THE VALUE OF THE BELGIAN DEFENCE







"The value of the Belgian Defence"

Introduction

What is the value of a national defence? What does it cost the state and the Belgian population, what are the benefits and what is the return on investment of a national defence for society?

Since the fall of the Berlin Wall and the disappearance of the direct link between defence and the protection of territorial integrity the value of defence in a globalised world has been questioned. Although we lived in peaceful times during the Cold War the existential threat during this era justified the means that were inherent to defence. Today, in the absence of any real territorial threat and in a society that perceives existing security threats as only indirect, we are less inclined to pay the contribution for the "ultimate defence insurance policy", especially in a time when the national budget is becoming ever tighter. In this respect, the difference between what Belgian citizens are willing to spend on individual insurance premiums against all kinds of risks and the expenses to cover the collective police and Defence "protection costs" (a kind of community liability insurance policy) is quite indicative.

In 2011, a Belgian citizen spent an average of €2,650 on insurance policies (life, accident, health, vehicle, fire, legal aid, ...), €384 on police (€156 on Federal Police and €228 on local police) and €254 on Defence.

This is made evident by the fact that Defence budgets have been consistently reduced in Belgium as in most European countries, whereas the new growth poles support their economic rise with additional investments in Defence. For instance, between 2001 and 2010 defence expenditure in the BRIC countries (Brazil, Russia, India and China) increased 29.6 %, 82.4 %, 54.3 % and 189 % respectively.ⁱⁱ

Belgium lacks a well-established tradition of strategic reflection and there has never been a broad societal debate on Defence. This can probably be explained by the fact that Belgian society is characterised by a deep-seated pacifism. Security, which partly results from more than 60 years of efficient transatlantic defence cooperation, is perceived in Belgium today as an inherent characteristic of our society.

In order to be able to compare the various expenses, the respective figures do not include the cost of pensions.

Newspaper "L'avenir" states on 22 June 2013: "only 12 % of our web surfers think it is "right" to send soldiers to Mali... - Of the 3,602 surfers who gave their opinion on the sending of 70 Belgian soldiers to Mali, 12 % agree. 54 % of the people polled think that it is their money that is sent abroad, 34 % think that 70 soldiers are not going to make a difference."

The next government will have to decide on the future profile of the Belgian Armed Forces. It will have to establish a sound personnel structure and take decisions on future important weapon systems (fighter planes, frigates and mine hunters) of our Belgian armed forces. These choices will determine the contribution of our Defence to national and global security for decades to come.

In order to advance the discussion on the role and the missions of Defence and in light of the ever increasing pressure on the Defence budget, it would be sensible to stress its importance and to emphasise its economic and non-economic 'added value'. It is therefore absolutely necessary to explain the value of Defence in the year 2014, while looking to the future.



The first chapter of this document compares the 'costs' and 'value' of Defence. The second chapter describes the current and future security environment. In the following chapter the intrinsic value of the Belgian Defence for the Belgian society is explained, i.e. its contribution to national security both abroad and at home. The fourth and last chapter deals with the derived value of the Belgian Defence, focusing on its direct economic return on investment.

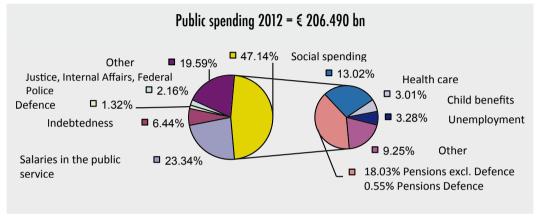




Chapter 1: Costs and value of the Belgian Defence

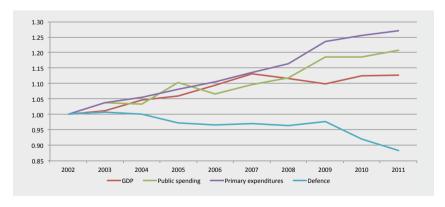
Costs of the Belgian Defence

At present, the annual Belgian Defence expenditure is almost €4 billion, i.e. about 1.9 % of total public spending.²



The budgetary effort for Defence in a national perspective.

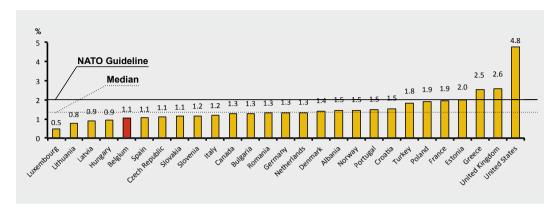
Judging by the economic and societal context described above it is not surprising that the share of the total Belgian public budget allocated to Defence is decreasing year after year.



Evolution of the Defence budget in constant € (2002) (excluding pensions).

²Public spending = primary expenditure + indebtedness.
Without pensions the annual Belgian Defence budget amounts to €2.7 billion, i.e. 1.32 % of public spending.

Even if the current operational output of the Belgian Defence is adequate, benchmarking with our neighbouring countries shows that our defence budget efforts are very moderate (see the graph below).



Percentage of the Gross Domestic Product allocated to Defence for all NATO countries in 2012.

Moreover, Belgian Defence is also at the back of the NATO pack as far as investments in major equipment are concerned. It is precisely these investments that are necessary to allow the government to commit Belgian armed forces for deployment in the next decades.

The *value* of Defence, intrinsic or derived, based on a financial assessment or not, is not mentioned enough in the public debate. This debate is today almost exclusively focused on the cost, without taking into consideration the profit that is gained by society from the financial investment in Defence.³

The concept of "intrinsic value" is used in the sense of "valuable of/in itself and not for what it can lead to (without further objective)", http://www.filosofischwoordenboek.nl/content/intrinsiekewaarde.html



In the Oxford Advanced Learner's Dictionary "value" is defined as "worth of something in terms of money or other goods for which it can be exchanged", as "worth of something compared with the price paid for it", and as "quality of being useful or worthwhile or important", reflecting the complexity of the concept.

Intrinsic value of the Belgian Defence

The intrinsic value of Defence is the answer to following question: why does our society need armed forces? This intrinsic value underlies the existence of the military forces.

The intrinsic value of the Belgian Defence is derived from its objective, i.e. contributing to safeguarding national interests. The main national interests are described in the document "Defence Mission Statement and Strategic Framework for Operational Work-up" vi:

- public security in the broad sense of the term, including public order, stability, peace and security, health;
- socioeconomic prosperity in a macroeconomic and stable monetary environment;
- standard of living;
- national sovereignty;
- protection of our values (such as democracy, human rights, ...);
- preservation of a voice in a multinational forum;
- national territorial integrity.

The intrinsic value of the Belgian Defence is difficult to determine for many reasons. In a globalised world with intertwined national interests the appraisal of Defence is not singularly connected to one specific interest of one specific country. However, it can be stated that national interests generally revolve around three key concepts: prosperity, well-being and security, the last one being an essential condition to preserve our prosperity and our well-being. Moreover, the concept 'security' is in itself very subjective. The perceived security does not necessarily correspond to the actual security.

Derived value of the Belgian Defence

The derived value is subordinate to the intrinsic value, since the derived value is a by-product of the organisation of Defence at the service of the security of the citizens and of the state. The derived value of a sizable organisation such as Defence is measured by the spin-offs for the benefit of the Belgian society: employment, contracts, research and development, etc. However, this derived value is gaining importance as nowadays Defence is viewed mostly from a financial perspective.

The value of the Belgian Defence consists of the intrinsic value and the derived value. Together they represent the return on investment for the Belgian society.



Defence - Daniel Orban



Chapter 2:Current and future security environment

Over the following pages we take a closer look at the current and future security environment. This chapter provides the framework that is necessary to understand the link between security, well-being, and prosperity, and the execution of military operations that often take place far away from our country.

A fundamentally changed global security environment

After the fall of the Berlin Wall the world changed from a relatively simple bipolar system into a complex hard-to-fathom multipolar world. The importance of non-state actors in security matters has grown considerably. In this respect terrorist groups, for instance, have played a major role in a number of recent conflicts. More and more non-state security providers appear in conflict areas, especially commercially-oriented private military companies acting, or not, on behalf of national authorities. Yet the state remains the main actor in international relations.

States are increasingly faced with cross-border threats such as terrorism, international crime, and security problems, on occasions, related to the internet, some forms of which are supported or even organised by state actors.vii

Besides that, the growing interdependence of the global economy, the access to and the rapid evolution of technology, as well as the impact of new communication media have resulted in an intensification of globalisation. Today it is of crucial importance to secure the global flows of goods and information upon which our open economy and society are based.^{viii}

These new dimensions denote the cross-border and holistic nature of security, in which aspects such as "economic security" and "cyber security"⁴ also have to be incorporated into a broader approach to security. External (international) security and internal (societal) security are overlapping more and more.

A strictly national and territorial approach to security, a view still held by our society, has become increasingly irrelevant. Now, more than ever before, we need international cooperation as well as a multidisciplinary and integrated approach to security issues.

⁴ Over the past three years the internet has accounted in Belgium for 25 % of growth in GDP (and 15 % in employment) coming in particular through growth export (Jacques Bughin et al, Internet matters: The transforming power of the Internet economy in Belgium. McKinsey Global Institute, November 2011, p. 5).

Europe, Belgium and security

Besides the security environment set out above, in a European and Belgian context a number of additional events and trends have to be taken into account.

Western Europe has not been faced with major inter-state conflicts since World War II. The peace dividend realised in these countries (including Belgium) since 1989 has resulted in a re-sizing and re-orienting of the armed forces, the most obvious consequence of which is the fact that compulsory military service has been abolished or suspended in most countries. As a country Belgium has known peace for more than sixty years now. In our globalised world the focus of military commitment that used to be territorial has shifted to expeditionary interventions in order to reduce spill-over effects of security issues anywhere else in the world as much as possible. By acting preventively Belgium ensures that state and security structures are solid enough. For historical reasons Belgium maintains special relations with Central Africa, where Defence has repeatedly offered its support. Together with its international partners Belgium has for example also intervened militarily in Europe and its periphery during the Balkan conflicts in the 1990s, in the Lebanon since 2006, in Libya in 2011, in Mali in 2013 as well as in Afghanistan after the events of 9/11 and in the Indian Ocean since 2009.

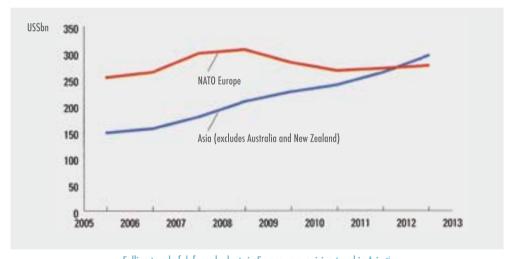


sind) cons

Mitrovica, Kosovo – a peace support operation in the backyard of Europe.

The military contribution of the United States, especially their indispensable enabling capacities⁵, has often been decisive for the success of these military interventions. But since 2012 the United States has gradually shifted its geopolitical focus to the Far East. As a result, Europe will be less able to count on American military capabilities to safeguard (former) common interests in Europe and its periphery. With growing ethnic diversity Belgium and other European countries run the risk of experiencing secondary effects of prolonged international crises on their territory. These effects concern security, prosperity and well-being, and include terrorist actions, refugee issues, polarisation of ethnic and religious communities, etc. As a consequence, just when Europe needs to act more independently when handling security issues at its borders, defence budgets in most EU member states are even further reduced due to the ongoing economic crisis and the rising costs of an ageing population.

Whereas defence budgets in other parts of the world, especially in Asia, show a rising trend, in Europe everything seems to indicate that the military will be further cut back, without having a sound defence policy to mitigate the consequences of this downsizing within a EU strategic vision framework.*



Falling trend of defence budgets in Europe versus rising trend in Asia. $^{\mathrm{xi}}$

The security environment has become more uncertain and more complex, and is evolving very rapidly. External and internal security are interacting more and more. The concept of security is going through a radical development, in which "extension" and "interdependence" are the key words. The extent to which Europe and especially Belgium will be able to guarantee security shall largely depend on the effectiveness of a multilateral approach.*ii

⁵ Enabling capabilities mainly involve AAR (Air to Air Refueling), strategic transport and intelligence.



Chapter 3:The intrinsic value of the Belgian Defence

Introduction

The Belgian Defence's intrinsic value is reflected in its contribution to national security in order to preserve our country's national interests. This contribution is demonstrated by a wide variety of activities which can be defined as strategic missions^{xiii}:

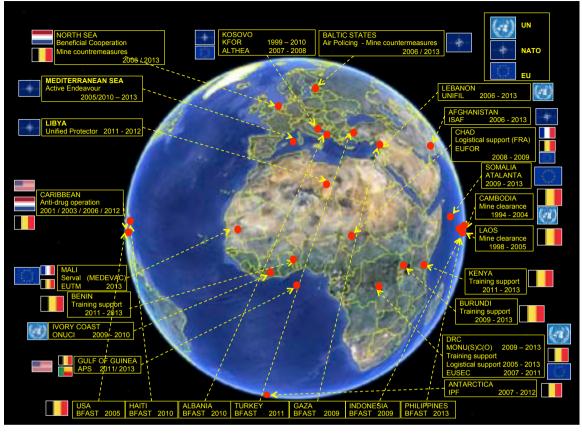
- participating in collective defence, including operations to prevent and deter armed attacks against one or more NATO or EU countries;
- participating in the collective protection of NATO's and/or the EU's vital and essential interests;
- protecting fellow citizens or Belgian interests abroad, including the liberation and evacuation of Belgian nationals;
- taking part in security operations, peace-keeping and peace-enforcement in order to prevent the violation of the international rule of law and security or to restore and maintain them;
- taking part in humanitarian operations in order to relieve human suffering;
- contributing to the security of Belgian society within national boundaries, based on specific military expertise or capabilities, or whenever civilian means are insufficient.

The value of some of these military activities is readily apparent and rather obvious. Just think of explosive ordnance disposal or maritime search and rescue. These operations, taking place on Belgian territory, have a high visibility and are easy to quantify.

This does not apply to all activities carried out by the Defence Forces in Belgium. Reasons for this include the fact that some actions are carried out in support of other public services while others, such as the fight against terrorism or cyber-attacks, are subject to some confidentiality.

But it is even harder to establish the value of missions carried out by Defence outside the national boundaries as they are part of a much larger multidisciplinary and multilateral approach to security issues. Whether or not a security situation is dealt with successfully through the use of military means, depends on both the military action and the act of involving other players and public means such as diplomacy, development cooperation and NGOs. Assignments performed by Defence within this context are of course less visible and harder to isolate, and cannot be quantified quite as easily. Besides, they have a rather indirect impact on the security of Belgian society.

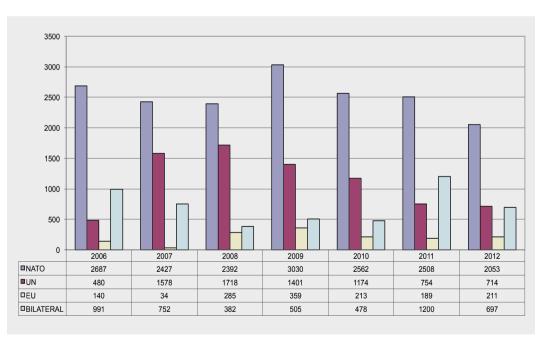
This explains why justifying the importance of these activities and their value for Belgian society is not always straightforward.



Main operations in which the Belgian Defence has participated - 2004-2013.

With a view to providing clear information a distinction is made in this document between the external and internal dimensions of the Belgian Defence's contribution to national security, while keeping in mind the ever-growing interaction between both dimensions.





Number of Belgian servicemen deployed per year and organization – period 2006-2012.

The Belgian Defence's commitment in a multilateral context.

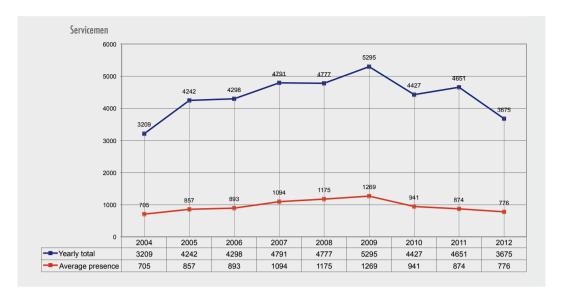
External dimension of national security

Expanding the concept of "preservation of territorial integrity"

The acquisition of means and the commitments made by Defence in connection with the preservation of territorial integrity are still often seen from a mainly national territorial point of view by the Belgian public opinion. Today, in a strongly evolved security environment, the interpretation of "preservation of territorial integrity" needs to be widened. Its policy of neutrality having failed twice, Belgium decided, after the Second World War, to join NATO and act as a defender of the European integration process. Our country turned to multilateralism through the NATO Treaty Article 5 and the mutual assistance clause of the EU Lisbon Treaty, in order to preserve its territorial integrity. This has made territorial integrity a collective responsibility, a collective "life insurance". As a result, Belgium is jointly responsible for preserving the territorial integrity of the entire NATO and EU territory. Clearly. the value offered by the Belgian Defence must be placed in the context of this expanded interpretation that requires a proportional participation by all member states. 'Assurina' this integrity remains the most important added value Defence has to offer to our nation. Its major contribution consists of deterring potential opponents through the Alliance. This mission however seems to have become the victim of its own success. An effective deterrence policy not being readily visible, such contribution often gets little attention and/or is misjudged as to its true value by Belgians. Besides, Belgium's perception of the security landscape is not shared by all its partners. The absence of a real territorial threat is viewed very differently by the countries of Eastern Europe.

A stable global security environment is essential for Belgium

Although the Belgian borders are not threatened, it is in our interest to maintain peace, stability and security in the broadest sense, worldwide and especially in our immediate European neighbourhood. Within the framework of Belgium's foreign policy, different resources such as economy, diplomacy, defence as well as development cooperation are used separately or in combination with each other, enabling our country to protect its national interests. The various contributions made by the Belgian Defence include humanitarian, peace-support, up to peace-enforcement operations. In the past ten years, there has been an annual average of 1,000 full-time posts in operations worldwide, most of the time in cooperation with other international partners (as shown in the following chart).



Each year, nearly 4,500 servicemen on average are deployed to guarantee a continuous defence effort equivalent to some 1,000 posts in operations.



Defence - Christian Decloedt

Defence is part of the interdepartmental fast intervention structure B-FAST (Belgian First Aid & Support Team) which was created to provide emergency relief in the wake of disasters and emergency situations abroad. In the aftermath of the typhoon Haiyan, and thanks to the means made available by Defence, B-FAST left for the Philippines on 11 November 2013. Belgium was the first European country to come to the rescue of the distressed population.

Belgian economy

Belgium has one of the most open economies in the world. Our country ranks fifth among the world's most globalized economies^{xiv} and occupies the 17th position in the world ranking with a GDP of \$483.7 billion in 2012. It is the 10th largest exporting and 12th largest importing country worldwide, with a total value of respectively \$476 and \$461 billion.^{xv} The port of Antwerp is the second port of Europe and we have the 19th largest merchant fleet (in terms of tonnage) in the world.^{xvi}

Compared to other countries, Belgium is indeed deeply embedded in the globalized world. Its prosperity and high standard of living largely depend on a safe 'open world'.

It is therefore in our country's best interest to make a military contribution to the free movement of goods worldwide, in proportion to the importance of its national maritime trade interests. Protecting our mainly maritime supply routes which are the vital arteries of our national economy, is therefore essential.

In 2012, the seaborne trade between Belgium and the Far East, the Indian subcontinent and the Persian Gulf amounted to \$54.9 billion.** In the same year, the Port of Antwerp realised a turnover of 25.5 million tonnes of goods with the Far East and Indian subcontinent regions.** Regarding energy resources, 27 % of crude oil and 14 % of natural gas imports in Belgium come from the Persian Gulf (Saudi Arabia, Iraq, Iran and Qatar)** through the Indian Ocean. The national economy depends to a large extent on safe maritime transport in this distant region. According to a 2013 World Bank report, the annual cost of Somali piracy in the Indian Ocean is estimated at \$18 billion.**

By taking part in EU Operation ATALANTA in the fight against piracy in the Indian Ocean and EUTM (European Union Training Mission) Somalia, Belgium contributes to global economic security through the protection of its economically vital shipping routes in this region.

In April 2009, the Pompei, a side stone dumping vessel belonging to the Belgian dredging company "Jan De Nul Group", was hijacked by Somali pirates. According to media reports, the ship and its crew were released after the company had paid €2.8 million ransom. xai



Jan De Nul Grou



The Belgian Navy frigate Louise-Marie has taken part three times in EU Operation Atalanta for the fight against piracy.

The Belgian society in a globalized world

Some foreign countries are devastated by civil wars, have weak state structures, do not or barely enjoy democracy, are economically less developed or are in a quite vulnerable situation as regards security and human rights. These regions are a fertile breeding ground for cross-border security issues such as terrorism, extremism, mass immigration and international crime (human trafficking, prostitution, drug and arms trafficking). Globally, failed and failing states represent an economic cost of \$270 billion of which the neighbouring countries bear 87 %.xxiii But also more distant countries like Belgium are faced with costs related to the economy, crime, migration, drugs and terrorism which are hard to quantify.

The budgets of both the, Federal Agency for the Reception of Asylum-Seekers⁶ and the Office of the Commissioner General for Refugees and Stateless Persons⁷ totalled €421 million^{xxiii} in 2012, which represents a 63 % increase since 2008.

⁶ Agence fédérale pour l'accueil des demandeurs d'asile (FEDASIL).

Commissariat général aux réfugiés et aux apatrides (CGRA).

As a result of the ongoing globalization, the situation in those countries, being sometimes – but not always – far from the European continent, can have implications for Belgian society, whether we like it or not. It is therefore in our country's interest to contribute to the quick restoration of security and prosperity in certain regions.



Belgian servicemen in conversation with local Afghan authorities in Kunduz.

In this context, the Belgian Defence has taken part in multilateral expeditionary operations in the Balkans, Libya, the Middle East, Afghanistan, Central Africa and the Sahel. In this way, it has helped enhance security in those countries and regions, allowing the rebuilding of local communities. This indirectly results in the local population being less inclined to flee the country, reducing the flow of refugees to Europe and Belgium.



Kosovar refugees in Belgium.

Jefence - Christian Theys



Albalodge: the construction of refugee camps in Albania in order to receive Kosovar refugees.

In the summer of 1999, as a result of the Kosovar conflict, the Belgian public social welfare centres⁸ were literally stormed by a massive influx of refugees. The situation in cities such as Ghent or Antwerp was described as a disaster. **xiiv** Refugees were granted the temporary status of "expatriates", making improved security in Kosovo a precondition for their return. The UNHCR, the Office of the United Nations High Commissioner for Refugees, waited for the KFOR, a UN peace-keeping force of 40,000 men, to be fully deployed before sending back the refugees. Moreover, a sufficiently large number of mines had to be marked and dismantled by the KFOR first. In March 2000 both conditions were met thanks to the deployment of also Belgian – ground troops. Every day, four planes from several European countries brought returning refugees back to Pristina.

⁸ Centres publics d'aide sociale (CPAS).

The Caribbean is a major transit area for cocaine destined for Europe.** Drug cartels are becoming increasingly more like paramilitary organizations, using weapons of war and sophisticated equipment such as small submarines. The Belgian Defence regularly sends a frigate or a helicopter on a Dutch Navy ship in support of the international fight against drug trafficking in this area which contributes to reducing the presence of drugs in our streets.



In the spring of 2013, the Dutch Navy ship Friesland, assisted by a Belgian Alouette III helicopter, intercepted more than 3 tonnes of drugs in the Caribbean Sea within the framework of the international anti-drug operation Martillo.

Belgium's position at the international level

Belgium is a founding member of the United Nations (UN), the North Atlantic Treaty Organisation (NATO) and the European Union (EU), the three major international security organizations. Our country is also a member of the OSCE (Organisation for Security and Cooperation in Europe). We often play a leading role in these organizations. Our country held the presidency of both the OSCE in 2006 and the EU Council during the second half of

The value of the Belgian Defence

2010. In 2007-2008, Belgium held a seat for the fifth time as a non-permanent member of the Security Council of the United Nations.



Belgian seat on the UN Security Council.

We are one of the 10 most frequent non-permanent members.xxvi This position and the willingness to play a leading role within these organizations affect Belgium's foreign policy and portray a positive image of our country. Playing a leadership role however entails some responsibilities. Belgium's international profile and standing compel it to fulfil its commitment and strengthen its position as a credible and responsible member of these international organisations. The credibility of this membership is connected with the burden and risks taken on by Belgian Defence when contributing to international security in a multilateral context, commonly known as "burden & risk sharing". Deploying its military means, allows Belgium to demonstrate its intention to act and to use its influence on the international scene which, in conjunction with other levers of power in the fields of economy, diplomacy and cooperation development, will contribute to the protection of its national interests.

By making an equitable defence contribution, member countries of an alliance avoid being seen as free riders or profiteers. A negative image can indeed lead to a decline in political influence and in economic opportunities at international level. Unlike large countries whose weight is in proportion to their vast territory, the size of their population and/or the presence of raw materials and energy resources, small countries whose economy depends on other countries definitely need to develop a solid reputation on the international scene.

In any case, given the position of a country like Belgium, being one of the top economies in the world entails obligations towards the international community. Through Defence commitments, Belgium can meet its responsibilities by contributing, in a reasonable and proportional way, to increased stability in the global security environment.

Security of Belgians abroad

Ensuring the security of Belgian citizens abroad is one of our most tangible interests. Whenever the host state is unable to guarantee the security of Belgian citizens and embassy staff abroad, it is the responsibility of the Belgian State to protect them by deploying military means and, if necessary, to plan a Non-combatant Evacuation Operation (NEO).

The Democratic Republic of the Congo (DRC) and Burundi are the countries facing the highest risk of instability, after Afghanistan (see table).xxvii Belgium retains close ties with these countries of the Great Lakes region, as well as with Rwanda. Therefore our country wishes to contribute to the reform of the security sector in this particular region. If necessary, Belgium must be able not only to evacuate respectively 4,500, 580 and 650 Belgian citizens in the DRC, Burundi and Rwanda, but also to lend its support to the evacuation of other EU citizens. The security context has changed significantly since the last NEO in 1994. Armed groups have gained considerable combat experience and have more sophisticated arms. Kinshasa has gradually turned into a metropolis of nearly 10 million inhabitants, including 3,000 Belgians. Although nowadays, as a result of the need for specific capabilities (such as intelligence, transport and Command and Control), most NEOs are carried out in a multilateral context, our partners continue to count on the Belgian military expertise and capabilities to take swift, effective action in Central Africa.

Position	Country	Risk factor
1	Afghanistan	36.4
2	Democratic Republic of the Congo	29.8
3	Burundi	24.5
4	Guinea-Bissau	23.9
5	Djibouti	23.5
6	Ethiopia	21.2
7	Pakistan	20.8
8	Nigeria	20.7
9	Mali	19.3
10	Sierra Leone	17.8
11	Somalia	17.6
12	Central African Republic	15.5
13	Iraq	15.4
14	Mozambique	15.2
15	Chad	13.4
16	Zambia	12.3
17	Benin	12.2
18	Bhutan	12.1
19	Zimbabwe	12
20	Bangladesh	12
21	Haiti	11.6
22	Кепуа	11.5
23	Gabon	11.1
24	Cameroon	11.1
25	Malawi	11.1

Highest risk of instability, as estimated for the period 2010 - 2012.

Red Bean (1978), Blue Beam (1991) and Silver Back (1994), NEOs carried out in former Taire and Rwanda



fence - Fernand Domange

Internal dimension of national security

Ensuring a population's security (in the broadest sense) on the national territory is an obligation and a responsibility of state authorities.

Unlike the preservation of the country's territorial integrity, discussed earlier in this chapter, ensuring security within the national borders is mainly entrusted to authorities other than Defence. Having unique expertise and making targeted investments, Defence nevertheless takes on several clearly-defined and important assignments in close coordination with these other actors. Defence will also carry out tasks when civilian means are insufficient. As internal and external security become increasingly intertwined, a growing coordination is needed at both national and international level (e.g. with regard to the cyber domain) in order to take effective action.

This document is not intended to be an exhaustive list of all Defence activities performed by the land, air, naval and medical components on Belgian territory. Only the most characteristic activities are mentioned with their quantitative and/or qualitative value expressed in figures.

Air space protection



Two F-16s are on stand-by day and night within the framework of the Quick Reaction Alert (QRA). The economic cost related to the closure of Belgian air space during one day as a result of a Renegade incident is estimated at €24 million.xxxiii

To prevent civilian planes from being used as terrorist weapons in Belgian air space, two armed F-16 fighter planes are on 24-hour stand-by (Renegade). The planes are also used to secure NATO's air space against military planes (QRA – Quick Reaction Alert). The fact that Belgium has never been hit by a terrorist air attack, does not mean Operation Renegade is any less valuable. The absence of a rapid response capability, guaranteeing the security of the Belgian air space, can bring about its precautionary closure. The direct economic cost of such closure would amount to €24 million and that is without mentioning the indirect economic costs, especially with regard to the impact on a state's reputation. Belgium's inability to offer such "insurance policy" could actually lead to a loss of attractiveness for foreign investors. Besides, Belgium being the host country of some major international institutions, particular attention should be paid to securing their headquarters.

Explosive Ordnance Disposal on land

Not a day passes without the Explosive Ordnance Disposal Service⁹ being called with regard to munitions of war or explosives. Since 1973, the service has been receiving about 3,000 requests for Explosive Ordnance Disposal (EOD) a year, which amounts to an almost constant annual average of 200 to 300 tonnes of explosives. Part of these explosives contain toxic materials and are dismantled in Poelkapelle. Over the last ten years, the service has also received an annual average of 139 intervention requests with regard to Improvised Explosive Devices (IED) (including bomb scares). This shows that SEDEE's interventions do not only concern explosive ordnance from the previous world wars but also actions in the fight against crime and terrorism.



IED intervention by the SEDEE in support of the Federal Police.

afanca - DO

	Applications for explosive ordnance disposal	Applications for improvised explosive devices	Tonnage of ammunitions collected
2003	3539	184	245
2004	3125	211	342
2005	2960	203	267
2006	3289	151	724
2007	3004	117	353
2008	2977	101	205
2009	3027	104	219
2010	2797	103	189
2011	3326	107	184
2012	2897	104	146

⁹ Service d'Enlèvement et de Destruction d'Engins Explosifs (SEDEE) or Dienst voor Opruiming en Vernietiging van Ontploffingstuigen (DOVO).

Security in Belgian Waters

Maritime security in the territorial sea and exclusive economic zone is the responsibility of the Belgian State. As regards this 3,600 km² large area, being bigger than the Province of West-Flanders and sometimes referred to as Belgium's eleventh province, the security dimension covers many different, partly overlapping, fields like maritime security, maintenance of law and order at sea, services to shipping and search and rescue coordination. Being in charge of maritime security, Defence lends its support to 16 other federal, regional and provincial authorities in other areas of competence. As a result of the division of competences with regard to maritime security and the permeability of sea borders, Defence's contribution to security falls, naturally enough, within an interdepartmental and international framework.*

In 2012, for example, the interventions and contributions by Defence included:

- monitoring and reporting of more than 2,000 specific ships (Contacts of Interest) for the Coast Guard partners (among others the Federal Police and Customs), security services and NATO;
- detection and reporting of suspicious behaviour at sea, including 20 intrusions in wind farms;
- 12 detections and investigations with regard to marine oil pollution;
- detection and identification of violations of the navigation rules, collisions and sunken ships;
- tracking of fishing vessels for the Coast Guard partners;
- search and rescue at sea and explosive ordnance disposal (see below).

The resources deployed by Defence to perform these tasks include the Maritime Information Centre (MIC)¹⁰, Ready Duty Ships (RDS), mine countermeasures vessels, SAR (Search and Rescue) helicopters as well as Unmanned Aerial Vehicles (UAV).



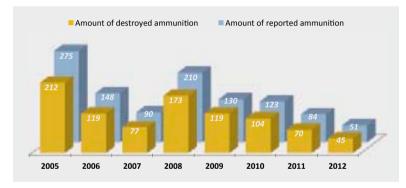
Since 1977, the 40th Squadron Koksijde has performed more than 3,000 scrambles, resulting in the saving of 1,668 human lives.

¹⁰ Carrefour d'Information Maritime (CIM) or Maritiem Informatie Knooppunt (MIK).

Should the North Sea Disaster Plan¹¹ (the future general emergency and intervention plan) in the North Sea be activated, Defence also provides means of Command and Control for conducting state actions at sea (on scene commander and coordinator in charge of anti-pollution resources at sea).

The Seaking helicopters, to be replaced shortly by NH-90s, support both maritime and – in case of aircraft accidents – land rescue operations for the benefit of Belgian society. It is important to remember that maritime security is the concern of various departments. The Maritime Rescue Coordination Centre (MRCC) in Ostend, which comes under the authority of the Flemish Region, uses military dual-use means. Although the primary role of an NH-90 (NFH – NATO Frigate Helicopter) is to carry out maritime operations from a frigate, four NH-90 helicopters can also be deployed for rescue operations with the view of optimizing Defence capability.

Defence's operations at sea also include the removal of ammunition that is regularly found aboard fishing boats and (suction) dredgers. After the death of three people due to the explosion of an air bomb caught by a Dutch fishing boat in 2005, Operation Beneficial Cooperation was launched. This Belgian-Dutch operation is charged with removing and destroying explosive ordnance from the previous world wars lying along the Belgian and Dutch coasts and the exclusive economic zone of Great Britain (see chart below). Standing NATO Mine Counter Measures Group one (SNMCMG1) regularly takes part in this on-going operation.



Operation Beneficial Cooperation: amount of reported and destroyed war ammunition on the continental shelf of the Belgian and Dutch coasts.

Keeping our ports open and the flow of maritime trade going are essential for our economy. Given the direct added value of €16.5 billion produced by the ports of Antwerp, Ghent, Liège, Zeebrugge, Brussels and Ostend in 2011, closing these ports would cost the Belgian economy some €45 million a day. The ports create 115,600 full-time direct jobs.** Sea mines, whether or not laid by terrorists in waterways leading to these ports, would therefore have a huge impact on the Belgian (and Western European) economy. Developing our own mine countermeasures capability and signing cooperation agreements with privileged partners make it possible to minimize such risk.

[&]quot; « Plan Général d'Urgence et d'Intervention », PGUI or « Algemeen Nood- en Interventieplan » ANIP.

Safeguarding the security in our own waters also has a positive spin-off for our contribution to external security. During its participations in the EU anti-piracy operation (Operation ATALANTA) in 2011, 2012 and 2013, the frigate Louise-Marie could always turn to the Maritime Information Centre (CIM) for the rapid transmission of information on Belgian merchant ships sailing nearby.

Support to the "Integrated Police" operations

Defence also provides non-structural, targeted and temporary support to operations of the "Integrated Police". It provides equipment, infrastructure and specialized teams, such as dog handlers and divers.

This includes:

- support to securing EU and NATO meetings (mine clearance, medical capacities);
- search for missing persons or weapons, within the framework of a criminal investigation;
- surveillance of parliamentary institutions and close protection of authorities.

The cost incurred by the surveillance of parliamentary institutions amounted to €4.5 million in 2012.



Jefence - Deplanque Nicolas

Support to the Nation in the field of intelligence

Defence contributes to the security of Belgian society in cooperation with various departments of the Belgian State, international organizations and allied intelligence departments. This contribution being confidential, it is also less visible. In Belgium, these departments are the Ministries of Foreign Affairs, Home Affairs and Justice, the State Security, the Threat Assessment Coordination Body¹², the Federal Police and the Financial Intelligence Processing Unit¹³. Practically speaking, the Defence Intelligence Service¹⁴ makes a crucial contribution

^{12 &}quot;Orgaan voor Coördinatie en Analyse van de Dreiging" (OCAD) or "Organe pour la Coordination et Analyse de la Menace" (OCAM).

^{13 &}quot;Cel voor Financiële Informatieverwerking" (CFIV) or "Cellule de Traitement d'Informations financières" (CTIF).

^{14 &}quot;Algemene Dienst Inlichtingen en Veiligheid" (ADIV) or "Service Général de Renseignements et de Sécurité" (SGRS).

by collecting and analyzing data related to the fight against terrorism, kidnapping and cyber threats. This contribution also encompasses the protection of Belgium's scientific and economic resources.

Medical support to the Nation

Medical support given by the Defence medical component is focused on the preparation of deployable and deployed personnel, as well as towards healthcare support to troops in operation. But the medical component is also directly involved in a substantial way in healthcare to the Belgian population. Uncommitted means are used for specialized care to the population in daily life as well as in a crisis situation, or after a natural disaster.

This includes the availability of:

- the burn center of the military hospital in Neder-over-Heembeek as the only Belgian day clinic for burnt patients, with 26 beds and a specialized consultation (more than 10,000 contacts on a yearly basis). In the private sector, this type of care would cost €20.7 million;¹⁵
- the center of hyperbaric medicine and oxygen therapy, complementing the private medical sector, for carbon monoxide poisoning, chronic wounds, serious infectious diseases and, last but not least, diving accidents. The military hospital is the only one in the Brussels-Capital region with a hyperbaric multi-place chamber. Between 600 and 1,000 patients can be admitted every year;



The military hospital: 36 % of the overall Belgian capacity with 72 beds for burned patients.

¹⁵ Every year, Defence receives about €13.8 million in services for third parties from the Belgian social security and insurance companies for providing this highly specialized service.

- an emergency and reanimation medical service ¹⁶ and an "112" ambulance service of the military hospital, each dealing with about 2,000 interventions among the civil population in the Brussels-Capital region and the Province of Flemish Brabant;
- the military hospital as a whole in the case of disasters such as the gas explosion in Ghislenghien, the train accident in Halle-Buizingen and the bus accident in Sierre (Switzerland);
- a production unit for mass production of medication in case of pandemics or nuclear accidents. This includes OSELTAMIVIR, an antiviral medication prescribed in the context of the Belgian emergency plan during influenza epidemics and the potassium iodide pills in case of a nuclear disaster, for the Federal Public Service Health, Food Chain Safety and Environment.



The manufacturing of antiviral products by the medication production department of the 5th Medical Intervention Element (5 EMI) in Nivelles.

The value of the specialized military medical capacities also relies on good integration within the Belgian medical landscape. The pooling and sharing of capacities and the development of partnerships conform to a functional and economic model that avoids redundancies and competition.

^{16 &}quot;Service Médical d'Urgence et de Réanimation" (SMUR) or "Mobiele Urgentie Groep" (MUG).

National crisis and disaster management

Defence provides personnel, equipment, infrastructure and expertise on a regular basis to other Public Federal Services, including Federal Police, Civil Protection and Customs, to fulfil tasks in the field of crisis and disaster management on Belgian territory. Most of these tasks at the service of the population are security-related. Defence only gets involved when all other means prove to be insufficient due to the magnitude of the event or the specific nature of the required expertise. Civil emergency services were supported by thousands of soldiers during the 2010 floods on the Belgian territory.



May 2013 - Wetteren-Schellebelle - Chemicals are spreading out after the derailment of a freight train – Defence provides CBRN (chemical, biological, radiological and nuclear) advisory team and a decontamination station in support of the military command of the Province of East-Flanders.



Chapter 4:The derived value of the Belgian Defence

Aside from its intrinsic value, an organization with the size and the characteristics of Defence has an undeniable derived value to Belgian society. This derived value accounts for an economic return. It also plays a role in areas such as scientific research and nature conservation.

Economic return of Belgian Defence

Employment

Defence offers 30,000 direct jobs for military personnel and 2,000 for civilians. There is a very wide range of jobs offered, from very skilled to unskilled labour.

The Air Base of Florennes is the biggest employer in the Province of Namur with 1,291 workers at the end of 2010, fulfilling no less than 70 different professions, ranging from administrative to highly technological functions.**

With 5,230 workers, Defence is the biggest employer in the Province of Limburg, before the Virga Jesse hospital.xxxii

Belgium has managed to embed the presence of international institutions headquarters, such as NATO or the EU, on its territory throughout the years. The support of Belgian Defence contributes to this anchorage. Both organizations based important international military headquarters in our country. This applies to the NATO General Headquarters in Evere, the NATO Strategic Command (SHAPE) at Casteau, the EU Military Staff and the European Defence Agency (EDA) in Brussels. In addition to the economic spin-offs, such as the consumption of goods and services, these headquarters also provide jobs for the Belgian population.

1,598 servicemen returned to the civilian labour market between 2006 and 2012. In addition to a qualitative and continuous training in the military institutions, they accumulated professional experience within Defence, often under difficult circumstances on operations. 409 servicemen were transferred to other Public Federal Services during that same period. Feedback from their employers in the private and public sector shows how much the qualifications, skills and abilities acquired within the Belgian Defence are appreciated. These former servicemen are loyal, disciplined, organized and flexible. They possess planning and social abilities, a language and technical background, etc.**

. . . .

Industry

Belgian companies generate a significant percentage of their business turnover from Defence, through various (sub)systems maintenance contracts and spare parts supply. The Belgian Defence signed contracts with national firms for more than €950 million between 2010 and 2012.

Today, the impact of the acquisition of the F-16 in 1975 remains significant for Belgian companies in all three regions. Participating Belgian companies have forged lasting business relationships with the other European partners and several American firms. Therefore, our companies were able to open up new markets and participate in the modernization and the delivery of spare parts for foreign F-16s. The F-16 contract enabled our people to build up technical and organizational skills. This facilitated the positioning and the selection of Belgian companies for the development, manufacturing and the after-sales services for spare-parts and equipment of Airbus airplanes and Ariane rockets.



SABCA ensures the maintenance of the Belgian F-16 and United States Air Force (USAF) planes stationed in Europe (USAFE).

The A400M contract between the Belgian Defence and the "Airbus Military Sociedad Limitada (AMSL)" also enabled an equitable share of costs and labour, offering Belgium a return on investment for the purchase of seven A400M transport aircraft. The 'work-share' of Belgian companies exceeds €500 million, mainly under the association between Flabel and Pratt & Whitney Belgium Engine Center (PWBEC).



A400M - work-share for Belgian companies: landing gear doors, leading edges, flap supports and flap skins.

Defence signed an open contract with a Belgian maritime firm for the availability of nearly 120 experienced civilian technicians and other skilled personnel to the logistic units of the Navy. They are responsible for specific maintenance tasks of the vessels, on board and ashore. Within the framework of the Belgian-Dutch cooperation¹⁷ between the Navies, technicians of this firm maintain 6 Dutch mine hunters in addition to the 5 Belgian mine hunters and the patrol ships in Zeebrugge.

From an industry point of view, the derived value of Defence is tangible at various levels. The value can directly benefit the community through employment and manufacturing. Equally important is the indirect value generated by the acquisition of new cutting-edge technology expertise, research, access to other markets and positioning of Belgian companies.

¹⁷ BElgisch-NEderlandse SAMenwerking – BENESAM.

Scientific research

The Royal Military Academy (Brussels) engages in scientific research in niche areas that are essential for the Belgian Defence. However, specific applications can be used in non-military fields for the benefit of Belgian society.

The laboratory of the department of weapon systems and ballistics at the Royal Military Academy is certified under ISO17025 for strength tests on glass structures with various items (bullets, gravel, birds). In this context, the laboratory is performing some tests for the ballistic analysis of the Federal Police, as well as for "third parties", such as the Belgian glass manufacturer AGC Glass Europe (former Glaverbel).

Ballistic limit: the projectile remained stuck in the target (laminated glass in a workbench). A few additional meters per second and the piercing would be complete... a few meters less per second and the structure would have resisted.



Jefence - Alain Vanhove

Defence has been supporting Belgian scientific research in national and international waters for almost 30 years with the oceanographic research vessel Belgica. Over this period, 500 researchers have embarked on the vessel. Together they totalize 67,000 hours spread over 852 scientific campaigns, mostly in support of the Public Institute for Agricultural and Fishery research¹⁸, the Management Unit of North Sea and Scheldt Mathematical Models (MUMM)^{xxxiv} and Belgian universities. The five main research fields pertain to geology, environmental monitoring, fishing, ecosystems and education.

Nature conservation

Military training areas are often highly valued from an environmental perspective. They owe their great biodiversity to the absence of inhabited areas and areas of intense cultivation. Defence signed a cooperation agreement with the Wildlife and Forestry Department¹⁹ in Wallonia, and with the Nature and Forest Agency²⁰ in Flanders. These agreements aim at a better management of nature and forests in over 17,600 hectares of military domains.



With its 1,571 hectares, the Groot Schietveld of Brasschaat forms the biggest nature reserve in the Province of Antwerp after the Kalmthoutse Heide. It is mainly known for its important population of vipers, as it is one of the largest ones in North-Western Europe. It also hosts more than 100 species of breeding birds, among which the honey buzzard and the nightjar.xxxx

^{18 &}quot;Instituut voor Landbouw en visserij Onderzoek" (ILVO).

¹⁹ "Département de la Nature et des Forêts" (DNF).

²⁰ "Agentschap voor Natuur en Bos" (ANB).





Our national interests can be captured in three words: security, well-being and prosperity. These inseparable values are the cornerstone of Western and Belgian society, with security as a prerequisite for our well-being and prosperity. In a dynamic and rapidly evolving security environment, the State role in guaranteeing national security has changed in a similar way. An interdepartmental and multilateral approach has become an absolute prerequisite to increase efficiency and effectiveness. The contribution made by Defence can only be assessed in this manner. However, a multilateral intervention does not always fully guarantee the preservation of national interests. This is why a country such as Belgium also needs its own military capacities. The effort made by Defence has to be tailored according to the need to maintain the government's flexibility in dealing with security problems on the one hand, and the need to adopt a proactive and constructive attitude while supporting the multilateral approach on the other.

Defence's intrinsic value as a security provider to society goes far beyond a simple accounting exercise expressed in euros. This document has explained how, together with other authorities, Defence contributes to the security of Belgian society, both at home and abroad.

The intrinsic value of Defence consists in contributing to security, and thus to the wellbeing and prosperity of Belgian society in a globalized world.

While remaining subordinated to the intrinsic value, Defence also has an important derived value for the country. This derived value mainly manifests itself as direct Defence economic spin-offs for the benefit of Belgian society.

In times of financial austerity, Belgian Defence has to show the population what it can offer. It should not be perceived as a Department that lends itself to easy but short sighted savings as this would affect our future prosperity and well-being. We must carefully consider the price our society is willing to pay for its security in order to guarantee national interests that are increasingly anchored in a European context.

This document wants to clarify the value of our Defence in a complex globalized world and demonstrate its contribution to a prosperous Belgian society, to the maintenance of national sovereignty and our international position.

- Chiffres clés et principaux résultats du marché des assurances belge en 2011, Assurinfo n° 32, 25 October 2012 and Dexia study Lokale financiën: OCMW's & Politiezones, December 2011, p. 58.
- ii. Bérangère Rouppert, La hausse des dépenses militaires des BRICS : Menace pour la sécurité ou aubaine pour l'industrie européenne de l'armement ?, Group for Research and Information on Peace and Security (GRIP) 22 June 2012.
- iii. Sven Biscop. chapter "Belgium" in Strategic Cultures in Europe Security and Defence Policies Across the Continent, Schriftenreihe des Zentrums für Militärgeschichte und Sozialwissenschaften der Bundeswehr, Heiko Biehl. Bastian Gieaerich. Alexandra Jonas. Volume 13. 2013.
- iv. See also the publication "De Waarde van Defensie" (The Hague Centre for Strategic Studies n° 16/09/12) that tries to determine the value of the Dutch Defence and to back it up with figures.
- v. Financial and economic data relating to NATO Defence, NATO press release PR/CP(2012)047-REV1, 13 April 2012.
- vi. Déclaration de mission de la Défense et Cadre stratégique pour la mise en condition, Belgian Defence, 01 October 2011.
- vii. Mandiant Intelligence Centre, Rapport APT1, p. 22 and the interview with the head of the Military Intelligence Service SGRS (http://www.mo.be/opinie/militaire-inlichtingendienst-getroffen-door-ernstig-cyberincident).
- viii. Jonathan Holslag and Thomas Renard, Een verdeeld land in een verdeelde wereld, een rapport aan de Koning Boudewijnstichting (Brussels, 2013), p. 18.
- ix. Known as 3D-L&O (Diplomacy, Defence, Development and Law & Order) or the "comprehensive approach".
- x. Sven Biscop, Egmont security policy brief n° 46, "And what will Europe do? The European Council and military strategy", May 2013.
- xi. The military balance 2013, The International Institute for Strategic Studies (London: Routledge Taylor & Francis Group, 2013), p. 42.
- xii. http://www.strategyandchange.nl/integrale-veiligheid/
- xiii. Déclaration de mission de la Défense et Cadre stratégique pour la mise en condition, Belgian Defence, 01 October 2011.
- xiv. http://globalization.kof.ethz.ch/static/pdf/press release 2012 en.pdf of "KOF Swiss Economic Institute".
- xv. World Trade Organization. World Trade Report 2012. Genève: World Trade Organization, 2012, p. 30.
- xvi. Royal Belgian Shipowner's Association, Annual Report 2012, p. 47.
- xvii. Figures of Seabury Cargo Advisory through the Gemeentelijk Havenbedrijf Antwerpen, personal communication, September 2013.
- xviii. Figures of the Gemeentelijk Havenbedrijf Antwerpen, personal communication, September 2013.
- xix. Belgian Oil Company, Annual Report 2012, p. 22 and Energy Observatory PFS Economy, small and medium-sized enterprises, Middle Class and Energy. Key figures 2010. 2012, p. 7.
- xx. The pirates of Somalia: Ending the Threat, Rebuilding a Nation, report of the World Bank n° 76713, Washington, 2013, p. xxiii.
- xxi. http://en.wikipedia.org/wiki/Jan_De_Nul
- xxii. Peace and conflict 2010, executive summary, Center for International Development and Conflict Management. University of Maryland.
- xxiii. http://fedasil.be/fr/content/budget-et-finance and Annual Reports CGRA of the years 2008 to 2012).
- xxiv. "Stroom Kosovaren creëert chaos" De Standaard, 10 September 1999.
- xxv. European Monitoring Centre for Drugs and Drug Addiction, Annual Report 2012, p. 68.

- xxvi. http://www.mo.be/artikel/belgie-de-vn-veiligheidsraad-balans-na-1-jaar
- xxvii. Peace and conflict 2012, Center for International Development and Conflict Management, University of Maryland.
- xxviii. http://trends.knack.be/economie/nieuws/bedrijven/staking-bij-belgocontrol-kost-tussen-8-en-10-miljoen-euro/article-1194833888146.htm
- xxix. "Integrated Maritime Policy for the European Union" (Blue Book), European Commission, 10 October 2007.
- xxx. Claude Mathys, Economic importance of the Belgian ports: Flemish maritime ports, Liège port complex and the port of Brussels Report 2011, Working paper document n° 242, Banque nationale de Belgique, July 2013.
- xxxi. Thierry Wagener, Vers une armée Flamande? (Brussels: published by La Muette, 2011), p. 44.
- xxxii. Het Belang van Limburg, 25 February 2013; http://www.karolien-grosemans.be/citaten/defensie-degrootste-werkgever-limburg
- xxxiii. Carissa Vets, Bram Roosens & Miet Lamberts, De positie van Defensie op de Belgische arbeidsmarkt Part 1 Externe mobiliteit, HIVA onderzoeksinstituut voor arbeid en samenleving, 2011, chapter 3.
- xxxiv. MUMM is a department of the Royal Belgian Institute of Natural Sciences (RBINS), a federal scientific establishment that comes under the Federal Science Policy.
- xxxv. http://www.noordertuin.be/parken-en-tuinen/

January 2014



Responsible editor: Lieutenant General Guido Andries Assistant Chief of Staff for Strategic Affairs Quartier Reine Elisabeth Rue d'Evere 1 B-1140 Brussels – Belgium

Editorial staff:

Commander Renaud Flamant



