as a further driver for change." Located near the existing HQ in Brussels, the 190,000 sq m building makes a clear statement: "In an unpredictable world, NATO is here to stay".

Heads of state and government agreed the new HQ during NATO's 50th anniversary summit in Washington DC, in April 1999. They recognised that the facilities, built in 1967 to last three to five years, were inflexible and had reached



saturation point. In 2004, NATO was forced to build an annex to house seven new Alliance member countries: Bulgaria, Estonia, Latvia, Lithuania, Romania, the Slovak Republic and Slovenia.

DESIGN COMPETITION

The HQ has involved five years of detailed preparation, including feasibility and technical studies. It is designed to suit both individual and collective needs, reflecting NATO's revised working methods with modern, flexible, user-friendly facilities. A restaurant, leisure areas and shops and banks will bring working and living conditions closer together.



WINNING DESIGN: a bird's-eye view of the revised design for the new NATO HQ, influenced by the idea of eight clasped fingers converging in a central atrium

■ *The new headquarters is designed to suit both individual and collective needs, reflecting NATO's revised working methods with modern, flexible, user-friendly facilities*

It had to facilitate international consultation and consensus, while promoting NATO's face as a transparent, outward-looking agency extending security across the Euro-Atlantic area. An international design competition was launched in 2001. The €200,000 (£167,525) prize was won by an international

consortium of SOM and partners ASSAR, Associated Engineers, and VK Engineering. "The design meets numerous challenging requirements," says VK Engineering. "It combines strength and strict functionality with spectacular form and a reasonable level of comfort, with the use of sustainable techniques and materials."

In 2004, Belgium was given responsibility for the HQ, which will have provided full-time jobs for about 4,000 people. The New Headquarters Project Office (HQPO), part of the Alliance's defence investment division, liaised between political oversight and daily project management.

MULTIFUNCTIONAL FACILITY

Design work began in January 2005, and site demolition started in May 2007. NATO had decided that member nations would perform their own interior 'fit-out', but the Belgian government agreed to manage design and execution of the work for all but four of the 28 nations' delegations.



IMAGE: ASSAR Architects

IMPOSING VIEW: the design of the new NATO headquarters features a canopied main entrance

A detailed review of requirements led to a revision of the concept design, which was completed in October 2005.

In March 2006, the North Atlantic Council agreed a more detailed study, based on the office-space requirements of member countries and the Alliance's international staff.

This transformed the original concept into a multifunctional facility without compromising the original design.

A jury of internationally renowned architects recommended that the construction contract should be awarded to BAM Alliance, the lowest bidder among five competing consortia. Work on the €460 million (£385.2 million) project began in October 2010, and is expected to be completed in the second half of 2015.

The HQ will provide a secure, collaborative, network-enabled capability, says NATO's HQPO. The main building features an office complex comprising eight long seven-storey fingers, or wings, and four short four-storey fingers, reached via the central 32 metre-high agora; and a conference centre which contains the 280-seat North Atlantic Council Room and the NATO-EU Plenary Room with 303 seats.

SUSTAINABLE BUILDING

The design incorporates sustainable technologies including thermal insulation, natural light, simultaneous generation of electricity and heat, geothermal energy, solar protection of glazed facades, and natural ventilation. Many construction materials have been recycled and are renewable, some roofs are 'green', and solar panels heat recycled rainwater.

■ Many construction materials have been recycled and are renewable, some roofs are 'green', and solar panels heat recycled rainwater

Electricity use will be controlled and adjusted for high-energy efficiency.

At NATO's New Strategic Concept conference in 2010 in Warsaw, Secretary General Rasmussen noted that the new building "must be less of a bureaucracy and more of a streamlined, operational headquarters, where staff and resources are realigned to serve the Alliance's new priorities, not outdated legacy activities and narrow national interests". ■



IMAGE: ASSAR Architects

LIGHT FANTASTIC: the interior of NATO's new headquarters is modern, spacious and bright

With defence budgets squeezed by current fiscal policy, Jill Taylor looks at how NATO's financial responsibilities are being met, and finds that these cuts do not necessarily lead to reduced capability, despite legitimate fears over the effects

The price of freedom



ON THE MOVE: French army soldiers prepare for an operation in Afghanistan. NATO members cover the costs of deployments themselves

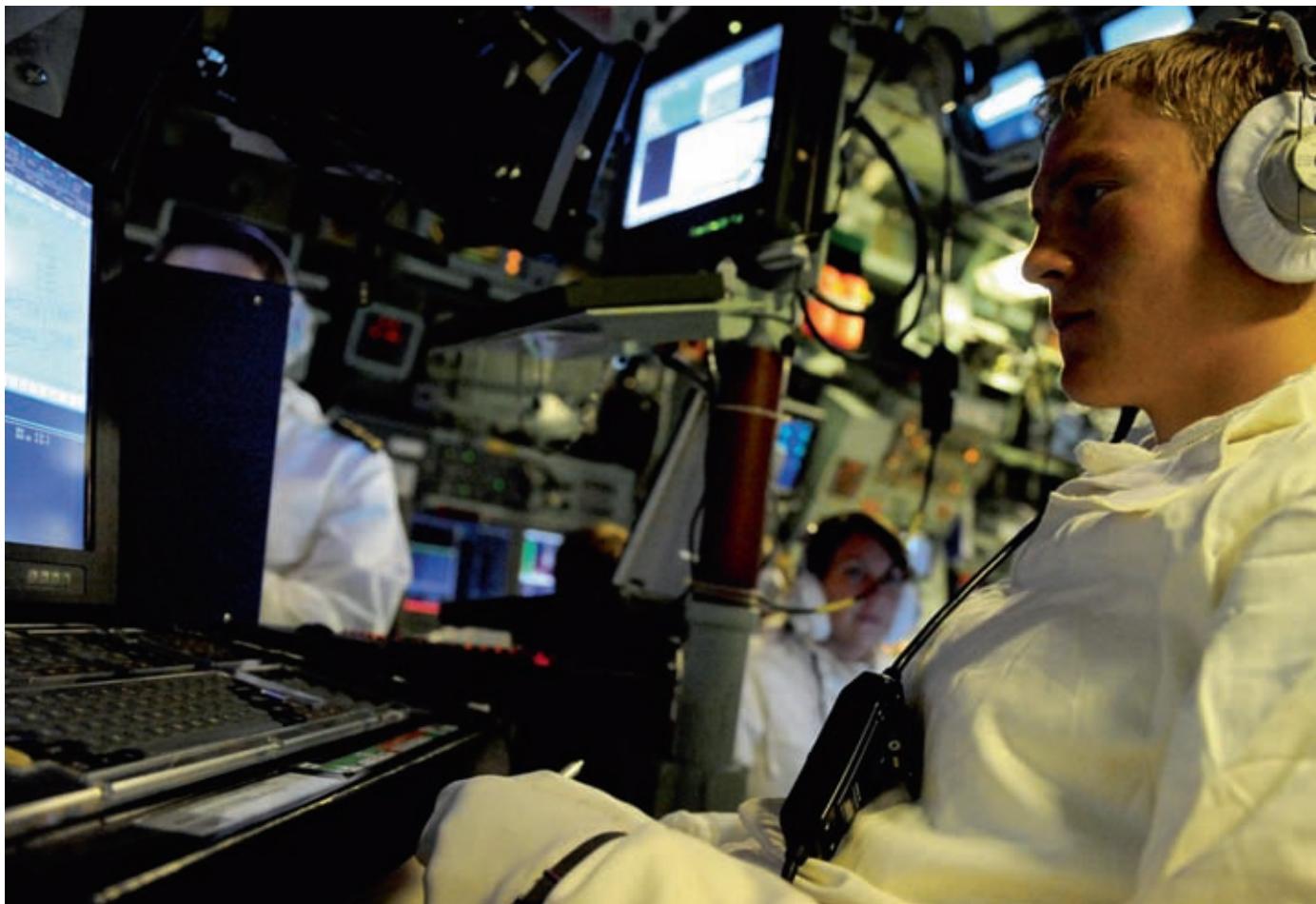
■ Most of NATO's 28 member states are under pressure to reduce public spending in the current economic climate. Defence spending is particularly at risk, and some of NATO's largest supporters have already announced significant budget cuts. The US, which is responsible for almost a quarter of NATO forces, plans to cut defence spending by \$500 billion (£319.1 billion) over the next decade, while Germany – NATO's second largest contributor – aims to cut \$10 billion over

the next five years. The UK, responsible for 15 per cent of NATO's resources, will cut defence spending by more than \$5 billion over the same period.

However, the cuts do not inevitably lead to reduced NATO capability. The transatlantic partnership remains a major factor for maintaining global security. It shares common goals and values, and it can access a successful armoury of interoperable and rapidly deployable forces.

NATO's successful intervention in Libya during 2011 revealed important truths about military intervention, says NATO Secretary General Anders Fogh Rasmussen. "Operation Unified Protector has shown that European countries, even though they spend less on their militaries than the US or Asian powers, can still play a central role in a complex military operation."

He said there were legitimate fears that the operation might lack sufficient strike capabilities, but the unprecedented speed,



ON THE ALERT: crew members on board HMS *Liverpool* keep a watchful eye off the coast of Libya during NATO's Operation Unified Protector

scale and sustained pace of execution demonstrated otherwise. "Libya is a reminder of how important it is for NATO to be ready, capable and willing to act."

This view was endorsed by US President Barack Obama during his address to the Pentagon in January 2012, when he stated: "We are going to continue investing in our critical partnerships and alliances, including NATO, which has demonstrated time and again, most recently in Libya, that it's a force multiplier. We will stay vigilant, especially in the Middle East."

CONTRIBUTIONS FROM MEMBER COUNTRIES

Member countries make direct and indirect contributions to the costs of running NATO, and implementing its policies and activities. The greater part of these contributions comes through participation in NATO-led operations, where Alliance members incur the deployment costs whenever they volunteer forces to participate in these operations.

The lion's share of these operations is shouldered by forces from Canada, France, Germany, Italy, the UK and the US. Members also contribute directly to NATO

■ **NATO is adjusting to new threats, such as cyber-warfare, terrorism and weapons of mass destruction, which require different countermeasures**

administrative costs and to NATO-wide programmes that are resourced more effectively on a collective basis.

The annual payments to NATO common funds or trusts amount to almost \$3 billion a year and focus on three areas:

The civil budget (about \$0.4 billion) includes administrative, communications, security and other non-military costs, as well as programmes such as the Partnership for Peace and the Euro-Atlantic Partnership Council.

The military budget (approximately \$1.8 billion) includes operational and maintenance costs for the integrated command structure, including

operational headquarters in Belgium, Italy and the Netherlands, regional command centres and joint military activities, such as the Airborne Warning and Control System fleet.

The third area covers the Security Investment Programme, which includes infrastructure spending on long-term investment for theatre facilities, such as airfields in Kabul and Kandahar, Afghanistan and support for the NATO Central Europe Pipeline System, which supplies fuel to military and civilian users.

SHARING THE COST

Contributions are made in accordance with an agreed formula based on relative gross national income, which, in most cases, represents less than one per cent of the national defence budget.

The largest direct contributors are the US (22 per cent), Germany (16 per cent), the UK (15 per cent) and France (10 per cent). NATO enlargement has helped spread the costs across the membership, which has risen from 12 to 28 since 1949.

The challenge facing NATO is to maintain the quality and availability of

resources during financial hardship. The organisation is also adjusting to new threats, such as cyber-warfare, terrorism and weapons of mass destruction, which demand different countermeasures.

The Alliance plans a number of cooperative projects at the NATO Chicago Summit in May, under a Smart Defence Initiative aimed at more effective use of software and hardware resources. Events in Libya underlined that, although a military approach cannot solve a conflict on its own, it remains a necessary tool in a wider political effort. Europe needs to build a strong continuum of hard and soft power, so that it can respond to the full spectrum of crises and threats.

NATO members meeting in Chicago also need to keep in mind the rise in

defence expenditure by developing nations, such as China and India, which are outside the NATO Alliance. While Asia accounts for less than a quarter of the world's military spending, its share is expected to rise to more than 30 per cent by 2016. In contrast, defence spending by NATO's European member nations has shrunk by some \$45 billion – the equivalent of Germany's entire annual defence budget – over the past two years.

PRIORITY AREAS

NATO is working to ensure it has sufficient funds for its operations and missions. It has become more focused on priority areas, such as countering improvised explosive devices and tying together countries with access to resources, such

as mission-capable helicopters. "Making savings includes doing more together, and that will deepen the solidarity between allies," Secretary General Rasmussen told NATO defence ministers at a budget meeting in Istanbul.

The Chicago Summit will discuss shared maintenance of Allied vehicles, aircraft and vessels, and opportunities for training facilities. Pooling investment in unmanned aircraft for intelligence and surveillance could also be on the agenda.

Intervention succeeded in bringing stability to Libya in 2011, with considerable cooperation and sharing of resources between Allied forces. Now NATO needs to ensure that it has the right equipment, training and resources in place for the next crisis. ■



CONTINGENCY: maintaining stocks of munitions like these Paveway 111 guided bombs is a NATO priority

NATO MEMBER COUNTRIES' DEFENCE BUDGETS 2011

COUNTRY	2011 BUDGET (\$ billions)	GDP % (2010)
Albania	0.21	1.7%
Belgium	3.76	0.79%
Bulgaria	1.02	1.46%
Canada	18.52	1.5%
Croatia	0.9	1.39%
Czech Rep	2.5	1.6%
Denmark	4.35	1.4%
Estonia	0.38	1.78%
France	52.23	2.0%
Germany	43.3	1.27%
Greece	8.16	3.1%
Hungary	1.36	1.15%
Italy	21.08	1.14%
Latvia	0.25 (2010)	1.4%
Lithuania	0.34	1.2%
Luxembourg	0.27	0.89%
Netherlands	11.4	0.5%
Norway	6.6	1.6%
Poland	8.8	1.95%
Portugal	2.92	1.5%
Romania	1.53	1.33%
Slovakia	1.04	1.3%
Slovenia	0.66	1.42%
Spain	9.7	1.2%
Turkey	12.07	1.63%
UK	54.6	2.7%
US	708.0	4.7%

Source: Atlantic Council (figures for Iceland unavailable)

FYR Macedonia

Euro-Atlantic Council of Macedonia

The Euro-Atlantic Council of Macedonia (EACM) is a non-governmental organisation established in 1997. EACM unites people from diverse national, political, intellectual and business backgrounds, and has close relations with state institutions such as the Ministry of Foreign Affairs, Ministry of Defence, the NATO Liaison Office in Skopje, the Cabinet of the President of the Republic of Macedonia and the Prime Minister of the Republic of Macedonia.

By Lazar Elenovski, President of the Euro-Atlantic Council of Macedonia, Vice President of the Atlantic Treaty Association and former Minister of Defence of the Republic of Macedonia

NATO is the largest security alliance in history. Over the past 20 years, it has been one of the most transformed international organisations on the planet. Throughout that transformation, and particularly after the fall of communism in Europe, it has had to find a renewed *raison d'être*.

But, beyond that, it is a security organisation with the highest responsibility when it comes to the protection of the values of civilisation and freedom. Therefore, it must meet the rapidly changing security environment in today's multilateral world.

The transformation is mostly regarded as the development of high-technology military capacities. The 2010 New Strategic Concept from Lisbon gave the road map for the future transformation of the Alliance.

The Chicago Summit expects the invested efforts from the Allies. When we add to this agenda the current operations, missions, partnerships and forums, the picture of the engagement of the Alliance in meeting today's global security challenges is one of responsibility and devotion to the building of world peace and progress. NATO acts as a global guardian of civilisation's values. This was very effectively highlighted in Libya.

Nevertheless, the main challenge comes internally. For several years, the main problem that the Alliance has been facing is the growing military, technological and budgetary gap

between North America, specifically the US, and the European partners.

Five years have passed since former US Secretary of Defense Robert Gates said to the European partners at the Munich Security Conference that "NATO is not a talking shop". This was a call that each of the Allies should bear the burden of building military capacities, contribute to operations and, as a precondition to that, maintain stable defence budgeting above two per cent of gross domestic product. Things have not improved since then.

THE EUROPEAN CHALLENGE

NATO, as a collective system, has remained the main pillar of European defence. However, as far as budgets are concerned, the European share of NATO spending is a little above 20 per cent, whereas in 1991 it accounted for a third of the total NATO budget.

Since the end of the Cold War, European member states' defence spending has decreased by 20 per cent while their combined GDP has risen by 60 per cent. This trend became more marked after the 2008 financial crisis, which brought significant decreases in European Allies' defence budgets (excluding France and the UK) to under the two per cent benchmark. Moreover, 15 of these states had defence budgets below 1.5% of GDP in 2011.

While the European budgets have fallen back in the past decade, China's military budget has tripled, Russia's has grown by 100 per cent, and the defence budgets of countries such as India, Brazil and South Korea has increased by between 50 and 100 per cent. If this trend continues, the estimates are that in the next 10 years China's military budget

■ Only a united and integrated Europe can be strong enough to respond adequately to future challenges



HONOURED GUEST: NATO Supreme Allied Commander Europe Admiral James Stavridis (right) in Macedonia

will match the combined budget of the European Allies. On top of that, we need consider the Obama administration's plan for defence cuts of a half-a-trillion dollars in the coming decade.

The budgeting gap is the main challenge for NATO in the collective development of military capacities. NATO Secretary General Anders Fogh Rasmussen's suggestion that the financial crisis is at risk of becoming a security crisis is more than a warning.

However, Europe's difficulties do not end here. The European Union is faced with its largest economic crisis since it came into being, but it is evident there is an absence of uniquely European political mechanisms for meeting the continental and global challenges.

All of these interdependent difficulties reveal a general crisis such

as has not been witnessed since the Second World War. It questions the basic philosophy of a united Europe and its place in a globalised world. Its manifestation is proof that the capacities of the great European idea are being squandered and that the EU and its citizens need to get ready for a new phase of transformation and reform.

Europe needs to choose the path of deeper integration. This requires a bold vision that will not only offer new hope and prosperity, but will also face up to the political, economic and, above all, mental barricades that stand in the way.

STRONG AND UNITED EUROPE

Deepened political and economic integration will mean enhanced stability and greater strength for Europe. Continuing the process of European

enlargement with the Western Balkans and the Eastern periphery is a further requirement. By completing the historical process, one strong entity will have been made that has its historical verification in several centuries of building a European identity. Europeans have nothing to fear – least of all from Europe.

As an Atlanticist and a European, I firmly believe that only a united and integrated Europe can be strong enough to respond adequately to future challenges. This solution is not a new one – it is a natural continuation.

First, it is a response to the current crisis, as it will promote economic stability through a strengthened internal market and the harmonisation of economic policies, as well as the initiation of growth and development.

Second, it is the correct response for the effective continuation of the transatlantic strategic partnership. In order to be strong in the future, Europe needs to make decisive steps today, and that means being a good partner for the US. Otherwise, America's interest in Europe will continue to decrease.

Third, it counters the threat of a diminishing European global role. After many centuries, the centre of the world is moving to the East, where the world's biggest political, economic and security challenges are to be found. Globalisation is creating a new geopolitical reality. This process will not favour a partly disunited and fragmented Europe.

Europe, the cradle of civilisation, needs to integrate and thereby strengthen its political, economic and military capabilities if it wishes to be able to offer a concept of a free society based on its values. ■

As well as projecting hard power to Afghanistan and Libya, NATO is also applying a softer touch to stabilisation operations in the Mediterranean, Kosovo and the Horn of Africa. **Simon Michell** takes a closer look at the reasons for its activity, and the successes that it has achieved so far

NATO's soft-power operations

Last year saw NATO forces applying hard-power war-fighting capabilities in Libya and in Afghanistan. These two operations highlight the Alliance's range of combat capabilities and the support that can be offered to the United Nations (UN) as it seeks to address intractable regional stability challenges. Quite rightly, Afghanistan and Libya attract enormous public interest and are therefore covered separately in this publication.

This highlights the issue that NATO's ability to apply a softer touch when addressing other complex security issues has, perhaps, been somewhat overshadowed. However, since the end of the Cold War, the Alliance has been called upon to support numerous security

missions by offering not just a military presence, but also military know-how in the form of capacity building, or to put it another way, training. The Alliance has also been able to offer military presence to deter and defeat acts of aggression and criminality. In addition, NATO has come to the aid of those nations that suddenly find themselves overwhelmed by natural disasters.

TRAINING IRAQ'S MILITARY AND POLICE

Although the second Gulf War was not a NATO operation, the Alliance was approached by the Iraqi Interim Government in 2004 and asked whether it would set up a training capability. An agreement was struck and the NATO

Training Mission-Iraq (NTM-I) was established under UN Security Council Resolution (SCR) 1546. NTM-I was tasked with delivering training and mentoring, as well as coordinating the distribution of equipment that was being donated by NATO member states to help Iraq rebuild its security apparatus.

After seven years, in December 2011, the agreement came to an end and NTM-I withdrew from the country, having successfully helped to train mid- to high-ranking officers in the military and police force, both in Iraq and in member-state facilities in their own countries.

This is not the end of NATO's support for Iraq because, in April 2011, the country was granted NATO Partnership



VALUABLE LESSONS: senior Iraqi Armed Forces NCOs receive training at the NCO School in Taji



ALBANIA: NATO supervised the 2002 collection of rebels' weapons



TENSE SCENARIO: the most recent version of regular joint exercise Balkan Hawk, in June 2011, tested units' ability to restore order after a natural disaster in Kosovo

■ *After the Pakistan earthquake, NATO airlifted 3,500 tonnes of urgently needed supplies, and deployed engineers, medics and troops, who quickly set about building emergency shelters*

status, which has cemented an enduring commitment to support Iraq as it struggles to get back on its feet.

PEACEKEEPING IN THE BALKANS

Since the turmoil in the 1990s, and thanks to the intervention of NATO forces, the Balkans has become a much more stable region, and prosperity is returning, thankfully. The job is far from over, however, and NATO retains a substantial presence in Kosovo as part of the KFOR mission. The primary task, which has seen the participation of all 28 members and Ukraine, is to create a professional, democratic and multi-ethnic security infrastructure in the new state of Kosovo. Like NTM-I, this is a UN-mandated mission – this time under SCR 1244. Unlike Iraq, the mission is much more of a

collegiate, team effort with the European Union (EU), through its EULEX (EU Rule of Law Mission), and other international outfits, including the OSCE (Organisation for Security and Cooperation in Europe).

A significant first was achieved in 2011, when units of the Kosovo Security Force took part in the latest version of the Balkan Hawk joint exercise. Significantly, the exercise was a training package of how to deal with a humanitarian disaster – in this case a massive earthquake.

This sort of activity is regularly practised by NATO, and most notably implemented after the Pakistan earthquake on 8 October 2005. This saw NATO airlifting 3,500 tonnes of urgently needed supplies, and deploying engineers, medics and troops, who quickly set about building emergency shelters before the

harsh winter exerted a firmer grip on the Himalayan region.

One of the most difficult issues to handle after a conflict, particularly an internal struggle involving both regular and irregular forces, is removing the arms from those who no longer need them after peace has returned. Libya is a timely reminder of this problem. Again, NATO has a tried-and-tested formula for dealing with this issue or for helping others to take on this tricky job. SFOR, the Stability Force that maintained a presence in Bosnia and Herzegovina, took on this task with great success. In 2003 alone, SFOR disposed of more than 11,000 weapons and 45,000 grenades. The result was a huge lessening of tension, enhancing confidence in the peace-building effort.

CONTROL OF ARMS

Seeking out and removing mines from the war-torn Balkans was another massive task that NATO enthusiastically accepted. The Balkans is not the only area where there is a need to take control of unregistered or hidden arms and explosives. Tajikistan



PREVENTING PIRACY: the Royal Navy's HMS *Montrose* patrols waters off the Horn of Africa as part of NATO's Operation Ocean Shield

is another country that is grappling with this problem following its own civil war between 1992 and 1997. Although it has received a lot of help to disarm and demine, there are still significant hidden arms caches that pose a danger to the Tajik people – not just because they represent a threat in other people's hands, but also because many of these weapons and explosives have become unstable over the 15 years since the end of the war.

NATO agreed to develop a Partnership Trust Fund project with Tajikistan to assist in finding unidentified caches and either secure or destroy them. With an estimated cost of more than €575,000 (\$762,687), the project was launched with the signing of formal agreements at NATO Headquarters on 31 January 2012.

This project is particularly significant because Tajikistan shares a border with Afghanistan, and anything that can help to constrain the illegal cross-border trade in these weapons and explosives will inevitably save the lives of both NATO ISAF troops and Afghans.

With piracy becoming a growing menace to commercial shipping in and around the Horn of Africa, NATO has started patrolling these waters as well and has ramped up efforts to end this menace

The first time that Article 5 of the Washington Treaty was invoked was after the Twin Towers and the Pentagon were attacked by hijacked commercial airliners in 2001. The invocation of the article, which states that an attack on one NATO nation shall be perceived as an attack on all, saw NATO immediately set about patrolling the eastern Mediterranean to ensure that terrorist activity in these sometimes murky waters could be monitored, controlled and,

if possible, eliminated. Operation Active Endeavour, the mission that undertakes this task, celebrated its 10th anniversary in October 2011 and continues to this day, albeit under a revised and extended remit.

It is a precursor of another NATO maritime effort, known as Operation Ocean Shield. With piracy becoming a growing menace to commercial shipping in and around the Horn of Africa, NATO has started patrolling these waters as well and has joined the international community in ramping up efforts to bring this menace to a close.

The piracy threat is a problem with a complex root system, encompassing social, political, commercial and criminal causes. It will not be solved by patrolling the Somali Basin and Indian Ocean. This can only contain the issue while the international community attempts to find a lasting solution. That does not mean NATO's maritime effort is pointless. For NATO, it is another part of the task it has accepted in helping others to return to stability and prosperity. ■

Qualified And Responsive



U.S. Ordnance has been selected by the U.S. Department of Defense as a qualified supplier of the M2HB weapon system NSN 1005-00-322-9715. Our M2A2 is a Quick Change Barrel system with fixed headspace and timing. The M2A2 features a single breech lock system for simple field maintenance and logistics support. We also offer systems and spare parts for legacy M2HB and QCB systems.

U.S. Ordnance manufactures battle proven NATO standard 12.7mm and 7.62mm machine guns that are in use in over 23 countries.

CALL OR EMAIL TODAY TO ARRANGE FOR A DEMONSTRATION

T: 775.343.1320

F: 775.343.1331

E: sales@usord.com


USORD.COM


U.S. ORDNANCE
DEFENSE SYSTEMS
MANUFACTURING

ISO 9001 : 2008
QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV



Esplodenti Sabino Srl

DEMIL AND MAINTENANCE COMPANY

Località Termini (Plant)
66021 CASALBORDINO (CH) ITALY
Tel. +39 0873 918150 Fax +39 0873 918160
www.esplodentisabino.com
e-mail: info@esplodentisabino.com

The NATO mission to provide Afghanistan with safety, security and stability continues, but what is actually happening on the ground? [Tim Ripley](#) takes a closer look

The NATO ISAF presence in Afghanistan



KEEPING WATCH: a NATO International Security Assistance Force (ISAF) soldier guards a construction site in Afghanistan

During winter in Afghanistan in December 2001, the first troops of the International Security Assistance Force (ISAF) arrived in Kabul, the central Asian country's capital. Working under a United Nations Security Council mandate, ISAF played a critical role in helping the Afghan Transitional Authority to establish a new government to replace the Taliban regime that had collapsed when Kabul

fell to troops of the Northern Alliance in November 2001. ISAF's first mission was to create a secure environment in and around the capital, as well as to support the reconstruction of Afghanistan.

On 11 August 2003, NATO assumed leadership of the ISAF operation, ending the previous ad hoc command arrangements, and set in train the process that would see the Alliance

assume responsibility for leading the security effort across the entire country.

In early 2012, ISAF boasted some 130,300 international troops from 50 nations, deployed across the country in combat units, training teams assisting Afghan security forces and 28 Provincial Reconstruction Teams (PRTs) working with civil authorities and non-governmental organisations (NGOs). At the time of



IMPROVING INFRASTRUCTURE: members of Provincial Reconstruction Team Zabul perform a quality-control inspection of a road project in the Afghan city of Qalat

writing, ISAF's military commander was General John R Allen of the United States Marine Corps. He works hand in hand with NATO's Senior Civilian Representative, Ambassador Sir Simon Gass, from the UK, who is responsible for political and diplomatic engagement with the government of Afghanistan.

MISSION STRATEGY

The formal aim of ISAF's mission is to prevent Afghanistan from once again becoming a haven for terrorists, to help provide security, and to contribute to a better future for the Afghan people. ISAF is working to create the conditions that will enable the government of Afghanistan to exercise its authority throughout the country. ISAF's key tactical priorities under its population-centric counter-insurgency strategy are to protect the country's people from insurgent attack, to build the capacity of the Afghan National Security Forces (ANSF) so that they can take the

The aim of ISAF's mission is to prevent Afghanistan from once again becoming a haven for terrorists, to help provide security, and to contribute to a better future for the Afghan people

lead for security in their own country, and enable the delivery of stronger governance and national development.

NATO is committed to a policy dubbed 'Transition', under which, by 2014, Alliance forces will pass the responsibility for running security to local forces. In cooperation with the Kabul government, the Joint Afghan-NATO Inteqal

[Transition] Board (JANIB) was set up to make recommendations on when provinces are ready to be handed over to Afghan security control.

ASSESSING CONDITIONS

Transition is a conditions-based – not calendar-driven – process, says NATO. JANIB's recommendations are based on a thorough assessment of the security, governance and development situation on the ground. The main criteria for transition of any given area are as follows:

- Can ANSF shoulder additional security tasks with less assistance from ISAF?
- Is security such that the population can pursue routine daily activities?
- Is local governance sufficiently developed so that security will not be undermined as ISAF assistance is reduced?
- Is ISAF effectively structured to thin out as ANSF capabilities increase and threat levels diminish?

For Transition to be successful, ISAF says that ANSF, under effective Afghan civilian control, needs to assume its security responsibility on a sustainable and irreversible basis – albeit with some level of continued support from ISAF. The Transition-implementation process is expected to take between 12 and 18 months for each area, depending on conditions on the ground.

The role of ISAF's PRTs is also evolving after the nations providing PRTs agreed a set of principles in June 2011 for their evolution and ultimate dissolution. It was agreed that the PRTs would support Transition implementation by identifying gaps in governance and development that could threaten the durability of the handover to Afghan control. NATO says that many PRTs are already evolving, shifting their efforts from direct delivery to providing technical assistance, and building the capacity of provincial and district governments to provide essential services to the Afghan people. By the time each province with a PRT completes Transition, ISAF says the PRT will have handed over its functions to the Afghan government, traditional development actors, NGOs and the private sector.

MAKING PROGRESS

ISAF and the Afghan government have already conducted two tranches of Transition. The most recent exercise in November 2011 saw Balkh, Daikundi, Takjar, Samangan, Kabul and Nimruz provinces all transition to Afghan security lead. This brought more than 50 per cent of the Afghan population under local security, and included the cities of Jalalabad, Cheigh Charan, Shebregan, Faizabad, Ghazni, Maidan Shar and Qalai Naw. "Transition is a reality, and it is a path for the future success of this country and the Afghan people," said General Allen. "There is no doubt that Afghanistan is moving forward, and with the announcement by President Hamid Karzai of the second group of Transition areas, the Afghan National Security Forces, who have made dramatic improvements in their development and effectiveness, will assume responsibility for security for 50 per cent of the Afghan population."

Although NATO remains upbeat about the progress of Transition, Afghanistan remains a dangerous place, with Taliban and other insurgents continuing to mount regular attacks. However, ISAF insists its counter-insurgency strategy is working.

For example, each month since May 2011 has witnessed fewer enemy-initiated attacks than the corresponding month in 2010. This is the longest sustained downward trend in enemy-initiated attacks recorded by ISAF.

That said, one area where ISAF admits that the insurgents are increasing their activity is in the use of improvised explosive devices (IEDs). According to ISAF reports, IED explosions during 2011 were six per cent higher than in 2010 and insurgents continue to rely on IEDs as the principal means to execute their campaign. Sadly, more than 60 per cent of civilian casualties caused by insurgents result from indiscriminate IED explosions. On the plus side, more than half of IEDs and mines were found and cleared before they were inadvertently detonated.

As Transition is implemented, NATO's engagement in Afghanistan will not end. According to the Alliance, NATO leaders will continue to provide training to ANSF, even after they become the primary providers of security for their country and people. Post-2014, NATO's commitment to Afghanistan will go beyond the current combat mission, defined by the Afghanistan/NATO Enduring Partnership signed at the Lisbon Summit in November 2010. NATO will remain long after its combat effort is over with a long-term support and political role. NATO Senior Civilian Representative, Ambassador Gass, explained in a BBC interview in July 2011: "We are building a stable security platform on which the Afghans themselves have to build their own future." ■



MEDICAL MATTERS: Afghan Security Forces doctors are trained in suturing techniques by NATO medics



FIREARMS LESSON: an Afghan policeman practises shooting under the watchful eye of a NATO ISAF trainer

Simon Michell reviews NATO's response to the call from the United Nations for assistance to protect the citizens of Libya during last year's uprising

Libya: Operation Unified Protector

When the Libyan human rights lawyer Fathi Terbil was arrested on 15 February 2011, it sparked off a series of protests in Libya's second city, Benghazi, which very quickly escalated into a full-blown rebellion. The Libyan government's reaction was swift, brutal and uncompromising. Muammar Gaddafi was widely quoted as insisting that his forces would go from house to house in order to "kill the rats" who had dared resist his authority.

This unstatesmanlike approach to the uprising led to UN Resolution 1973, on 17 March, which

called for an immediate cessation of hostilities and a ban on all flights in Libya. The UN Security Council resolution was unequivocal. It authorised member states to act "nationally or through regional organisations or arrangements, to take all necessary measures to protect civilians under threat of attack in the country". Within a week, NATO had begun patrolling the sea and air around Libya to enforce an arms embargo. Two days later, it commenced the enforcement of a no-fly zone and, on 31 March, it began its campaign to protect civilians.



Operation Unified Protector (OUP) was unlike earlier NATO operations in the Balkans, Kosovo and Afghanistan. The United States, although more than willing to participate and lead where appropriate, requested that the Libya air combat element should be primarily led by Europe. That does not mean that the US did not take a large role in the operation. In fact, the US led the way in gaining a UN mandate and then in putting together the initial planning for the campaign. It also undertook the suppression of Libyan air defence assets at the beginning of the action and maintained this posture throughout the operation. Beyond that, the US provided the bulk of the Intelligence, Surveillance and Reconnaissance (ISR), targeting expertise and air-to-air refuelling. In all, the US accounted for some 26 per cent of all air sorties.

The three-pillared mission to ensure that civilians were not targeted or threatened by Gaddafi forces was conducted under overall command by the North Atlantic Council at the NATO Headquarters in Brussels. Admiral James G Stavridis of the United States Air Force (USAF) was the man at the top, with Canadian Air Force Lieutenant-General Charles Bouchard reporting directly to him, as the overall Operational Commander.

Reporting to General Bouchard were Lieutenant-General Ralph J Jodice of the USAF from the Allied Air Command in Izmir, Turkey, and Vice Admiral Rinaldo Veri at the Allied Maritime Command in Naples, Italy. Together, they conducted the seven-month campaign, which was to end in victory for the anti-Gaddafi irregular forces, without any NATO boots committed on the ground.

THREE SIMULTANEOUS CAMPAIGNS

Embargo: Within days of UN Resolution 1973, NATO maritime assets began to cordon off the coast of Libya to ensure that arms and mercenaries would not be able to enter the country from the sea. To do this, the ships monitored all commercial vessels in the area, particularly those that appeared to be

heading towards Libya. In all, more than 3,000 ships were contacted (hauled) and very nearly 300 were boarded for closer inspection. Of these vessels, 11 were denied transit to or from Libya.

In addition to this vital task, NATO ships also ensured that the waters were safe for humanitarian aid to transit into Libya and for evacuees to leave. This meant that coastal batteries had to be put out of action and that any attempts to seed the waters with mines should be prevented, with any existing mines being destroyed. This included the neutralisation of ordnance that had lain undiscovered since the Second World War. Of the 18 nations that participated in the action, a dozen sent a total of 21 ships into the Mediterranean to enforce the embargo. A similar number of vessels also participated in the Libyan embargo, but under national, rather than NATO, command.

■ *Within a week of Resolution 1973 being passed, NATO had begun patrolling the sea and air around Libya to enforce an arms embargo. Two days later, it commenced the enforcement of a no-fly zone*

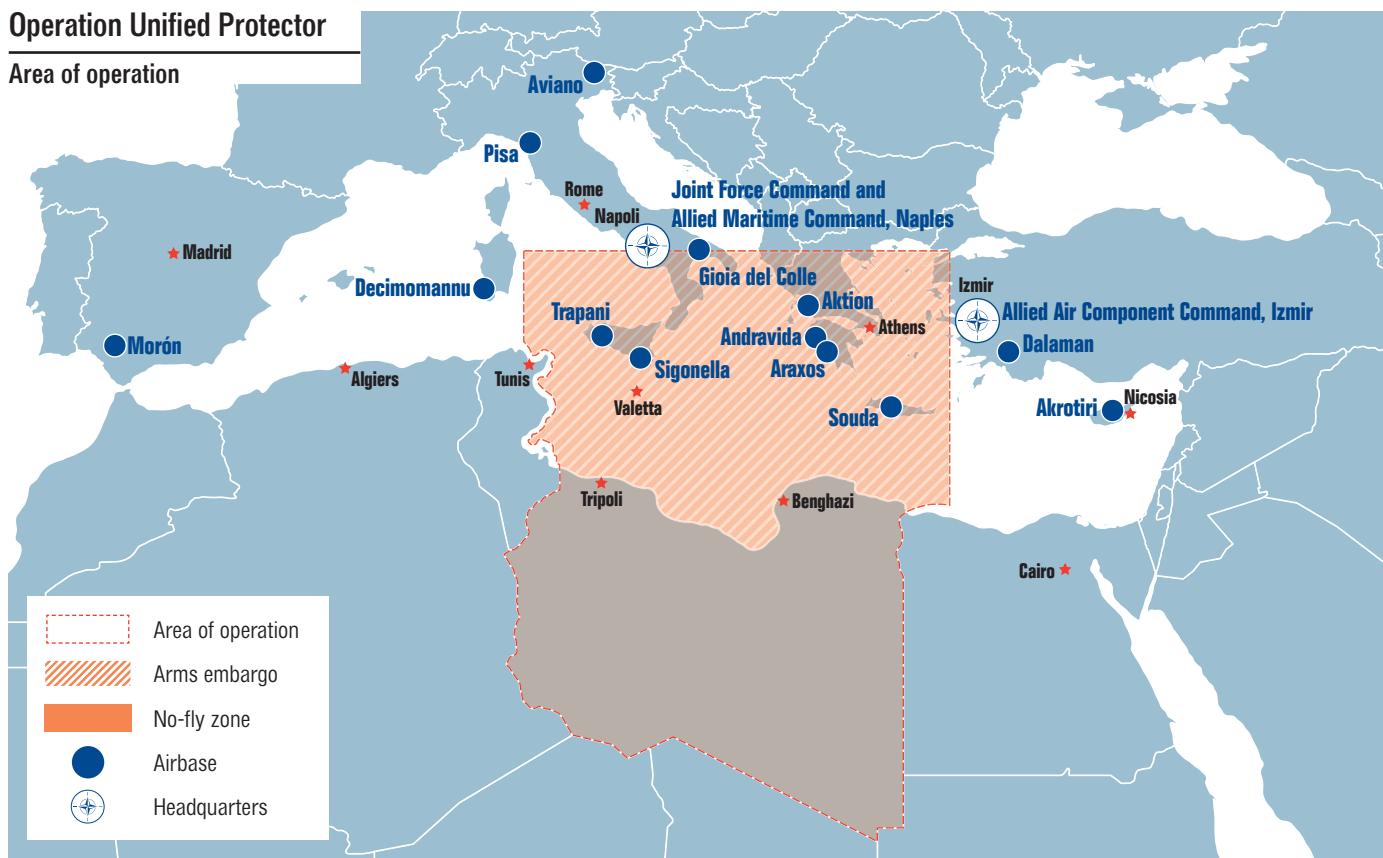
No-fly zone (NFZ): In order to prevent the Libyan regime from using strike aircraft or attack helicopters to attack civilians, NATO commanded the no-fly zone over Libya from the Joint Forces Command in Naples, with operational management from NATO's Air Command Headquarters for Southern Europe, in Izmir, Turkey. This entailed a huge array of air assets that flew primarily from bases across Southern Europe. Airborne surveillance and Command and



ON TARGET: a Royal Norwegian Air Force F-16 taxis on the airbase at Souda Bay in Crete having completed a strike mission in Libya

Operation Unified Protector

Area of operation



OPERATION UNIFIED PROTECTOR KEY FACTS

COMMENCEMENT OF KEY OUP ELEMENTS:

Arms embargo: 23 March 2011
 No-fly zone: 24 March 2011
 Protection of civilians: 31 March 2011
 End of operation: 31 October 2011

PARTICIPANTS:

Belgium, Bulgaria, Canada, Denmark, France, Greece, Italy, Netherlands, Norway, Qatar, Romania, Spain, Sweden, Turkey, United Arab Emirates, United Kingdom, United States

COMMAND AND CONTROL:

Operational Commander:
 Lieutenant-General Charles Bouchard
 (Canadian Air Force)

Commander Allied Air Command Izmir:
 Lieutenant-General Ralph Jodice
 (US Air Force)

Commander Maritime Command Naples:
 Vice Admiral Rinaldo Veri (Italian Navy)

Task Force Commander Mediterranean:
 Rear Admiral Filippo Maria Foffi
 (Italian Navy)

MILITARY ASSETS INVOLVED:

- 21 naval vessels
- 260 aircraft
- 8,000 armed forces personnel

MILITARY ACTIVITIES:

- 26,500 air missions, including 9,700 strike sorties
- 5,900 military targets destroyed, including 400 artillery pieces and 600 armoured vehicles

ARMS EMBARGO:

- Maritime surveillance area of 61,000 nautical square miles
- 3,175 vessels hauled
- 296 vessels boarded
- 11 ships denied transit to or from Libya

HUMANITARIAN ASSISTANCE:

Over 2,500 air, ground and maritime movements de-conflicted by NATO

SAFETY OF LIFE AT SEA:

NATO assets aided the rescue of 600 migrants in distress

Control (C2) aircraft were used to monitor the air, ensuring that only humanitarian flights were allowed to operate. With his air defences depleted – and in the face of overwhelming force – Gaddafi did not mount a robust challenge against the NFZ. In fact, the only reported attempt to break it took place in late March, when a G-2 Galeb attack/trainer jet was shot down by a French Rafale fighter aircraft.

Protection of civilians: By far the most reported element of OUP was the campaign to prevent attacks on civilians. NATO strike aircraft took out Libyan C2 centres, as well as targeting combat assets on the ground. As the battles raged along the coastline, NATO – along with its partner nations' aircraft – once again exemplified the utility of precision-guided munitions. Targets were only ever attacked when it was certain that no collateral damage would be incurred, and the weaponry employed demonstrated an unmistakeable ability on the part of European air forces to conduct precision-strike missions. Bit by bit, Gaddafi's ability to inflict harm on Libyan civilians was systematically torn apart, with almost 6,000 targets attacked.

After seven months of intense activity, and with no combat losses to NATO, OUP was called to a halt at one minute to midnight on 31 October 2011. With the removal of the dictatorship and the emergence of democratic governance in Libya, NATO can be proud of what it achieved in a relatively short space of time. Some two decades on from the Balkans conflict, Europe has shown that it is now willing to take on a much more robust leadership role in stability operations within its own sphere of influence. ■

Now that Libya has freed itself from the shackles of an erratic and irresponsible dictator, the country needs to rebuild and prepare to take its place in the international arena as an equal. **Simon Michell** examines the priorities involved in the process, and highlights how NATO stands ready to offer continued support

Libya, one year on: how NATO could help



BEGINNING OF A NEW ERA: Libyans take to the streets of Tripoli in celebration at the ending of Muammar Gaddafi's regime after 41 years

 The most obvious difference between the NATO Operation Unified Protector in Libya and the NATO International Security Assistance Force (ISAF) mission in Afghanistan is that no Western ground troops were deployed into the country, apart from specific evacuation and liaison missions. The fall of the Libyan government was a victory for the rebels and not for NATO. The

fact that the Alliance did not eject the Libyan government left it with no legal obligation to ensure that a functioning government and national infrastructure were put in its place. That task is for the Libyan Transitional National Council and its successor governments. Critically, this means that NATO has, in theory, no more influence over the future of the country than does any other organisation or state.

That said, the absolute priority for Libya is to move forward with its transition to a legitimate government: one that can oversee the effective rebuilding of the infrastructure that was damaged or destroyed in the conflict. Moreover, the rule of law needs to be re-established under a fairer and more transparent process. Alongside that, the country will have to continue to restore its oil



A COLOURFUL HISTORY: with its wealth of ancient monuments, Libya has the opportunity to capitalise on its potential as a tourist hot spot

production and export industry, as well as implement a policy of economic diversification that was being attempted by the Gaddafi regime before its fall.

ECONOMIC DEVELOPMENT

Before his capture, Muammar Gaddafi's son, Saif al-Islam – commonly known as the 'Engineer' – was already exploring ways to speed up economic development plans. Due to the long-standing embargo against Libya, much of this work was being instigated under the guise of the Gaddafi International Foundation for Charity Associations, which Saif headed. For some time, he had been looking for ways to expand the country's tourism industry by opening up many of the historic Roman ruins that are to be found scattered across the country. He was also keen to build a modern railway system across the northern coastline, and to further develop Libya's commercial aviation infrastructure.

As challenging as those aspirations may have seemed before the insurrection, they are now well within the scope of the National Transitional Government and its successors – not least because of the oil and gas reserves that Libya possesses



ZEAL FOR LEARNING: little by little, Libya is getting back on its feet as schools reopen their doors

and has managed to get back into production. In fact, they have been spectacularly successful in this, and in March 2012 the Libyan National Oil Corporation stated that exports had already exceeded pre-war levels.

These economic plans and others do not fall within the remit of the NATO Alliance; instead Libya can expect a host of nations knocking on its door to participate in its renaissance. Even

before the conflict had concluded, in September 2011, British Prime Minister David Cameron and French President Nicolas Sarkozy visited Benghazi and Tripoli together and promised to assist the nation in getting back on its feet. An assurance was given by the Chairman of the National Transitional Council, Mustafa Abdel Jalil, that those countries that had helped them secure victory would be rewarded for their efforts.

Any nation that suddenly finds itself free of its former oppressors is immediately thrust into a security crisis. The situation is not as severe as the one that followed the toppling of Iraq's dictator, Saddam Hussein, but there are obvious similarities. The NATO airborne bombing campaign systematically neutralised Libya's air defence capability, leaving it vulnerable to attack. Likewise, its ground and maritime forces were severely disrupted. Whatever happens next, Libya's military capability has to be put on a sound footing. Those rebels who are not part of that new structure will, at some stage, have to hand in their weapons. The battlegrounds will need to be made safe, and any mines and explosives left discarded on the ground will have to be retrieved.

All these areas fall directly into NATO's wide range of stability-building capabilities. And although, as yet, Libya

has not asked for assistance with this, NATO has indicated that it stands ready to help. When Anders Fogh Rasmussen, NATO's Secretary General, visited Tripoli on 31 October 2011, the final day of Operation Unified Protector, he told the Libyan people that, "Even though our mission ends today, NATO stands ready to help if you need us, and request us." During the visit he explained that NATO could help with building defence and security institutions. He also expressed the hope that a democratic Libya would join the circle of NATO partners "one day soon", should the Libyan people wish.

POTENTIAL NATO SUPPORT

Previous NATO missions in the Balkans and Iraq, and the existing operation in Afghanistan, highlight the depth and range of skills that the Alliance can offer. Military training is a field in which NATO has specialised for decades. The

NTM-I (NATO Training Mission in Iraq), and the establishment of modern and effective armed forces in Afghanistan, pay testament to its well-rehearsed and comprehensively deployed capabilities. Furthermore, NATO's pivotal role in both the disarmament and de-mining processes in Bosnia Herzegovina and Kosovo is yet more proof that the Alliance can successfully take on these responsibilities.

However, perhaps even more importantly, NATO has created a wide network of partners across the Middle East, North Africa, Asia and Australasia. Not only are these partners offered continuous support and guidance, but the partnership process is a significant mechanism for maintaining regional stability through sensitive and diplomatic efforts to build confidence and mutual trust. The Mediterranean Dialogue countries – Algeria, Egypt, Israel, Jordan, Mauritania, Morocco and Tunisia – would be an obvious fit for Libya. The invitation stands open for Libya to join, should it so wish. After decades in the wilderness, Libya now has a realistic chance of rejoining the international community. NATO is one institution that not only can help, but is also very willing. ■

■ *Whatever happens next, Libya's military capability has to be put on a sound footing. Those rebels who are not part of that new structure will, at some stage, have to hand in their weapons*



EXTENDING THE HAND OF FRIENDSHIP: NATO Secretary General Anders Fogh Rasmussen is welcomed by Libya's interim Prime Minister, Mahmoud Jibril (right)

Slovakia

Slovak Atlantic Commission

The Slovak Atlantic Commission works in cooperation with political, governmental and non-governmental elements of the community to create a new quality of discussion about current challenges to the security and role of Slovakia in the Euro-Atlantic area. The Commission provides assistance in looking for topics that unite the whole Slovak society in the field of security, defence and values.

By Tomas A Nagy, Research Fellow of the Slovak Atlantic Commission's Central European Policy Institute

The Alliance and Russia are struggling to find common ground that might address the most problematic element in their mutual relations – the European missile defence project.

Since the 2010 NATO Summit, the Alliance has made considerable progress, sticking to the Obama administration's newly formed European Phased Adaptive Approach (EPAA), launching an X-band radar station in Turkey, agreeing with Poland and Romania on the hosting of land-based SM-3 missile interceptor sites, and with accommodating Aegis (ballistic missile defence) system ships along the Mediterranean coast.

With the EPAA-delivered shift from “theatre” towards “territorial” missile defence, the scope of system's orientation has expanded significantly. If the aspiration was solely NATO-centric, there would be little doubt about the positive nature of recent developments.

However, with almost no progress regarding Russia's inclusion in the framework, the developments seem to be less emblematic. One key obstacle is Russia's wish to have a legally binding agreement placing limits on both US and Allied missile defence capabilities.

In ideal terms, the US would seek to establish a modus operandi in which the system's operability does not depend on Russian consent. In other words, the system must remain fully capable, even if the Russians decide to opt out at the last moment before an eventual attack.

On the other side, the Kremlin wants a system in which it has essentially a

separate key for its utilisation. However, the possible practical implications of such a setting place the Russian argument as a non-starter for the whole of the Alliance.

THE ROAD TO COOPERATION

The single most reliable way that Russia can be assured about the real intentions of the Alliance and persuaded that the missile defence does not aim to limit its own strategic deterrent is to have a seat in the operational tent with NATO. Permanent presence is arguably the most NATO could propose to Russia, and it is the most the Kremlin might look for, realistically.

First, pushing through a legally binding agreement on missile defence limitations in the US Congress would almost certainly face fatal opposition from both political camps.

Second, even if such legislative ‘equilibristics’ became somehow feasible, the notion that future US administrations are going to abide by commitments of the Obama administration are far from certain.

With all this being said, Russia should understand that it can get credible assurances only if it chooses cooperation within the NATO missile defence system. A potential example of how this might be both technically and politically achievable was presented by the Euro-Atlantic Security Initiative working group, endorsed by personalities from all the parties involved: Sam Nunn, Wolfgang Ischinger and Igor Ivanov.

The group proposed that NATO and Russia would pool substantive data and information derived from a network tying together both Allied and Russian satellite and radar sensors.

■ *The most reliable way that Russia can be assured about the real intentions of the Alliance is to have a seat in the operational tent*



UNITY: Robert Fico, Prime Minister of Slovakia, meets NATO Secretary General Anders Fogh Rasmussen

While monitoring capabilities would be shared, Command and Control capabilities would remain a sovereign responsibility of each side. Thus, all the interceptors aimed to provide both short- and intermediate-range missile defence would be preserved as sovereign elements within a partially integrated structure. This proposal only enhances NATO's functional axiom that, ultimately, NATO will defend NATO and Russia will defend Russia.

FINDING COMMON GROUND

The structural elements of this proposal are not new. NATO and the Russian Federation have had operational experience of this type of cooperation since the early 2000s, when the Cooperative Airspace Initiative (CAI) was established under the NATO-Russia

Council. The idea regarding the modus operandi of a future missile defence system is to somehow replicate the pattern that led to mutual satisfactory cooperation within the realm of conventional air safety and security.

Comparable to the CAI model, the data on ballistic missiles could be analysed in cooperation centre(s) with joint Allied and Russian military presence. The main idea is to introduce a more transparent system against potential ballistic missile attacks.

Last December, NATO presented Russia with a set of trust-enhancing proposals. These included inviting Russian experts to observe and analyse missile defence tests, joint NATO/Russian missile defence exercises and finally (and importantly) the establishment of two joint missile

defence centres for data sharing and planning. That was rejected by the Kremlin as "insufficient". Given that the technical aspects of the proposal represent the "upper limits" of how far the Alliance can go with conciliatory initiatives, it is likely that "insufficient" should be interpreted as being politically uninteresting for Russia.

Russia's preference for verbal geopolitical exercises and its simultaneous refusal to adopt a constructive tone can only weaken its position. Permanently divergent intentions will surely slow down the process and might lead to the abandonment of an integrated (ie NATO-Russia-based) approach.

The Obama-initiated "Reset" in the US policy towards Russia has brought about a productive momentum on a number of fronts, from the bilateral arms controls of the New START Treaty, and increased and seemingly sustained Russian cooperation with ISAF over the stabilisation of Afghanistan, to the tightening of the sanctions against Iran regarding its dubious nuclear ambitions.

Time has shown that the momentum seems to be dispersing faster than we would like. Without the continuous investment of political capital and diplomatic efforts, the relationship may become seriously neglected.

Contrary to a confrontational path, cooperation on almost any security-related issue could bring mutually beneficial results. Establishing a credible and sustainable cooperative partnership could bolster the nuclear non-proliferation regime, enhance European security and help the US and Russia to maintain some space for managing their mutual nuclear relationship in a more stable and transparent way. ■

Denise Hammick looks at the scope of the NATO Defence Against Terrorism programme and assesses the steps being taken to protect Alliance members from the cyber threat

Countering the cyber and terrorist threats

NATO has been gearing up to counteract the danger from the multiple types of terrorist attacks that are becoming prevalent worldwide, by developing new, cutting-edge technologies to protect Allied troops and civilians. Through its Defence Against Terrorism (DAT) programme, the NATO Alliance aims to prevent the kinds of action carried out by terrorists, such as suicide attacks with improvised explosive devices (IEDs) or other challenges, such as attacks on critical infrastructure. DAT's primary purpose is to provide a protection and rapid-response capability against terrorist-inspired tactics and, particularly, against unconventional threats.

FINDING FAST SOLUTIONS

NATO's DAT documentation notes that terrorists "profit from the mobility afforded by modern transportation, and use the connectivity and autonomy afforded by modern communications". Therefore, most projects launched through DAT are focused on finding solutions through technology that can be fielded in the near future. Accordingly, NATO has identified 10 areas in which it believes technology can help to find solutions to the terrorist threat, cutting across a wide range of military research objectives, from combining existing technologies to enhance Command and Control (C2) capabilities to applying new materials to tasks such as providing shielding for buildings. The efforts vary widely in degrees of complexity, as the projects themselves range from

countering low-tech IEDs to developing technology to defeat sophisticated attacks in the Chemical Biological Radiological Nuclear (CBRN) realm.

Most NATO member states are involved in DAT, with individual nations taking the lead in projects to develop advanced technologies to meet the most urgent security needs, with support, contributions and collaborative research from other members and NATO bodies. Many defence companies, and a number of research institutes and NATO Agencies, are also involved. The 10 areas for which DAT is responsible are:

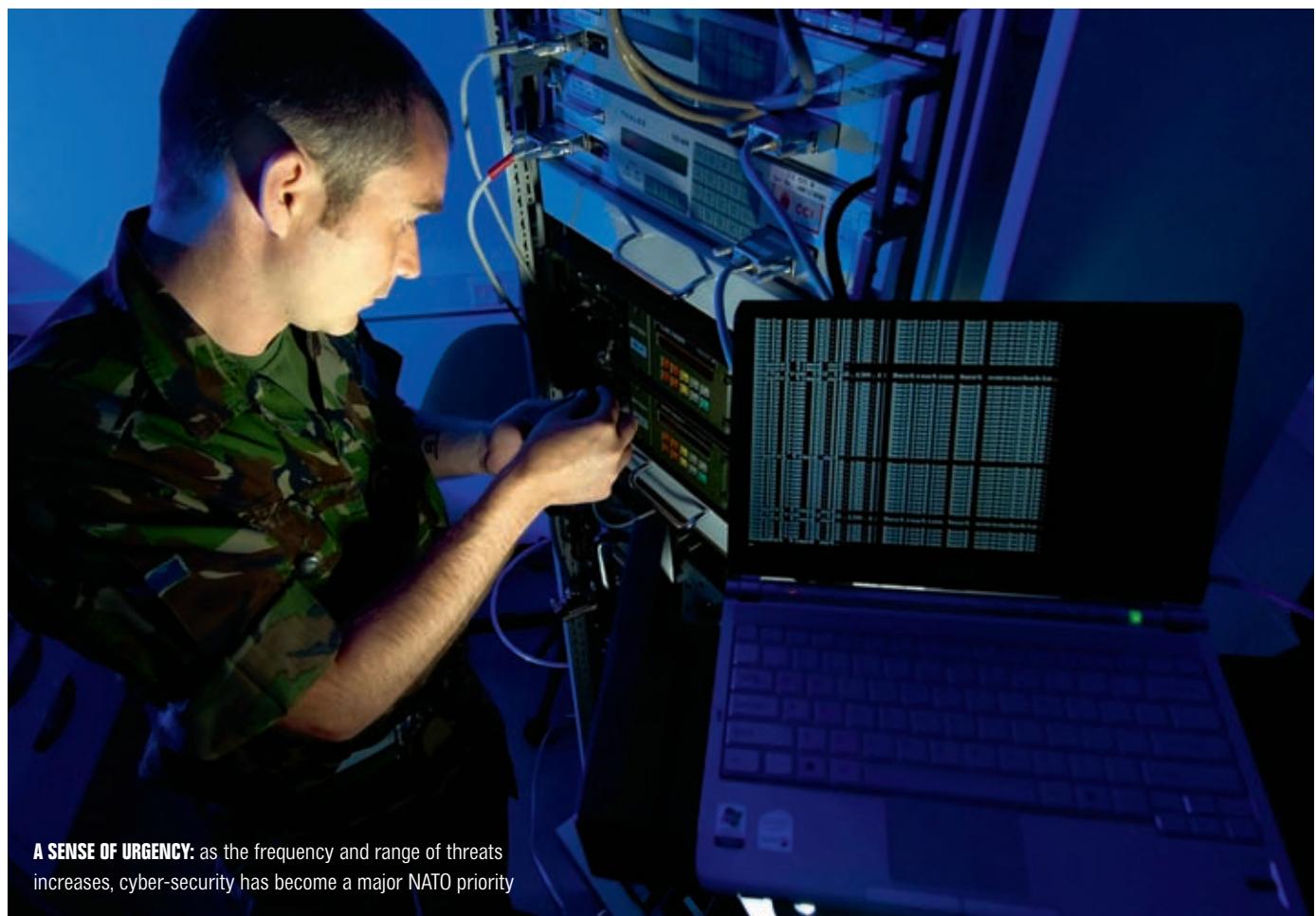
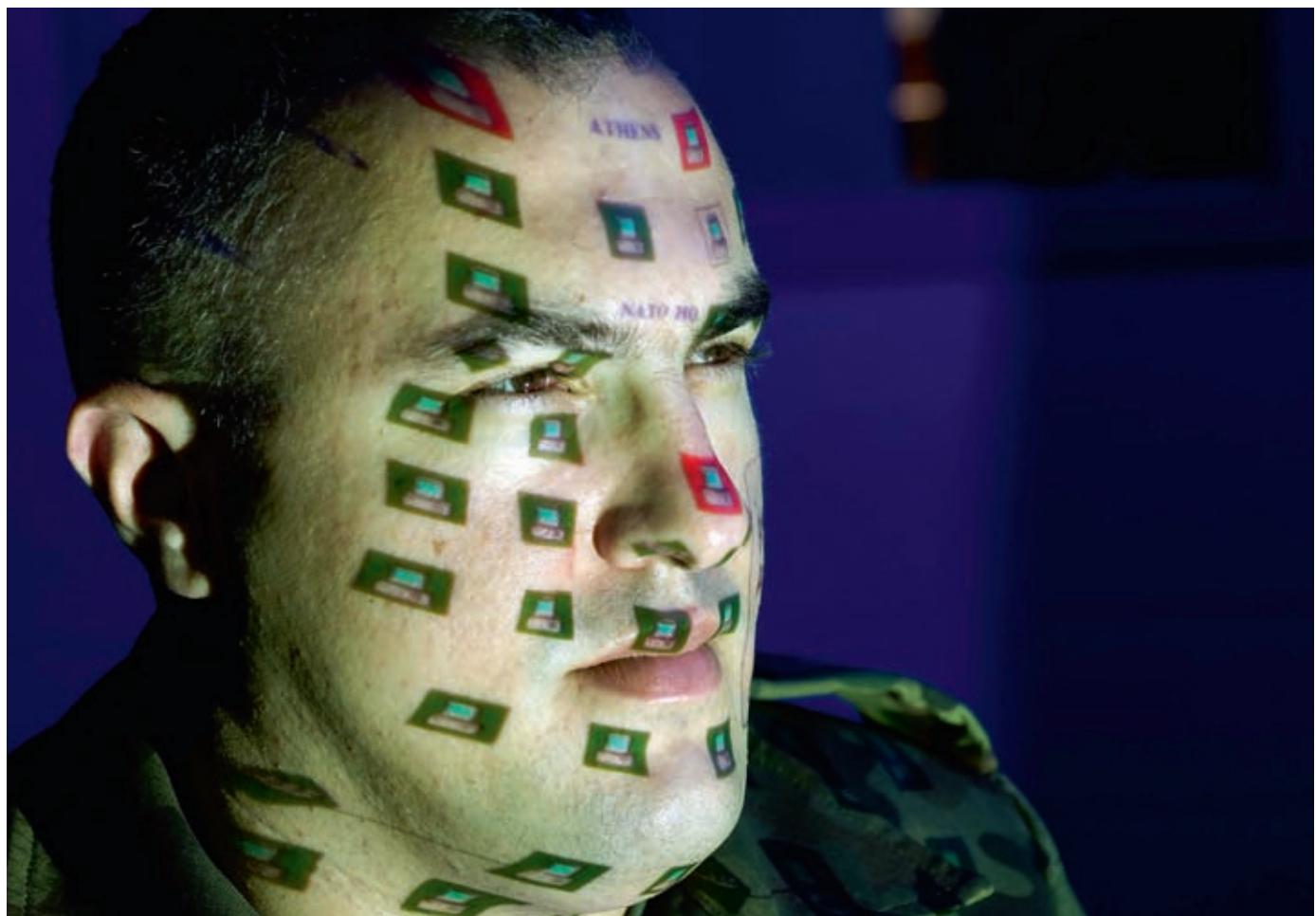
- Countering man-portable air defence missiles (MANPADS) – led by the UK;
- Protecting harbours and ships – Italy leads, with support from Portugal;
- Defending helicopters against rocket propelled grenades (RPGs) – Bulgaria leads, with support from Greece;
- Countering IEDs – Spain leads through the centre of excellence in Madrid;
- Detecting and defeating CBRN weapons – France leads, supported by the Czech Republic;
- Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) – Germany leads;
- Explosive Ordnance Disposal (EOD) – managed by NATO's EOD centre of excellence in Slovakia;
- Defeating mortar attacks – Norway leads, supported by the Netherlands;
- Protection of critical infrastructure – now integrated into harbour protection;
- Developing non-lethal capabilities – led by Canada.

Over and above the DAT programme, NATO is also taking steps to confront the wide range of cyber threats targeting the Alliance's networks. The growing sophistication of cyber-attacks – from states, self-styled 'hacktivists' and criminal organisations, among many others – makes the protection of the Alliance's information and communications systems an urgent task for NATO, and one on which its security now depends.

REVIEWING DEFENCE POLICY

A series of major cyber-attacks on Estonian public and private institutions in April and May 2007, the war in Georgia in 2008 – which demonstrated that cyber-attacks have the potential to become a major component of conventional warfare – the Stuxnet attack on Iranian organisations connected to uranium enrichment facilities in 2010 and, most recently, 'hacktivists' publishing the details of 221 British military officials and 242 NATO staff online, have all prompted the Alliance to take a harder look at its cyber-defences. This has led to the approval of a revised NATO Policy on Cyber Defence by defence ministers, on 8 June 2011.

This policy advocates a coordinated approach, focused on preventing cyber-attacks and building resilience. Crucially, all NATO structures are to be brought under centralised protection, and new cyber-defence requirements applied. Furthermore, the policy aims to make cyber-defence an organic part of the Alliance's defence planning. Consequently, the Defence Policy and



A SENSE OF URGENCY: as the frequency and range of threats increases, cyber-security has become a major NATO priority



HIGH-TECH TRAINING FACILITY: NATO Secretary General Anders Fogh Rasmussen (left) visits the Cooperative Cyber Defence Centre of Excellence in Estonia

Planning Committee (DPPC) provides oversight and advice on the Alliance's cyber-defence efforts at the expert level. At the working level, the NATO Cyber Defence Management Board (CDMB) has responsibility for coordinating cyber defence throughout NATO Headquarters, as well as the organisation's associated commands and agencies. The latter comprises the leaders of the political, military, operational and technical staffs with responsibilities for cyber-defence.

The NATO Consultation, Command and Control (NC3) Board is the main body for consultation on the technical and implementation aspects of cyber-defence. The NATO military authorities and NC3 Agency (NC3A) bear the specific responsibilities for identifying the statement of operational requirements, and the acquisition and implementation of NATO's cyber-defence capabilities.

In addition, the NATO Communication and Information Systems Services Agency (NCSA), through its Computer Incident Response Capability Technical Centre (NCIRC TC), is responsible for the

■ *NATO's aim is to protect its own communication and information systems, but also to develop and enhance mechanisms for assisting those who seek NATO support*

provision of technical and operational cyber-security services. It has a key role in responding to any cyber-aggression against the Alliance, and provides a means for the handling and reporting of incidents, as well as disseminating important, incident-related information to system/security management and users. It also concentrates incident handling into one centralised and coordinated mechanism, thereby eliminating duplication of effort.

Primarily, NATO's aim is to protect its own communication and information

systems, but also to develop and continuously enhance mechanisms for assisting those who seek NATO support for the protection of their communication systems. It does this by encouraging training and education on cyber-defence, through its existing schools and the cyber-defence centre in Tallinn, Estonia, the Cooperative Cyber Defence Centre of Excellence (CCD COE), and through the dispatch of Rapid Reaction Teams.

NATO's defence planning towards cyber defence is still at an early stage, and the Alliance is continuing to work hard to combat the major problems inherent in this field: attribution, or the ability to understand who is targeting you, and improving the deterrent effect by becoming increasingly open about how it would defend, or go on the offensive, against those who would perpetrate the crime. By centralising technology, expertise, research and learning together, it can begin to build the solid base necessary to prevent vulnerability to the cyber threat. Likewise, the DAT has homed in on the evolving terrorist menace. ■

Towards 2020: supporting NATO from battlefield to boardroom

Since its foundation back in 1949, NATO has been an extremely important player in the defence and security field. In the modern world, NATO's involvement remains important wherever it is required and possible within its military capabilities and political ambitions. But in an increasingly complex world with new threats and challenges emerging, NATO is facing possibly its greatest challenge: to be ready for its future missions within the boundaries of its Strategic Concept.

Atos is an international IT services company and serves a customer base in various sectors. It is the biggest European IT services player. The public and defence sector is one of the sectors in which Atos operates. The company has been supporting NATO for decades in meeting its challenges, from battlefield via Afghan Mission Network support to the German Armed Forces, to the boardroom by providing NATO with directory services. Now, with its critical design review for the first of three AirC2IS implementation increments successfully completed, Atos knows what it means to support NATO's strategic concept by implementing the right IT services.

The blue-sky system implementation of AirC2IS is one of the best examples of the complex and integrated challenges NATO has to meet. Providing network-enabled capabilities to its member nations is a must-have for NATO to successfully support any comprehensive approach. But technology is evolving very quickly. Service-oriented architectures and agile development are already part of NATO development processes such as AirC2IS. And with cloud computing making storing and sharing information more efficient and accessible for fixed and mobile

devices, the end is definitely not in sight. But as every innovation comes with a downside, cyber threats are the increasing new asymmetrical threat to NATO's optimal use of technological benefits.

TAKING A LONG-RANGE VIEW

To successfully defend against these threats, NATO must look far beyond its current horizon. Taking a glance into the future of cyber, the world is faced with increasing scale and complexity in terms of interconnectivity and interoperability. Cyber threats are constantly developing in sophistication, and organisations are becoming increasingly aware that this is a challenge for new capabilities, such as the future mission network for NATO. Cyber resilience is of eminent importance for NATO and, because cyber threats are not confined to any boundaries, it is equally important to NATO allies and other partners, both private and public, all active within the NATO ecosystem.

This ecosystem spans national ministries and governmental agencies of NATO's member and partner nations. But it doesn't stop there. In operations, nations other than NATO or partner nations also take part, and IOs and NGOs are involved. They, and those private and public organisations that are part of the critical national infrastructure, must become a part of this ecosystem as well. And with outsourcing on the rise and necessary knowledge becoming scarce, cooperation with private companies needs to



be intensified, making them part of the same ecosystem. Growing towards a closer (digital) interconnected ecosystem will benefit all organisations by getting access to more knowledge, for instance via ACT's Framework For Collaborative Interaction (FFCI, with industry and science), battle labs or by efficiently developing smart defence capabilities such as MAJIC2. But smart defence is more. Atos believes that NATO's smart defence initiative could also benefit from lessons learned outside of its organisation, and, of course, outside organisations can benefit from NATO as well.

LEARNING FROM OUR OLYMPICS MISSION

The Atos experience as the worldwide IT partner for the Olympics is an example of many of these benefits. Having to deal with a complex ecosystem and managing many IT partners towards one single mission, the successful IT execution of the Olympics, has created valuable lessons learned on multidimensional partnership in a challenging ecosystem.

Jo Godderij (Lt-General Ret'd, Atos Global PHT VP government affairs EMEA, former Director General of NATO's international military staff) is seeing opportunities to improve on this: "The key learning from my own public service experience is the critical

importance for governmental and international organisations to think out of the box, in order to keep up with the ever faster and ever growing technological and social developments.

"There is a need to link up with industry in a transparent, open way from both sides. ICT is one of those areas that give a tremendous potential in this respect. When I look at the Olympics and the ICT integration work that Atos does out there, I see many similarities with the ICT/networked-enabled operating challenges and requirements that NATO has in its comprehensive approach to operations, from immovable deadlines and harsh budget restrictions to multiple actors and complex scenarios, while the world is watching you.

"Our leadership and ability to collaborate have made Atos a natural choice as IT partner. Our involvement in all the above mentioned projects, underlines that a successful partnership requires investments from both sides, and can be very beneficial to all parties involved. At the speed at which the world is changing today, joining and aligning efforts as much as possible with Industry, is in my opinion, the only way in which NATO will continue to have the right capabilities at its disposal to be fit for today's and tomorrow's challenges, whether it's in the boardroom or on the battlefield," says Godderij.

Like to read more about Atos capabilities? [Visit atos.net/defence](http://atos.net/defence)

Active blast-protection systems for armoured vehicles



Recent full scale testing by Advanced Blast and Ballistic Systems Ltd has now demonstrated the technical feasibility and practicality of reducing both Floor Deformation and Global Acceleration levels in vehicles hit by under-belly blast mines or improvised explosive devices (IEDs).

THE VEHICLE ARMOURED FLOOR STABILISATION (VAFS) AND VEHICLE GLOBAL ACCELERATION MITIGATION (VGAM) SYSTEMS

The basic function of both the VAFS and VGAM systems is to directly oppose the mine-blast forces acting on the vehicle. VAFS is achieved by applying downwards-acting force directly to the belly-plate structure through a column passing through the vehicle cabin, which raises a number of issues to be addressed.

■ The basic mechanism of both systems is the use of explosive force against the explosive force of the mine, rather than using a heavily reinforced metal structure

Internal space in modern armoured vehicles comes at a high premium, due to the need to restrict the external width of the vehicle while still providing adequate protection against ballistic and RPG threats, which requires systems with substantial thickness to be effective. Therefore, the column passing through the vehicle must be as small a diameter as possible, commensurate with providing the very fast reaction time and high force output and duration required to fully counteract all the elements of the mine-blast forces.

This challenge has led many in the business of building armoured vehicles to reject any thought of such an active system being possible. ABBS, however, has now demonstrated that these perceived problems

are not insurmountable, and development is now focused on optimising the motor systems for specific vehicle applications.

It is also now clear that there are several different design options for the systems depending on the specification requirements and vehicle design involved. If only the VGAM function is required, there are at least three different motor types that can be retro-fitted easily to a vehicle without any significant changes to its structure. If VAFS is required there will be some additions necessary to deal with the high local forces involved, but in many cases these can be relatively simple.

The basic mechanism of both the VAFS and the VGAM systems is the use of explosive force against the explosive force of the mine, rather than using a very heavily reinforced metal structure. The key issue is that the counteracting force is carried on the vehicle in very lightweight form, compared to adding large amounts of steel or other physical blast protection. The explosive route produces the required counteracting force precisely when it is needed, and only then, acting by supporting a relatively lightweight belly plate and effectively converting it into a membrane between opposing forces, rather than acting as a stand-alone structure required to withstand the blast forces acting on its lower side.

APPLICABILITY OF ABBS ACTIVE BLAST-PROTECTION SYSTEMS – SUVs/VIP CARS

The systems are applicable to any vehicle requiring significant under-belly mine-blast protection, but they are especially useful for relatively light VIP cars and SUVs. The VGAM system makes it possible for the first time to mine-protect such vehicles to a significant level. Previously, even if the belly-plate structure was sufficient to prevent penetration, the global acceleration would be likely to kill or severely injure the occupants. With the global acceleration now controllable, and floor deformation also restricted, escaping from an SUV under-belly mine blast without serious injury is now possible. Above the VIP/SUV types, every type of armoured vehicle from LAV to MBT can benefit from application of the ABBS Active Blast Protection systems, especially APCs.

GLOBAL MARKET DEVELOPMENT

ABBS is currently working with the UK MoD, armoured vehicle OEMs and other design teams to define and develop the Active Blast Protection systems described above for specific vehicle applications. Discussions with major players regarding the exploitation of the VAFS and VGAM technology in the global market are ongoing.



www.advanced-blast.com

Christina Mackenzie talks to Dr Franco Fiore, from the NATO Counter-IED Task Force, to gauge whether NATO is winning the war against the improvised explosive device

The NATO Counter-IED Action Plan

■ Afghan insurgents planted 14,661 improvised explosive devices (IEDs) in 2010, killing 430 NATO soldiers – a slight drop on 2009, when 447 soldiers lost their lives to this most pernicious form of warfare. These home-made bombs are the largest single cause of casualties among troops in Afghanistan, as they were in Iraq, provoking NATO to take the initiative in 2010 with a Counter-IED Action Plan.

The number of IEDs – cobbled together by Afghan insurgents using fertiliser and plastics, and set off by mobile phones or pressure, much like a simple landmine – has increased steadily since 2007, rising by 62 per cent between 2009 and 2010 alone. But the fact that there were considerably more IEDs and slightly fewer fatalities points to a measure of success for the NATO Allies' counter-IED measures.

SLOWING INSURGENTS' MOMENTUM

Colonel George B Shuplinkov, chief of counter-IED programmes for US and NATO troops in Afghanistan, said in a recent interview with the *Washington Post* that he thought the insurgents' momentum had been stopped over the past year. Lt Gen Michael L Oates, former head of the Joint IED Defeat Organization (JIEDDO) in the Pentagon, backed this up when he told the newspaper that the percentage of IED attacks leading to casualties among US, NATO and Afghan forces, as well as among Afghan civilians, had dropped from 25 per cent in summer 2010 to 16 per cent six months later.

The improved figures could be ascribed, in part, to NATO's Counter-IED Action Plan, officially approved in 2010,



SAFE DISTANCE: unmanned vehicles play a vital role in combating improvised explosive devices (IEDs)



DEVASTATING EFFECT: IEDs are one of the main causes of casualties among troops in Afghanistan, and they also exact a heavy toll on local populations

but whose teams have been working since 2009 with the technical support of Dr Franco Fiore, member of the NATO C-IED Task Force. "What we have developed is, basically, a live document of current NATO shortfalls in the IED fight, and action to be taken to fix these, which is continually updated," says Fiore.

These shortfalls lie largely in the categories 'Defeat the Device', 'Train the Forces' and 'Attack the Networks'. Talking about jamming technology to fight the remotely controlled IED threat, Fiore says: "We have to reach a situation where we are no longer engaging in fratricide jamming," explaining that because each nation tends to procure its own equipment to jam emissions from mobile phones and other remotely controlled devices that are used to set off IEDs, the equipment also ends up jamming emissions from friendly forces.

"This means that instead of concentrating on jamming the common enemy, the troops end up jamming each other and then trying to disentangle."

The response to this problem has not yet been found. However, NATO and the French procurement agency Délégation Générale pour l'Armement are planning to work together on developing a prototype jammer that employs a novel technique developed by Fiore's team, called radio-frequency watermarking. "This will make sure that friendly forces don't jam each other and simply cancel each other out," he says.

INFORMATION SHARING IS VITAL

Another shortfall lies in intelligence sharing. Part of the Action Plan's remit is, therefore, to establish a policy to do so. But one of the first actions taken by the team was to get counter-IED training standards adopted, and this was achieved in March 2009 through STANAG 2294, which sets out the recommended required minimum training standards for individuals, units and headquarters (HQ), "so that they can operate as effectively and safely as possible" and so that "the training

standards adopted by participating nations are the same, in order to ensure common understanding and interoperability within the force," says Fiore.

The objective is also to harmonise NATO troops' methods of predicting and preventing IED attacks, detecting IEDs and their components, neutralising (disrupting and disposing of) them, mitigating their effects (disruption and redirection of blast energy and fragments, thereby reducing damaging physical and mental effects), and, finally, exploiting the technical and tactical aspects of an IED attack. But as the Action Plan document stresses: "The key enabler... is military education, training and awareness that includes sharing of current IED data and information."

Fiore's team also undertake research and development (R&D). They attend research and technology panels and task groups, visit trade shows, and scour publications and academic reports to see what new sensors and new technologies are being researched and developed. The



CLEARING THE WAY: increasingly specialised equipment is being developed to counter the IED threat

team do “try to avoid” industry coming to them with ideas, however, preferring to remain “unbiased” in their choices. Once they have found something promising, it is tested and taken to theatre for field trials – a useful approach that provides valuable feedback for introducing any necessary improvements or modifications. “This procedure can take from a few months up to a year,” says Fiore.

Under the sponsorship of the NATO HQ Emerging Security Challenges Division, over the past three years the team have been concentrating their R&D efforts on the “stand-off detection” of explosives. That means systems that can detect explosives on a person, without them being aware that they are being searched.

The team are exploiting two mature technologies to see the benefit of usage in the field. One is passive, detecting body heat as people walk past the sensor to build a picture from it, so that any anomaly would show up as a cool spot. The other is an active millimetre-wave

“For the moment, most IEDs are detected by the soldiers themselves. They know the terrain so well that they are alert to any slight change. Their ‘gut feeling’ and sixth sense are key in this case”

DR FRANCO FIORE Member of the NATO C-IED Task Force

system. This passes harmless, non-penetrating electromagnetic waves over the person’s body, and the reflected signals are used to create a 3D image. Fiore says that an “enhanced checkpoint using multi-sensor fusion will be trialled in an as-yet-unspecified European civilian airport” in the next few months.

Over the next year, the team is concentrating on Route Clearance, or how best to find roadside bombs. “For the moment, most are detected by the soldiers themselves,” says Fiore. “They know the terrain so well that they are alert to any slight change. Their ‘gut feeling’ and sixth sense are key in this case.”

This approach does not, however, solve the problem of pressure-plate detection – the most-used type of victim-operated roadside bomb – so Fiore’s team are working on a novel, ground-penetrating X-ray sensor.

So far, NATO has spent around €20 million on IED jammers for vehicles and checkpoints, which are currently being fielded, and another €30 million on sensors to detect explosives in cargo, vehicles, personnel and hand luggage, which have been deployed at ISAF headquarters and the airport in Kabul, as well as at Kandahar airfield. “The major problem is that the enemy can adapt in days,” says Fiore. “It takes us years.” ■

In September 2011, NATO conducted an exercise, CODRII 2011, to assess its ability to cope with a major earthquake in Moldova. Giles Ebbutt reviews the operation and takes a closer look at the Euro-Atlantic Disaster Response Coordination Centre

Disaster response and the EADRCC

When disaster strikes, it is a natural response to offer to help, whether it is at the house next door or in another country. But uncoordinated and indiscriminate assistance can hinder rescue efforts and detract from the efforts of would-be helpers. Coordination is the key to ensuring that the maximum effect is achieved from rescue efforts.

The Euro-Atlantic Disaster Response Coordination Centre (EADRCC) was established in 1998 by NATO to enhance the practical cooperation of nations for disaster relief and to improve the contribution that NATO could make to relief efforts. Its founding followed a number of major disasters where increased coordination by Alliance members would have been valuable. The centre, staffed by members of the NATO International Staff and personnel drawn from NATO and partner countries, is based in Brussels at NATO headquarters.

Its role is: to coordinate the responses of European Atlantic Partnership Council (EAPC) countries to disasters occurring in the EAPC area; to act as a focal point for information sharing between EAPC countries when disaster assistance is requested; and to maintain liaison with the United Nations (UN), European Union and other organisations involved in international disaster response.

This crisis-response mechanism draws together the 28 NATO countries and a

further 20 partner countries. In the event of an actual disaster, the EADRCC can be augmented with additional personnel from EAPC delegations to NATO, or NATO's international civilian and military staffs. The EADRCC also has access to national civil experts who can be called up to provide the centre with particular advice in various specialist areas.

COORDINATING THE RESPONSE

Since its foundation, the EADRCC has been involved in helping to coordinate the response to more than 45 disasters. These have included floods, forest fires, earthquakes, heavy snow, pandemic flu and Hurricane Katrina. Countries affected have included Albania, Belgium, Bulgaria, the Czech Republic, Georgia, Israel, Moldova, Pakistan, Portugal, Slovakia, Tajikistan, Ukraine and the United States – and this is not an exhaustive list. Since 2001, the EADRCC has also been given the task of dealing with the consequences of chemical, biological, radiological and nuclear (CBRN) incidents, including terrorist attacks.

As part of the response to a disaster, the EADRCC may organise the deployment of a Euro-Atlantic Disaster Response Unit (EADRU), made up of contributions from member nations. The EADRCC maintains databases of national points of contact and the availability of suitable national capabilities, which can significantly



reduce response times once a nation requests assistance. A significant function of the EADRCC is to facilitate rapid deployment by simplifying border-crossing procedures and assisting with visas, customs clearance, personnel status and similar issues, taking into account existing arrangements.

The EADRCC coordinates the different offers of assistance from EAPC nations and passes them on to the requesting nation, working closely with the UN Office for Coordination of Humanitarian Affairs, which will generally have the primary role in coordinating international disaster relief. Once decisions have been made about which offers have been accepted, the



NATURAL DISASTER: a Turkish soldier surveys the devastation caused by the first of two earthquakes that hit eastern Turkey in late 2011

EADRCC will help to coordinate movement and match transport assets to need.

In-country operations are controlled by the Local Emergency Management Authority (LEMA). If a major disaster takes place, this may be reinforced by the UN or by deployment of additional headquarters staff provided by EAPC nations. As well as national liaison officers from the EADRU, the EADRCC will also supply a liaison officer to the LEMA.

The EADRCC monitors the progress of the relief operation through reports from the various national elements of the EADRU, which then produces a daily situation report. At the end of the operation, a detailed report is produced

■ *EADRCC maintains databases of national points of contact and the availability of suitable national capabilities, which can reduce response times once a nation requests assistance*

by the EADRCC, drawing on reports drafted by the contributing nations. This focuses on lessons learned and recommendations for future operations.

EXERCISE CODRII 2011

Although the organisation gets tested at regular intervals by real disasters, there is still a need to carry out exercises to

ensure that procedures are thoroughly rehearsed and new ideas trialled before they are used in earnest. The EADRCC organises a major field exercise annually with a realistic scenario.

In 2011 this was Exercise CODRII 2011, which took place in late August and early September. The exercise was staged in Moldova near the capital, Chisinau, in

Worldwide support for Mi-8/17/171 helicopters



Tailored Support Packages for MI-series helicopters worldwide:

- Maintenance & Technical Support
- Capital overhaul of helicopters
- Capital overhaul of components
- Spare parts & logistics
- Upgrade & modernization
- Deployed operations
- Continued Airworthiness Support
- Training Programs



Fully certified maintenance, repair, overhaul and upgrade facility for Mi-8/17/171 helicopters:

- Mi-8/17 Approved Maintenance Organization (compliant EASA Part 145)
- Mi-8/17 Approved Maintenance Training Organization (EASA Part 147)
- Mil DB Certified Overhaul Facility for Mi-8/17/171
- Interstate Aviation Committee (MAK) Certified Overhaul Facility for Mi-8/17/171
- ISO-9001:2000 Quality Management System
- Registered NATO/NAMSA supplier

www.helisota.lt

HELISOTA Ltd.
5, Europos Ave.
LT-46329 Kaunas
Lithuania
Tel. +370 37 421637
Fax +370 37 420420
helisota@helisota.lt



EMERGENCY RESPONSE: observers watch as firefighters practise drills during NATO exercise CODRII 2011 in Moldova



TREATMENT: the exercise was a chance to test field hospitals



AERIAL AID: a helicopter is monitored as it undertakes a practise rescue attempt

cooperation with the Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs.

The aim was to practise EADRCC procedures and EADRU capabilities during a disaster-relief operation, including CBRN incidents, and to strengthen Moldovan capabilities to organise and manage international assistance. More than 40 teams from 22 nations took part, making a total of more than 1,300 personnel, including the Prime Minister of Moldova.

The scenario was based on a major earthquake, with its epicentre 200km from Chisinau. This had caused widespread

destruction, leaving thousands of people homeless, major disruption to utilities and transport networks and potential hazards from toxic-substance leaks. In the exercise, such was the extent of the 'damage' that the Moldovan government had requested assistance from the international community through the EADRCC and activated a LEMA command post to coordinate activities.

There were two days of intensive training before the exercise. This covered the organisational and coordinating roles of the EADRCC staff and the LEMA, as well as practical on-site training for CBRN

teams and training for the LEMA under national arrangements. This was followed by the two-day field exercise that saw the participating teams dealing with various tasks, which included a railway accident, an aircraft accident, a chemical incident, floods, and casualties in damaged buildings and a hospital. The exercise also included simulated media, to give the participants practice in dealing with the press in such an event.

The final day of the exercise included a static display and demonstrations by the participating teams, and the exercise concluded with a closing ceremony. ■

NATO's new Air Command and Control System is one of the most ambitious programmes in the Alliance's history. It will replace existing systems throughout European NATO with standard hardware and software for the planning, tasking and execution of Alliance air operations. Thomas Withington explains

Airborne defence

Formal NATO authorisation for the Air Command and Control System (ACCS) project started in 1992, following an agreement by the Alliance's North Atlantic Council governing body to replace existing national Command and Control (C2) centres organised under the NATO Air Defence Ground Environment Europe-wide air C2 infrastructure. The contract for ACCS's development was awarded to the Franco-American joint venture Air Command Systems International, a ThalesRaytheonSystems (TRS) company, in 1999. Funding for the \$500 million (€380 million) initiative is provided by all 28 NATO members, through the Alliance's NATO Security Investment Programme.

Under the supervision of NATO's ACCS Management Organisation Board of Directors, the project is tasked with developing a common design for the two main C2 operational entities, namely, the Combined Air Operations Centre (CAOC) and Action Request System (ARS) units. These provide functionality for an Air Control Centre, Recognised Air Picture (RAP) production centre and a sensor-fusion post, to equip 24 of NATO's continental European members.

MANAGING SOVEREIGN AIRSPACE

TRS is providing both the hardware and the software for military air traffic controllers to observe the RAP alongside air-mission control functions, thus providing a nation's military controllers with the capabilities to manage the sovereign airspace they are tasked with defending in their respective countries.

ACCS will also allow them to pass standard messages, data link and voice communications between one another,

as well as to warplanes and ground-based, air-defence, surface-to-air missile batteries. As well as the static national ACCS sites, the ACCS will develop deployable units, yielding both CAOC and ARS units that can accompany NATO forces on out-of-area operations to secure the airspace above the theatre of operations. This latter capability is particularly important as, according to Bernard Garot, the ACCS Programme Director, NATO itself lacks any tactical, deployable CAOC and, instead, has to ask member nations to pledge air C2 equipment and staff during operations. The day-to-day management of the

“The objective is to have testing finished ready for the delivery of the completed ACCS software in the first half of 2013”

BERNARD GAROT ACCS Programme Director

ACCS programme is under the purview of NATO's ACCS Management Agency, located in Brussels.

The production of specialised software is crucial to the development of ACCS. It will fuse together imagery collected by both domestic military and civilian air-surveillance radar in a given country, enabling military and civilian air traffic controllers to have a comprehensive radar view of an entire nation's airspace, as well as of the larger surrounding area of

interest. On operations, battlefield radar in theatre will be connected to the deployable ARS to provide a similar RAP. However, this software is redundant without the accompanying ACCS hardware, which will include servers to run the software and workstations with flat-screen monitors. Military air traffic controllers will also get a voice communications system that will allow them to communicate with their colleagues domestically and internationally, as well as with all types of military aircraft.

VALIDATION AND TESTING

The main ACCS software development was completed in late 2010, and its in-factory validation was concluded in September 2011. This showed that “from a capability perspective, the software works,” says Matthew Gilligan, vice-president of TRS's NATO Command, Control, Computers, Communications and Intelligence business. The software will now be evaluated at the NATO System Test and Validation Facility, based at the NATO Programming Centre in Glons, Belgium. By the end of 2012, further testing will have been performed at four validation sites in Belgium, France, Germany and Italy. The deployed ACCS control system entities based in the Netherlands and Germany will also be evaluated. Garot says: “The objective is to have this testing finished ready for the delivery of the completed ACCS software in the first half of 2013.”

NATO planning calls for both the software and hardware to be rolled out across the CAOCs throughout NATO's European member countries, excluding the UK and Luxembourg. For now, these two nations remain outside the ACCS



© SIRPA Air - A. Jeuland

STRATEGIC IMPORTANCE: ACCS will enhance digital and voice communications between ground stations and Alliance warplanes



DEVELOPING DEPLOYABLE ACCS: improving the capability for out-of-area operations



PATROLLING THE SKIES: Royal Canadian Air Force CF-188 Hornets in action

■ *The ACCS not only provides a single national Recognised Air Picture by integrating disparate civilian and military radar, but it will also improve interoperability across the Alliance*

initiative. The US and Canada contribute financially to the ACCS Programme, but they have their own binational North American Air Defense System, a large part of which was also built by TRS. In the near future, the US is looking to upgrade its existing Theater Battle Management Core Systems, which perform CAOC functions within the US Air Force. It is possible that the US may consider a NATO ACCS CAOC-derived system for this capability.

The UK, meanwhile, is a contributor to ACCS, but for national reasons is moving ahead with its Air Surveillance and Control System, which modernises the country's Air Defence Ground Environment command and control infrastructure. However, there is every chance that these modernisation efforts will, in future, link to the wider ACCS network. NATO expects to declare the entire Alliance-wide ACCS software and hardware fully operational

in the national CAOCs by 2018. To this end, work has already commenced in the various NATO nations to prepare for the installation and replication of the ACCS software, and its accompanying hardware, according to Garot.

STANDARD SYSTEM DESIGN

One of the key benefits of the ACCS is that it not only provides a single national RAP by integrating disparate civilian and military radar and other sensor systems, but it will also improve interoperability across the Alliance. "ACCS replaces a patchwork of ground-based air defence C2 systems with one standard system design," says Garot. The hardware and software "replaces a multitude of different CAOC systems, spread across NATO's European membership".

Gilligan adds: "There is a strong desire to have very good US-European NATO interoperability."

Given that ACCS standardises CAOC hardware and software, it will be easier for ground-based air-defence installations in different countries to work together and to share their air operations planning data and RAPs. This is particularly important for NATO in the post-9/11 world. So, in order to provide this comprehensive radar picture at both the national, and European, levels, as well as providing the associated software and hardware, the ACCS programme will connect up to 300 civilian and military radar systems across Europe.

Even when in service, ACCS will continue to evolve. Technology, threats and concepts of operations do not stand still, and ACCS will be upgraded to meet the new challenges that will undoubtedly emerge. ■

ACCS sites across Europe





PROTECTION AROUND THE GLOBE.

Every second of every day, ThalesRaytheonSystems (TRS) provides superior protection through integrated Air and Missile Command and Control Systems, Air Defense Radars and Weapon Locating Radars.

From the skies over North America, into Europe, Asia and across the Arabian Peninsula, TRS provides combat-proven, next-generation solutions that meet the security challenges of the 21st century head on. Setting new standards of performance, reliability and affordability worldwide, TRS provides the tools needed to engage, defend, and protect national interests around the world.

www.thalesraytheon.com

© 2012 ThalesRaytheonSystems. All rights reserved.

 **ThalesRaytheonSystems**

SEEKER 400 UAV

THE LATEST SOUTH AFRICAN
UAV SOLUTION TO TACTICAL
AND STRATEGIC SURVEILLANCE

- Capable of carrying two Denel Dynamics laser-guided missiles with a stand-off range of 10 km
- Homeland Security • Maritime Patrol • Border Patrol
- Natural resource Monitoring • Force Multiplier
- 16 h Endurance • Multiple Payload Capability

SEEKER II UAV

OPERATIONALLY PROVEN TACTICAL UNMANNED AERIAL VEHICLE

- 10 h endurance
- 250 km Line of Sight communication
- 50 kg payload capacity
- Real-time day and night reconnaissance
- Target location and artillery fire support

SKUA

HIGH SPEED TARGET DRONE

- All-composite, low-drag airframe
- Maximum speed: Mach 0,86 at 10 000 m
- Controllable range: 200 km (line of sight)
- Altitude: 150 m to 11 000 m
- Endurance: 60 min at 6 000 m and Mach 0,7
- Manoeuvrability: 5 g at 1 500 m

Proud Innovators of Competitive Missile & UAV Solutions

Denel Dynamics, a Division of Denel (SOC) Ltd. Reg. No. 1992/00133/07
Nellmapius Drive, Irene. PO Box 7412, 0046, Centurion, Republic of South Africa.
T: +27 (0) 12 671 1911; F: +27 (0) 12 671 1779; E: market@deneldynamics.co.za
www.deneldynamics.co.za

Business Development Manager - UAVS: Burt van Staade
T: +27 (0) 12 671 2619; F: +27 (0) 12 675 2619;
E: burtv@deneldynamics.co.za

DENEL DYNAMICS UAVS



Airborne surveillance systems on manned and unmanned aircraft provide vital capabilities to NATO forces, both in the air and on the ground, by helping to manage complex air operations. **Pierre Tran** reveals the mix of aircraft making this contribution

Airborne surveillance – manned and unmanned



COLLECTIVE DEFENCE: NATO's squadron of E-3A AWACS Sentry aircraft provide command and control of the air

 The Alliance air missions during Operation Unified Protector over Libya underlined the importance of the airborne Command and Control (C2) function in a campaign.

The Royal Air Force provided a key contribution to the manned airborne surveillance mission, flying the E-3D Airborne Early Warning and Control (AEW&C) aircraft with 8 Squadron.

The six militarised Boeing 707s, designated Sentry AEW1, are operated out of RAF Waddington airbase, near Lincoln in north-east England. “The long coastline, large physical areas and littoral nature of the Libyan theatre posed a severe challenge to the C2 of the variety of Alliance aircraft that flew in the campaign,” confirms RAF Wing Commander Paul Moss of 8 Squadron.

The AEW&C fleet was essential to managing the air operations flown by fighters and other aircraft from several nations under NATO command.

The E-3D Sentry – flying in coordination with the NATO squadron of E-3A aircraft from the NATO airbase in Geilenkirchen, Germany – ensured 24-hour continuous coverage over the Libyan skies, Wg Cdr Moss explains.

Availability of the aircraft was seen as a big success, and the Sentry squadron achieved 100 per cent of tasking orders.

Readiness was key, says Flight Lieutenant Darren Haith, tactical director on the Sentry aircraft. The squadron was flying in the early stages of the campaign, operating within 17 hours of the notice to move at the start of Operation Deference (the operation preceding Operation Ellamy, the British component of Operation Unified Protector) and continued until 31 October, when the campaign was closed.

Flt Lt Haith says a typical Sentry mission includes about 13 mission crew. As tactical director, he and his team of three controllers act as a flying control tower, distributing flight information to fighters and other aircraft in the air, and reporting the operational picture to commanders and generals on the ground. A surveillance team comprises a controller

and two radar operators, who watch the radar screens to identify and recognise aircraft and to send that picture to HQ and allies. An electronic support measures officer provides an electronic warfare capability. A data-link manager watches over the digital data link used to send the radar pictures, and a team of technicians monitors the health of the radar and communications equipment.

ALLIANCE GROUND SURVEILLANCE

The Sentry aircraft, with their distinctive rotating radar domes, are part of the current NATO Airborne Warning and Control System. However, the planned Alliance Ground Surveillance (AGS) system will strengthen this by adding an unmanned component to the airborne surveillance capability.

AGS is intended to give commanders and planners the same appreciation of the tactical situation on the ground.

“Everyone will have a common picture of the situation, at the same time,” reveals Bob Zeiser, Northrop Grumman AGS business development director. “It’s never happened before. All NATO forces in the 28-member Alliance will have access to the same radar and intelligence product from the AGS system that headquarters staff will get. That common operational picture is already remarkable, but field commanders will also have access to the information on their laptops,” he says.

The AGS system includes transportable ground stations and mobile workstations for delivering information to deployed troops. NATO planners have drawn on lessons learned, not just from military conflicts, but natural disasters, such as the Haiti earthquake and the Japanese tsunami. AGS would allow commanders to tailor their responses.

For example, flying AGS over devastated areas could deliver situational awareness pictures to show whether a port was navigable and which roads were open.

For military conflicts, commanders could see the extent of civil unrest in a country and whether there was a need to send in United Nations forces to separate insurgents from government troops. The

■ *The use of unmanned aircraft within the Alliance Ground Surveillance network circumvents the risk to aircrew and ensures soldiers are not sent into harm's way unnecessarily*



UNIFIED PROTECTOR: RAF E-3D Sentry aircraft flew missions over Libya, ensuring 24-hour coverage

use of unmanned aircraft within the AGS network circumvents the risk to aircrew and ensures soldiers are not sent into harm's way unnecessarily. A better tactical understanding helps in "getting the right people there", says Zeiser.

The AGS air segment will comprise five Northrop Grumman Global Hawk RQ-4B high-altitude, long-endurance, unmanned aerial vehicles (UAVs) in the Block 40 version. They will carry a powerful synthetic aperture radar and an electro/optical infrared camera, to provide detailed pictures of ground conditions. The multi-platform radar technology insertion program (MP-RTIP) sensor on the AGS is built by Northrop Grumman and Raytheon, and the acquisition of the \$1.2 billion (£0.8 billion) AGS core package has been approved by the 13 participating members.

EVERYBODY BENEFITS, EVERYBODY PAYS

However, although only 13 of the 28 NATO member states are participating in the procurement of the equipment, all Alliance members will share in the long-term support of the system. Members can contribute to support in cash or in kind, consistent with NATO practice: "Everybody benefits, everybody pays."

Sigonella airbase in Sicily will be the main operating base for the AGS Global Hawk UAVs, and host the ground segment – the flight control and the command and control systems. The AGS aircraft at Sigonella will be stationed alongside Global Hawk units of the US Air Force and US Navy. The ground segment, particularly the communications links, will be supplied by European industry, notably EADS. "AGS is becoming multinational," says Zeiser.

The ground segment will distribute the pictures and associated information to the national networks of Alliance members, allowing commanders and planners to see events unfold in near real time.

The 20-year support plan in the capability package must be approved by all 28 members, as they decide on how the military and infrastructure budgets are spent. Under the present plan, if the budgets are approved, the AGS operation could be stood up in the third quarter of 2015 at Sigonella.

It is envisioned that, under the AGS concept of operations, the five NATO-operated air vehicles could provide continuous coverage of events taking place in two separate theatres, in distinct geographical areas simultaneously. ■



GROUND SURVEILLANCE: the RQ-4B Global Hawk will offer situational awareness on the ground



PREPARATION: An RAF E-3D Sentry crew practises surveillance operations for London's 2012 Olympic Games

Transport aircraft may not be as glamorous as fast jets, but they represent a vital, core capability for NATO. However, it is a capability with which the Alliance has struggled over the years, particularly in Europe. Alan Dron highlights the efforts being made to fill the gap, with a combination of heavy lifters and tactical helicopters

Airborne transport

For most European NATO nations, the largest transport aircraft in their inventory has been the Lockheed Martin C-130, which lies towards the top end of the tactical range in the air transport spectrum. In the past, true strategic lift has generally depended on the US making capacity available.

Putting it as politely as possible, the 'mood music' out of Washington has, for some time, been to encourage European NATO nations to do more in this respect. In his farewell tour of Europe during autumn 2010, the outgoing US Secretary of Defense, Robert Gates, was considerably more blunt in his complaints about the Americans having to do so much of the heavy lifting in the Alliance.

Despite his remarks, so far there is little sign of change. The involvement in Libya's civil war in 2011, for example, could have been a template for European nations to act: a crisis on Europe's doorstep, in which the US declined to lead from the front, leaving close air support sorties largely to European NATO members.

AMERICAN AIR SUPPORT

However, despite European nations taking the frontline roles, it was the US that 'led from the back', once again supplying much of the back-up capability, such as air-to-air tankers and special mission aircraft. NATO has long been aware of its transport shortcomings and has put in place several measures to try to alleviate them. These are the Strategic Airlift Interim Solution (SALIS), the Strategic Airlift Capability (SAC) and the HIP Helicopter Task Force (HIP TF).

Under SALIS, 16 European NATO nations (and two partner countries) have

contracted with a subsidiary of Russia's Volga-Dnepr Airlines to provide heavy-lift transport, using Antonov An-124-100 freighters. These are capable of carrying up to 120 tonnes of cargo – particularly 'outsize' loads. SALIS provides two Antonov An-124s on full-time charter, two more on six days' notice, and another two on nine days' notice. The countries have committed to using the aircraft for a minimum of 2,000 flying hours per year. The intention is that Volga-Dnepr should provide this capability, until the Airbus A400M transport starts to arrive on squadron flight lines from 2013.

“The problem with commercial aircraft is that you’re beholden to the owner to agree with your political outlook, or at least not to get in the way of it”

DOUGLAS BARRIE Senior Research Fellow for Military Aerospace, International Institute for Strategic Studies

SAC is a multinational squadron of Boeing C-17 strategic transports, while HIP TF brings together nine European members, led by the Czech Republic, in developing a multinational transport helicopter programme. HIP TF is aimed at facilitating the deployment of groups of the Russian-built 'HIP' series of helicopters (Mil Mi-8, Mi-17 and Mi-171) to aid tactical lift capabilities. This aid can take the form of pre-deployment training, command

and control capabilities, base support, or financial aid. Under HIP TF, helicopters have been deployed to Afghanistan, where their rugged construction and good hot-and-high performance are welcome.

USING COMMERCIAL AIRCRAFT

However, while these moves are all useful in reducing the transport shortfall, they do not come without difficulties. "The problem with commercial aircraft is that you're beholden to whoever is the owner of the aircraft to agree with your political outlook, or at least not to get in the way of it," says Douglas Barrie, Senior Research Fellow for Military Aerospace at London's International Institute for Strategic Studies, of SALIS.

"You can't always assume that, and it leaves you potentially exposed if country X, Y or Z says, 'We don't actually agree with you here and you can't have the aircraft'. You're certainly less vulnerable if you have a pool of your own aircraft."

NATO does, of course, have an embryonic capacity in the heavy-lifter field, in the shape of the three Boeing C-17s operated by multinational crews from Pápa airbase in Hungary. "The only problem with the C-17s is that there aren't enough of them," says Barrie.

That situation is unlikely to improve. With the US Air Force saying it neither needs nor wants more of these aircraft and with further export orders slow to materialise, Boeing said in autumn 2011 that if no more contracts were signed by the second quarter of 2012 at the latest, then disruption to the flow of long-lead items for the aircraft would be inevitable.

Some Middle East and Far East nations may yet step forward with orders for the



HEAVY LIFT: a Royal Australian Air Force F/A-18 Hornet is loaded into a civilian AN-124 transporter



BURDEN SHARING: the SAC has supplied cargo to Afghanistan, Haiti and Pakistan



HOT AND HIGH: MIL Mi-8 helicopters are suited to the Afghan theatre



STRATEGIC AIRLIFT: the C-17 Globemaster IIIs of the Strategic Airlift Capability are based in Hungary

C-17, but it seems unlikely that there will be further examples of the highly capable, but very expensive, strategic airlifter heading the way of NATO air forces.

FINANCIAL CONSTRAINTS

Canada has just taken delivery of its fleet of four C-17s, and the UK, while keen to buy more and rapidly racking up flying hours on its fleet of seven, is unlikely to be able to afford expansion. "The British aspiration was always to get 10-12," notes Barrie. "But in the current economic environment, it's difficult to see people taking any more aircraft in that area. That applies throughout Europe, not just to the UK," he adds.

The appearance of the Airbus A400M will ease the situation, he believes. The European turboprop is closer in stature to the C-17 than to the Lockheed Martin C-130 that constitutes the transport fleets of many European air arms and, although it will be procured in smaller numbers than the aircraft it will replace, "it will help quite considerably", through both its greater range and load capacity.

"It brings more to the table than the types it is replacing. If you put it next to a C-160 Transall, which it will replace in German service, there's no comparison," says Barrie. The first production A400M, destined for France's Armée de l'Air, is due to be delivered around the end of 2012.

Evidently, more work is required to improve the air transport situation. However, with virtually all NATO member nations facing reduced defence budgets, the likelihood of any really significant improvement to the situation seems to be some years away yet.

COMBINED EFFORT

"The question is, can we muddle along and get by, or does it get to the point at which it really starts to impair our ability to operate?" says Barrie. He believes that further pooling of resources – perhaps with a handful of nations banding together to share the costs of more transport aircraft – is the most likely solution. ■



In a world where natural disasters have affected over 2 billion people in the last decade,* the Airbus A400M gives military and political leaders the chance to respond faster and more effectively.



The most advanced airlifter ever built, it can carry personnel, earth moving equipment, trucks and even helicopters further, faster and closer to where they're needed.

THE A400M. FOR HER, IT'S A SIMPLE MATTER OF SURVIVAL. It can airdrop aid or refuel jets. It can operate into unprepared landing strips, and fly safely through a devastated conflict zone. It can deliver survival. Find out more about what the Airbus A400M means for



an uncertain world at airbusmilitary.com



AIRBUS MILITARY

Martin Temperley reports on how NATO advanced during 2011 to develop a system to defend against ballistic missile attack, achieving several key milestones, and expanding the scope of the Active Layered Theatre Ballistic Missile Defence programme

Missile defence



WEAPON OF CHOICE: five NATO nations currently operate the land-based Patriot missile defence system

NATO describes Active Layered Theatre Ballistic Missile Defence (ALTBMD) as being “the sum of national assets”, combining interceptor and radar systems owned by all Alliance members.

It is the command and control network and architectures that are NATO developments. The most widely known defensive system is the land-based Patriot missile, operated by Germany, Greece, the Netherlands, Spain and the US. Further land-based systems – such as the forthcoming multi-nation Medium Extended Air Defense System (Patriot's successor) and SAMP/T Mamba, which is in service in France and Italy – may be harnessed to ALTBMD. Warships from NATO nations, carrying powerful missile systems and radars, are expected to contribute as they become available.

ALTBMD is layered because it is being designed to intercept and destroy attacking missiles at high altitudes, and around the trajectory back towards the point of launch. The ALTBMD programme is authorised to develop the specifications for an upper-layer/exoatmospheric capability, and the go-ahead for this is expected from the NATO Council soon.

TESTING MILESTONES

Two important tests in ALTBMD were completed in 2011, and an interim version of the system was handed over to NATO commanders.

This followed an announcement at the Lisbon Summit in November 2010 that NATO would extend the system's scope from protecting deployed troops against short- and medium-range ballistic threats at up to 3,000km range, to protecting territories and populations.



DEFENSIVE CAPABILITY: USS *Hopper* launches a RIM-161 Standard Missile (SM) 3 during a successful at-sea test firing to intercept a ballistic missile

Systems engineering work on ALTBMD began in 2007, to develop the command and control network. Much of that work has been handled in The Hague by the NATO Consultation, Command and Control Agency (NC3A) office, where a computer Integration Test Bed (ITB) has explored ways of coupling missiles and sensors, using other NATO facilities across Europe and North America in tests of hardware and software.

RISK REDUCTION

The ITB has worked as a risk-reduction tool in many applications. In 2010, the most important of the risk-reduction actions to date, Ensemble Test 1, brought together centres in France, Italy and the Netherlands, and five US sites. These ranged from France's Direction Générale de l'Armement-Maîtrise de l'Information in Bruz, to the Missile Defense Integration and Operations Center in Colorado Springs, US.

This has led to the 'first step' in ALTBMD – the ability to exchange the information required to operate a system across NATO.

It was enabled by the handover of the interim version, the Initial Capability Step 2 Real-Time (InCa 2 RT), on 27 January 2011 at the Combined Air Operations Centre in Uedem, Germany.

NATO's Deputy Secretary General, Ambassador Claudio Bisogniero, reported that this would give NATO commanders "for the first time, an initial, limited, but integrated ability to manage a defence battle to protect deployed forces against ballistic missile attacks".

It is described as a planning and tasking capability across the NATO Command

■ *Two important tests in Active Layered Theatre Ballistic Missile Defence (ALTBMD) were completed last year, and an interim version of the system was handed over to NATO commanders*

Structure. The development will be followed by a staged programme that will introduce progressively higher levels of command and control capabilities, and an extended reach between 2013 and 2018.

Two tests in 2011 reflected an advance from the laboratory to field trials in realistic environments with an increasing use of hardware.

STRIKE-TO-KILL ABILITY

Last August, a test based at the NATO headquarters in Uedem and Ramstein, Germany brought together a wide network of sensors to prove ALTBMD's strike-to-kill ability. It involved operational units from Germany, the Netherlands and the US: Patriot missile batteries from Germany and the Netherlands, and US Aegis radar systems.

In this case, the threat was a simulated attack and the units involved in the test responded to information received from space- and land-based sensors, launching simulated interception missions based on tactical information shared between all participating units, under the direction of the NATO commander.

In November, during German-led exercise Rapid Arrow, at the NATO Missile Firing Installation in Crete, a real interceptor missile was launched. The powerful radar of the US Aegis-class destroyer, USS *The Sullivans*, picked up the target vehicle representing an incoming missile and transferred data to direct a German Patriot missile battery.

The target was successfully destroyed in an engagement that lasted just over five minutes from launch of the target vehicle to interception.

MISSILE DEFENCE FOR THE MASSES

The Lisbon Summit announcement in November 2010 that ALTBMD would be extended to populations and territories will bring new challenges.

Territorial Missile Defence differs significantly from Theatre Missile Defence. Former Italian Air Force Brigadier General Alessandro Pera, head of the ALTBMD Programme Office, explains: "Forces are, for example, trained and are, to a certain extent, hardened and can be dispersed. The populations of territories and cities cannot."

Last September, the first contracts to analyse in detail the additional requirements to expand the system were signed by NATO and Scientific Application International Corporation (SAIC), the consortium that was responsible for the ITB at the NC3A office in The Hague. SAIC comprises companies from France, Germany, Italy, the Netherlands, the UK and the US. The study was expected to take one year.

In November, an operational hardware and software contract was signed by NATO and ThalesRaytheonSystems to upgrade the interim capability already in place, and also form the basis of a Territorial Missile Defence capability. The results of the upgrade are expected to be seen during 2012.

CRITICAL CONTRIBUTION

The core Alliance nations involved in the programme are Canada, France, Germany, Italy, the Netherlands, the UK and the US, although other nations are providing various forms of support.

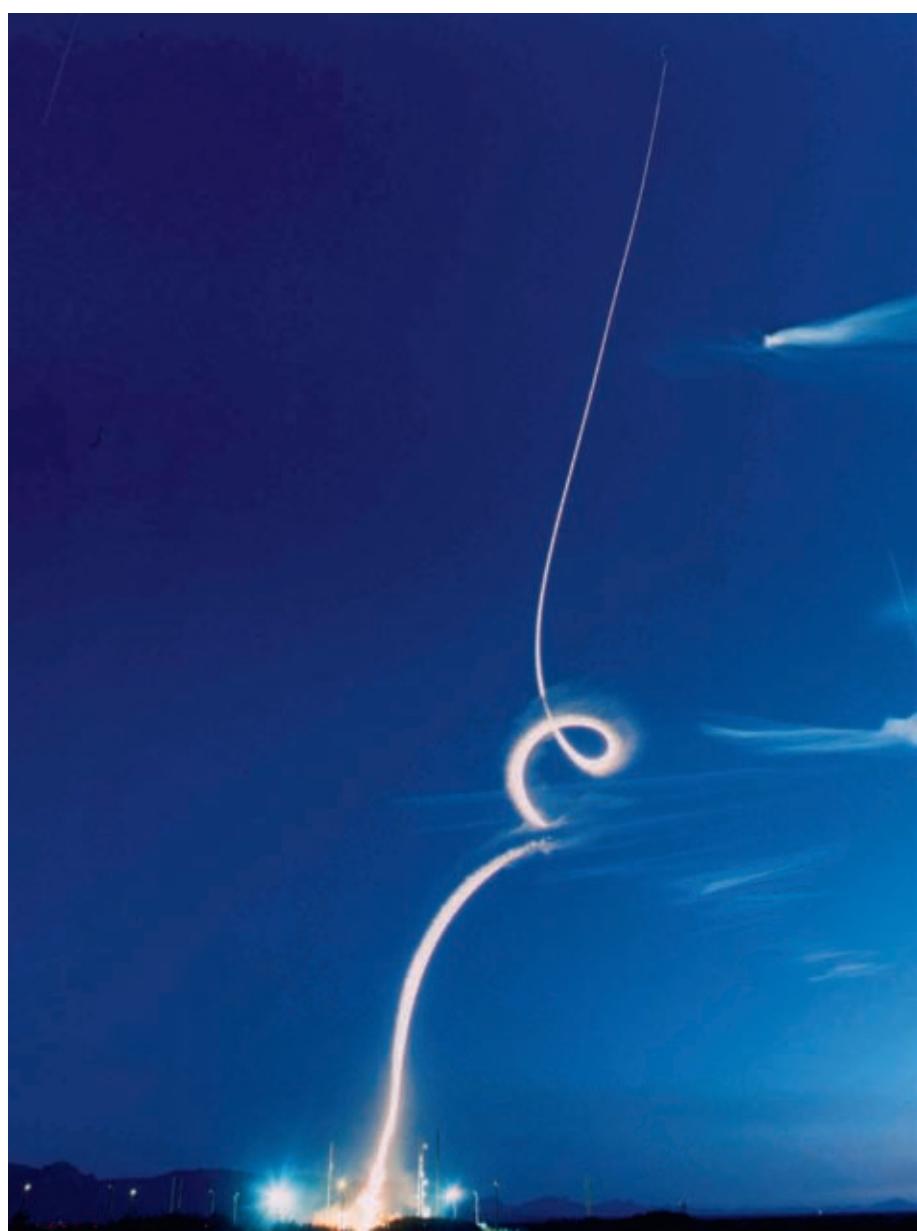
For example, Turkey's announcement in September 2011 that it will host an early-warning radar for ballistic missile defence was welcomed by NATO Secretary General Anders Fogh Rasmussen.

"This represents a critical contribution to the Alliance's overall defence against current and emerging ballistic missile threats," he said. "Turkey's decision will significantly contribute to NATO's capability to provide protection to its European territory, populations and forces, against the growing threat posed by the proliferation of ballistic missiles."

With missile proliferation on the rise, this is a most welcome announcement. ■



PROTECTION FROM ABOVE: an artist's impression of a Defense Support Program satellite in orbit



TAKING AIM: Terminal High Altitude Area Defense (THAAD) targets missiles with a 'strike-to-kill' approach



საქართველოს საფეხბურთო ნავიგაცია
GEORGIAN AIR NAVIGATION

OPEN hearts, safe SKY!

*Constantly at your service ensuring
your safety in Georgian Airspace
with the most advanced technologies
and equipment, keeping pace with
innovation and modern design.*



For their Libyan mission, NATO air forces could call on a combination of modern US and European precision guided munitions (PGMs) that were instrumental in conducting an accurate and effective air campaign. **Robert Hewson** details NATO's full range of PGMs that were used to deal with the overlapping levels of tactical and strategic targets it faced

Precision weapons



PAYOUT: RAF Typhoon jets delivered Enhanced Paveway II guided bombs during Operation Unified Protector

On 31 October 2011, NATO Secretary General Anders Fogh Rasmussen announced that the NATO mission in Libya, Operation Unified Protector, had formally come to an end. NATO ceased to be involved as of one minute to midnight Libyan time (21:59 GMT) that night.

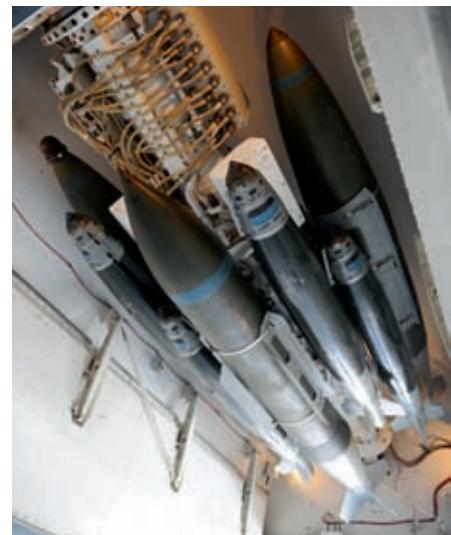
Air operations over Libya were initiated on the night of 19-20 March; five months later, over the course of a week in August, what was left of the Libyan government apparatus finally unravelled and opposition fighters entered Tripoli. The final phase of NATO operations that followed brought a surge in the pace of the air campaign that had been steadily maintained throughout previous months.

The air war over Libya was a high-tech campaign that saw several notable 'firsts' for NATO nations. These included:

- Combat firings of SCALP-EG cruise missiles by Dassault Rafales of the French Air Force and Navy Rafales (from land bases and carrier deck), and one by an Air Force Mirage 2000D;
- Combat firings of Storm Shadow cruise missiles by Italian Air Force Tornados;
- In its Storm Shadow strikes, the Royal Air Force conducted the first bombing missions to be launched directly from the UK since the end of the Second World War. The number of Storm Shadow missiles fired by the Tornado GR4 force also proved to be significant, with somewhere between 60 and 72 weapons launched;
- Combat firings of AGM-88 High-Speed Anti-Radiation Missiles (HARM) by US Navy EA-18G Growlers;
- Combat firings of 'legacy' Brimstone anti-armour missiles by Royal Air Force Tornado GR4s;



AIR ASSISTANCE: in NATO's Libya campaign, B-1B Lancers were sent from the US to strike overseas targets



PRIMED AND READY: Joint Direct Attack Munitions



EFFECTIVE TRACKING: Sniper pod targeting device

- Combat drops of Joint Direct Attack Munitions (JDAM) by Italian Air Force Tornados;
- Combat drops of JDAM and Paveway II guided weapons by AV-8B Harriers from the Italian Navy;
- Combat drops of EGBU-24 Enhanced Paveway III bombs by RAF and Italian Air Force Tornados and French Air Force Mirage 2000Ds;
- US Air Force B-1B bombers made 'round-trip' missions from the US to attack multiple targets with heavy precision-guided munition (PGM) loads – the first time that the B-1B force has ever flown combat sorties directly from its home bases;
- RAF Typhoon FGR.4s made their first-ever combat deployment, switching from their air-defence taskings to deliberate attacks and dynamic targeting using Enhanced Paveway II bombs;

- France and the UK both undertook their first-ever helicopter combat operations from a ship, using Tiger and Apache attack helicopters respectively. Heavy use was made of Hellfire (UK) and HOT (France) missiles;
- A US Navy P-3 Orion fired an AGM-65F Maverick at a hostile ship – the first time this had happened in the Orion's 49-year service career. US Air Force A-10s also conducted GAU-8/A 30mm cannon attacks on Libyan vessels;
- Italian Navy AW101 helicopters flew with Marte Mk 2/S anti-ship missiles for the first time in operations.

The conflict also saw important 'firsts' from the partner nations operating alongside NATO and within its command-and-control structure. The Qatar Emiri Air Force and the United Arab Emirates Air Force both made their first-ever combat deployments. Also, the Swedish Air Force

deployed JAS 39C Gripen for air-defence and combat ISTAR missions.

Operations have validated the decisions made by the majority of NATO air forces to field smaller PGMs that combine accuracy with a reduced collateral-damage risk. MBDA's dual-mode Brimstone stands out in this regard. The Libyan experience also underlined the need to maintain expensive 'high-end' capabilities, such as stand-off land-attack missiles. France and the UK fired MBDA SCALP and Storm Shadow cruise missiles in their intended role as 'first-night-of-the-war' weapons against strategic targets in defended airspace. Later in the campaign, Italy also used its Storm Shadows to attack strategic-type targets within Libya. In fact, according to published figures, Italy fired more missiles than France (35 compared with 15) over the course of the campaign.

The Libyan experience also underlined how modernisation programmes have

kept older platforms relevant through the integration of new weapons. The aircraft with the widest range of capabilities deployed by the Royal Air Force was the Tornado GR4, not the Eurofighter Typhoon. The French Navy flew its veteran Dassault Super Etendard Modernisés (SEM) from the carrier *Charles de Gaulle*, and they acquitted themselves well, despite their age. The upgraded SEMs can carry dual-mode GBU-49 Paveway II guided bombs and dropped multiple weapons in two-ship attacks.

Italy's upgraded Alenia Aermacchi AMX aircraft can carry a whole suite of guided weapons along with Litening III targeting pods (which were used, on occasion, to designate targets for Italian Tornados). The European F-16AM fleet again proved invaluable, with the latest mid-life update standard aircraft from Belgium, Denmark and Norway making a contribution (in terms of sorties generated and weapons delivered) that was out of proportion to their modest deployed numbers.

Libya is still at an uncertain point and it is too soon to give a final verdict on what the military campaign delivered. However, from the (narrow) point of view of air power, the conflict has delivered two distinct messages about NATO's air-combat capabilities. On the one hand, industry has provided effective relevant weapons systems that have proved their worth in combat. NATO was able to strike targets with great precision and



ON TARGET: a NATO precision strike on a satellite dish caused minimal damage to surrounding buildings

■ *The Libyan experience underlined the need to maintain expensive 'high-end' capabilities, such as stand-off land-attack missiles*

has a better-than-ever ability to match effects to targets, reducing the risk of collateral damage.

On the other hand, stocks of weapons and the ability to replenish those stocks shrank to thin margins. A lack of resources threatened the ability of some participants to sustain combat operations in what was

hardly a high-tempo campaign against a full-spectrum enemy. Europe's defence ministries now face some tough questions about their long-term procurement and industrial base policies. ■

Robert Hewson is the editor of IHS Jane's Air-Launched Weapons



THREAT REMOVED: a number of Libyan Air Force MiG-23 fighter aircraft were neutralised by a NATO precision strike on Misrata airport

Simon Michell examines the role and purpose of NATO's standing maritime groups, which operate in rotation to undertake a wide variety of tasks around the world

Maritime poise and reach



JOINT FORCE: having visited the port of Split in June 2011, the Standing NATO Mine Countermeasures Group 2 conducted a joint exercise with the Croatian Navy

For more than 40 years, NATO has maintained the world's only permanent multinational maritime capability at sea. In the early days, this was mainly a first line of defence against possible Soviet aggression, but since the end of the Cold War, the ships that deliver this constant vigilance have transformed themselves into flexible, high-readiness groups capable of undertaking a much more diverse range of hard and soft roles.

Consisting of four squadrons, Standing NATO Maritime Groups 1 and 2 (SNMGs 1/2) and Standing Maritime Mine Countermeasures Groups 1 and 2 (SNMCMGs 1/2) rotate in and out of six-month deployments, so that at any one time there is always an SNMG and

an SNMCMG at sea and ready for action. Traditionally, one squadron from each group has taken responsibility for the Atlantic Ocean/North Sea, while the other concentrated on the Mediterranean Sea, although over the recent past the focus has moved closer to the Mediterranean.

DIFFERENT TASKS, SAME FOCUS

The SNMGs and SNMCMGs have two essentially different tasks, with one overriding focus – support to the NATO Response Force. The SNMG 1 and 2 squadrons are made up of a combination of between four and six frigates and destroyers, together with an auxiliary supply ship. Between them they are capable of engaging maritime threats

on, above and below the sea. Generally speaking, it is the frigates that are able to carry out the anti-submarine specialist task, with destroyers more likely to bring the anti-aircraft capability, although not all nations adopt such a rigid distinction.

Both types are equipped for ship-on-ship engagements. Nowadays, however, frigates and destroyers are capable of taking on a much broader spectrum of duties – particularly when equipped with onboard helicopters and rigid-hull inflatable boats, known as RHIBs.

The mine-hunter groups (SNMCMGs) on the other hand, consist of very specialised vessels, often with composite (plastic) hulls, specifically developed for the technically challenging role of



PROVIDING PROTECTION AT SEA: NATO is becoming increasingly active in the campaign to counter the spread of piracy

The minehunter groups are able to take on additional tasks, such as general patrolling and port visits. Their main aim, however, is to ensure that the sea lanes in the Atlantic and around the continent of Europe are safe for all shipping

detecting and defeating underwater explosive weapons – commonly referred to as mines. They tend not to have helicopters or RHIBs because they are smaller vessels, and space on the upper deck is reserved for minehunting equipment. That said, they too are able to take on additional tasks, such as more general patrolling and port visits to friends and allies to help strengthen diplomatic

ties. Their main aim, however, is to ensure that the sea lanes in the Atlantic and around the continent of Europe are safe for all shipping to transit.

ACTION ENDEAVOUR AND OCEAN SHIELD

The past decade has seen the SNMGs and SNMCMGs concentrate on two major enduring maritime missions: Operations Active Endeavour (OAE) and Ocean Shield.

The former is a direct response to the 9/11 attacks that saw Article 5 of the NATO founding agreement, the Washington Treaty, invoked for the first time when the assault on the US was deemed an attack on the whole of NATO. OAE was established to demonstrate NATO's solidarity in the face of international terrorism and to contain the illegal use of the Mediterranean by terrorists, or those who might try to assist them by transporting personnel or weapons by sea.

Although centred on SNMGs and SNMCMGs 1 and 2, OAE is not exclusively manned by them, since other NATO members who do not usually contribute to the groups have joined in the effort, as have non-NATO members, particularly those in the Partnership for Peace group



SEALIFT CONSORTIUM

As well as having the ability to patrol and protect important maritime regions and strategic sea lanes, NATO has also developed a high-readiness maritime logistic support organisation that it can call upon to transport extremely large volumes of military equipment and personnel by sea. In much the same way as NATO has pooled resources to deliver strategic airlift in a more cost-effective manner under Strategic Airlift Interim Solution and Strategic Airlift Capability – see Airborne Transport, p130 – it has created the Sealift Consortium to achieve a similar effect at sea.

Led by Norway, the Sealift Consortium also includes Canada, Denmark, Germany, Hungary, Italy, Lithuania, the Netherlands, Portugal, Slovenia and the United Kingdom. Between them they finance the chartering of roll-on/roll-off ferries to suit the requirement. Some of the ferry capacity is being sourced from consortium members' assets – in particular from Denmark, Germany, Norway and the UK. However, the concept goes beyond the mere access to large cargo ships. Even before the consortium was established, the NATO MCCE (Movement Coordination Centre – Europe) has already been maximising the global cargo shipping fleet to make use of unused capacity. To do this it matches the need to move NATO assets by sea with the availability of cargo capacity that would otherwise have gone unused, helping to save considerable sums of money.



READY FOR ACTION: rotation means that there is always a squadron, such as SNMCMG1, at sea

(notably Russia and Ukraine) and the Mediterranean Dialogue nations (Morocco and Israel).

The wisdom of having the SNMG and SNMCMG permanent presence in the Mediterranean was highlighted in 2011 when three minehunters from SNMCMG 1, operating under OAE, were transferred to help out with NATO's Operation Unified Protector in Libya. The Dutch ship, *Hr MS Haarlem*, the Royal Navy Hunt-class mine countermeasures vessel *HMS Brocklesby*, and *BS Narcis* from the Belgian Navy were able not only to find and destroy mines, but also to contribute to the embargo operations by monitoring the shipping and, when necessary, contacting ships to ensure they were not in breach of the embargo.

Operation Ocean Shield is a more recent activity, established in the summer of 2009. Its aim is to combat the growth in piracy off the coast of Somalia and the Horn of Africa. NATO had previously helped with the anti-piracy effort under Operation Allied Protector and, in 2008, SNMG2 made history as the first NATO maritime force to operate east of Suez.

Both OAE and Ocean Shield are products of a changing world where the threats are becoming less predictable and are moving beyond the traditional state-on-state challenges with which the world had become familiar.

NATO is clearly demonstrating that it has the resolve and resources to keep pace with these changes and meet each challenge head on. ■

Kristin Durant, President of the Youth Atlantic Treaty Association (YATA), explains the variety of ways in which young people from NATO countries and beyond can work together to secure a peaceful future for all

A youth vision

A young girl sits at a computer screen. She is about eight or nine, wearing a pink dress, her hair in pigtails. NATO's logo appears on the screen followed by an orgy of violent images: bombings, battleships, human casualties. The girl's face assumes an expression of resolve; she bangs her hands on the table and takes to the street. One by one, people join her and the crowd reaches a seemingly insurmountable metal fence holding a NATO flag. After being helped over the fence, she encounters a soldier. As she pushes him against a wall and pats him down, the words "NATO Game Over" appear on the screen.

This video circulated the internet in late March, drawing attention to an initiative by the European Antimilitarist Network – the so-called International Direct Action Camp. Peace activists from around the world gathered for "training sessions", the culmination of which was a non-violent initiative at NATO headquarters in Brussels on 1 April. The result was the gathering of about 500 activists in an area coined "Free Speech Square".

As President of the Youth Atlantic Treaty Association (YATA), I consider myself an activist striving for a more peaceful world and a broader transatlantic agenda. I represent an international network of youth that works tirelessly to engage young people in international politics and security issues. We do this primarily through debate – in the belief that if two people have engaged in civil dialogue, hostility between them is less likely. We are staunch supporters of free speech, as well as the right to demonstrate – elements which are fundamental to the values set forth in the North Atlantic Treaty.



LEADING THE DEBATE: YATA President Kristin Durant

I, therefore, herald the engagement of the aforementioned activists, despite our differing views, but find myself disappointed by their counterproductive measures of civil disobedience. Some 483 activists were arrested for attempting – among other things – to breach the NATO facility's security perimeter. Such actions do not further the inclusion of civil society in decision-making processes. They do not enhance or nuance the knowledge of nine-year-old girls in pink dresses and pigtails. They do not bring change.

INTERNATIONAL DEBATE

In YATA, we attempt to embrace developments within public opinion and understanding, and use them to our advantage by focusing on the discussion of security policy in new and broader terms, and upon this foundation debating the role of international organisations such as NATO. Opinions vary greatly

within our network, which consists of 37 national chapters. As an example, YATA recognises the Russian Federation as a full member and part of the transatlantic community. We are constantly trying to maintain the balance between focusing on what we have in common, while facilitating a forum in which differences can be discussed.

Among my peers, I am sometimes met with an argument that is difficult to counter: war is bad and peace is good. It often leads to the conclusion that, as a political-military alliance, NATO breeds conflict and ought not to exist. I find a lack of nuance in this perspective – and it is nuance that civil-society organisations can bring to the debate by engaging populations in dialogue and problem-solving initiatives.

The desire for peace is fundamental to the majority of the world's human population. However, conflict has reared its ugly head regularly throughout our history, and it is only very recently that it has abated to a substantial degree. Interestingly enough, since 1945 there has been a steep decline in Europe and the Americas in interstate wars, deadly ethnic riots and military coups. Within the same time frame on a worldwide scale, interstate wars have also declined steeply.

Without ignoring the atrocities that take place in our world on a daily basis, I find that we ought to follow the advice of Canadian-American Harvard College professor and author Steven Pinker. We should ask not just 'Why is there war?', but also 'Why is there peace?'. The focus should not only be on what we are doing wrong, but also what we are doing right.

The development of intergovernmental institutions such as NATO and the European



TRANSATLANTIC VIEW: YATA representatives were invited to take part in a panel debate at the Norwegian Atlantic Committee's 2012 Leangkollen Security Conference

■ *In YATA, we attempt to embrace developments within public opinion and understanding, and use them to our advantage by focusing on the discussion of security policy in broader terms*

Union seems to have played a significant part in this decrease in conflict. To quote Pinker, "Anything that makes it easier to imagine trading places with someone else increases your moral consideration for that other person." Cooperation across national, religious or cultural borders is no easy feat, but when successful, the rewards can be great. Human security is one of the most basic needs of a population. When this need is met by an alliance of governments, on equal terms as those applied to their own populations, the resulting solidarity is difficult to breach.

Within these largely successful institutions there are serious challenges, many of which we open our newspapers to each morning. Some refer to the development of a "small-Europe mentality" and a loss of unified responsibility – a deficit in European solidarity caused largely by the eurozone crisis. Others single out the shifting American focus towards Asia, or the lack of apparent relevance of the Alliance in certain countries, for whom conflict is very distant from the shared consciousness of the population.

But NATO still has a role to play. Cyber-warfare is developing at an incredible pace, the proliferation of weapons of mass destruction has become no less relevant in recent months, and we are still seeing the spread of terrorism on a global scale. This is not a pleasant state of affairs for little girls with pigtails.

A year ago, European NATO countries took the primary diplomatic and military lead in Libya. The process was less than perfect, but has sown a seed of hope for more active European participation in the Alliance.

Despite the financially crippled state of the continent, Europe must continue advancing an active role in NATO, and this should be carried out through the realisation of the Smart Defence Initiative. It is an opportunity for renewed solidarity internally, leading to renewed relevance externally. ■

CHICAGO'S YOUNG ATLANTICIST SUMMIT

In May 2012, Chicago will be the centre of the political world as heads of state and government, top diplomats, military figures and journalists convene for the 2012 NATO summit. The Atlantic Council and the Chicago Council on Global Affairs will organise the primary public diplomacy event in Chicago: the Young Atlanticist Summit.

The summit will provide a dynamic and innovative opportunity for outstanding young professional leaders – the decision-makers of tomorrow – to engage with the

leaders of today. The international group of emerging professional leaders (aged between 25 and 35) will include elected officials, CEOs, government officials, military officers, journalists, academics and policy experts. They will represent NATO countries, as well as partner nations such as Australia and Afghanistan.

Previous Young Atlanticist Summits have seen sessions with heads of state and government, as well as the leadership of NATO and the United Nations. Past speakers

include US President Barack Obama, Turkish Prime Minister Recep Tayyip Erdogan, Afghan President Hamid Karzai, and NATO Secretaries General Lord Robertson, Jaap de Hoop Scheffer and Anders Fogh Rasmussen.

Events during the Young Atlanticist Summit will include: public keynote speeches by high-profile figures, including heads of state and ministers; an interactive model NATO simulation; a platform for young professionals to present their ideas directly to leaders;

opportunities for delegates to network with policy experts and practitioners; and a robust online platform that will broadcast the dialogue beyond the summit walls.

The Young Atlanticist Summit is a major draw for the world's media. Previous summits have been covered by the BBC, Agence France Presse, and Deutsche Welle, in addition to outlets in more than 20 nations.

For more information, visit [www.acus.org](http://acus.org) or email press@acus.org

Index of advertisers

ABBS (Advanced Blast & Ballistic Systems)	114
Aggreko.....	37
AgustaWestland	2
Airbus Military	133
Atlantic Council.....	28
ATOS	113
Cassidian	26
CBC.....	17
Denel Dynamics UAVS	126
DeviceLock.....	84
Esplodenti Sabino Srl	98
Finmeccanica.....	18
Fox-it.....	147
General Dynamics.....	10
Helisota Ltd.....	120
ISSEE.....	24
L-3 Communications	4
Mezcal Security.....	51
Mina Group.....	14
Nammo.....	76
Northrop Grumman.....	148
PANH Helicopters.....	67
Pentaq Manufacturing Corp.....	43
Revision Military.....	12
SAAB	20
Sakaeronavigatsia Ltd	137
Streit Group.....	8
Tam Tam Consulting	22
Telecom Italia.....	57
ThalesRaytheonSystems	125
U.S. Ordnance.....	97
WEW Westerwälder Eisenwerk GmbH.....	47



FoxDataDiode

SECURE ONE-WAY COMMUNICATION

**Replace your airgap with our
100% secure one way firewall**

GOVERNMENT

DEFENSE

PROCESS CONTROL

BUSINESS

Enhance security and improve usability at the same time with numerous applications:

- Provide Microsoft updates
- Update your antivirus definitions
- Mirror Oracle, MSSQL and other databases
- Securely share a classified printer
- Send files manually using FTP or CIFS
- Stream video to the classified network

www.datadiode.eu

Approved and certified by:

- Common Criteria EAL 7+
- NATO Secret (NS)
- NATO Green Scheme Evaluated
- NL-NCSA (Secret)
- BSI (Secret)
- NERC-CIP Compliance Vendor



**THE VALUE OF
SEEING THE
BIG PICTURE
BEFORE YOU MAKE
BIG DECISIONS.**

NATO is acquiring an airborne ground surveillance capability to provide a clear picture of ground activities essential to both deployed forces and decision-makers. NATO AGS will be vital to the full range of Alliance missions—from force protection and counter-piracy to border security and humanitarian relief. Relying on Global Hawk's proven capabilities, NATO is working with Northrop Grumman and its transatlantic industrial team to provide a truly transatlantic solution, and the earliest possible capability to NATO forces.

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN