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Advice on the decision to purchase new combat aircraft for the Air Component of the Belgian Defence Forces

In view of the impending decision about the purchase of new combat aircraft for the Air Component of the Belgian Defence Forces, the Flemish Peace Institute would like to highlight a few key points:

- Existing public information lacks the elements needed to assess the advisability of buying new combat aircraft:
- The decision on possible replacement of the F-16s is embedded in a broader defence and foreign policy, made in a European framework and within the context of NATO. A comprehensive view of the challenges to which the Belgian Armed Forces need to respond is currently lacking from the public space. In the absence of a clear, public, long-term vision, it is not possible to make well-founded and explicit decisions on the future deployment of persons and resources in the Land, Air and Naval Components.
- 2. A proper evaluation of the economic return for this public expenditure in terms of industrial participation is not available at present. A simple comparison with prior work-share arrangements for the F-16 will not do. In contrast to those earlier compensation arrangements, Belgium decided not to participate in the development phase of new combat aircraft, so Belgian companies can make relatively little claim for direct or semi-direct industrial participation.
- A possible purchase and the accompanying operating costs will have a significant impact on public finances.
- Support among the Belgian population for the purchase of new combat aircraft is currently limited to 1 in 4.

The Flemish Peace Institute advises the Chamber and Senate, the Flemish Parliament and the federal and regional authorities, <u>before a decision</u> is made, and in accord with their respective competences regarding the purchase of new combat aircraft, to:

- 1. Articulate a comprehensive vision of Belgian Defence and justify defence purchases or replacements based upon this vision.
- 2. Make estimates of the entire cost price including operating costs for the various purchase options and make these figures public.
- 3. Arrange for the anticipated indirect economic return for Belgian industry and the impact on employment for each purchase option to be calculated by independent authorities, and make these figures public.
- 4. Conduct a public parliamentary debate on the appropriateness of the purchase in which all options including possible non-replacement will be discussed on the basis of comprehensive background information.

1 The current state of the dossier on buying new combat aircraft

The Belgian Air Component currently has a fleet of approximately sixty operational combat aircraft. This initially included 160 F-16s that were purchased in 1975 and 1983, co-produced by the company that is now Lockheed Martin (US) and assembled in Belgium. In the period 2023-2028, the F-16s will reach their maximum of 8,000 flying hours. After that, the cost of keeping the aircraft operational will increase significantly due to the necessary adaptations. Given the time that is needed for the purchase, production and delivery of a possible replacement for the current combat aircraft, a political decision on this point is required during the 2014-2019 legislature.

Options

The first issue to decide is whether it is desirable for Belgium to keep its fleet of combat aircraft operational. Does a new fleet of combat aircraft make sense within an overarching vision of the development of Belgian defence in the long term? Next, the question of budgetary resources for such a purchase is crucial. A third aspect concerns the question of what economic return the suppliers can guarantee.

If it is decided to replace the F-16s, five options for the purchase of combat aircraft have been listed in the debate:

- 1) The F-35 or *Joint Strike Fighter* was developed by Lockheed Martin (US) and has already been ordered by a dozen countries, including the United States, the United Kingdom, Netherlands, Italy and Norway. More specifically this refers to the type F-35 Lightning II.
- 2) The Eurofighter is currently manufactured by a consortium centred on Airbus Defence and Space and is a project of four EU Member States (the United Kingdom, Germany, Spain and Italy).
- 3) The Rafale is a combat aircraft from France, designed and built by Dassault.
- 4) The *Gripen* JAS 39 Next Generation is a project of Saab (Sweden). Older versions are in use in five countries, including Sweden, Hungary and the Czech Republic.
- 5) The *F-18* is a Boeing (US) model and is used in a dozen countries, including the US, Switzerland and Spain. More specifically this refers to the type F/A-18F Super Hornet E/F.

For the sake of completeness, it should be noted that the purchase of new F-16 combat aircraft, which are currently still manufactured by Lockheed Martin (US), is also an option.

International comparisons

For purposes of comparison, the debate and decision on replacing the Belgian F-16s can be set in an international framework. Several countries in Europe are going through various stages of a comparable decision process. In 2002, for instance, the Netherlands decided to join the development phase of the F-35. In doing so, the Dutch government ruled that the costs of participation in the project must be proportional to the amount of work that Dutch companies receive in it. Starting in 2019, the F-35 should replace the F-16 in the Dutch Armed Forces. There is actually much debate in the Dutch Parliament about the rising costs, the disappointing industrial work-share and the long-term vision for defence. 2 Denmark also has an outdated F-16 fleet and will decide in mid-2015 about purchasing a replacement. The Danish government has the same options as the Belgian, although Denmark has already invested in the F-35 development phase. The Danish government has, however, announced that the competition is open again and that the number of Danish jobs associated with the purchase will be decisive.³ Germany has opted for the Eurofighter, a hundred of which have already been delivered.⁴ The German Court of Audit let it be known that the combat aircraft would cost double the amount originally budgeted.⁵ Finally, there is less discussion about the purchase of new combat aircraft in France, which has a home-produced combat aircraft in the shape of the Rafale.

Three considerations

Three considerations always re-surface in debates on new combat aircraft, and they are also determining factors for decision-making in a Belgian context:

- (1) the vision of national defence in a European framework and in the context of North Atlantic Treaty Organization (NATO) commitments;
- (2) the budgetary implications of a decision to make such a purchase; and
- (3) the economic implications of the work-share arrangements accompanying such a major armed forces purchase.

Policy ambitions for the future role of the Belgian Armed Forces, and an overarching vision of the mutual relationship of the different components, need to be clearly articulated. This aspect of the debate applies also to the purchase of new mine hunting vessels and frigates for the Belgian Armed Forces. Pending a definitive decision on the replacement, the Ministry of Defence has engaged five foreign agencies to obtain information about the fighter aircraft that are candidates for replacing the F-16s. ⁶

Together with military-strategic considerations, public budget constraints are an important factor. In late 2013, the Minister of Defence talked of buying forty aircraft. Estimates for the purchase price per aircraft start from 100 million euro per aircraft, which would bring the total purchase price to at least 4 billion euro. The expenditure for the purchase would be distributed across several years. Annual operating costs are also significant and must be taken into

account. A structural increase in the total defence budget is currently unlikely. This means that reallocation of the defence budget among the four components of the armed forces is likely to be a zero-sum game. Unless the purchase is kept outside the defence budget by means of a special budget, investment in one component may come at the expense of investments in the other components - just as an increase in the defence budget would come at the expense of other public expenditures. This underlines how far the replacement of the F-16s is also a strategic decision in budgetary terms.

As for economic compensation, it is important to point out that Belgium previously decided not to participate in the development phase either for the F-35, or for the other types on the market. This means that, should the decision for replacement be taken, in all likelihood Belgium would have to purchase aircraft 'off the shelf'; it can make relatively little claim for direct industrial participation. Further, debates about offsets for similar military purchases in Belgium always concern the linguistic communities, meaning that the concerns and interests of relevant industries in the different regions differ and need to be included in the balance. The present case involves not only questions of an economic return (for which the regional authorities also have competence), but also the continued existence of air force bases (Kleine Brogel and Florennes) in the North and/or South of the country.

In a democratic system, defence policy calls for transparency, civilian control, and parliamentary control. More information and debate is needed to arrive at a soundly based decision on this purchase. In the following analysis the Flemish Peace Institute will further develop two relevant standpoints, and define necessary parameters for a thought-through decision on replacing the Belgian Armed Forces' combat aircraft.

2 The importance of a strategic defence vision

The decision on potential replacement of the F-16s is embedded in a broader defence policy. A thorough analysis of the political-military context, a clear and well-argued articulation of policy goals, and the well-considered application and development of adequate personnel and material resources are the core elements of a strategically defined defence policy. The main objective of a defence policy is to defend the (inter)national interests of the State. Specific interpretations of these interests - and potential threats to them - are open to variation and subject to considerations of political acceptability. Implementation of the defence policy is the responsibility of the Belgian Armed Forces, which currently have four components: the Land Component, the Air Component, the Naval and the Medical Component.

The F-16 is assigned to the Air Component. Originally, F-16s were purchased in a Cold War context, to replace the F-104 Starfighter dating from the 1950s. Their purpose was to defend Belgium's territory and that of its allies in the framework of collective NATO defence. Regular modernizations have contributed to the development of a versatile aircraft. The F-16 has now

become a multi-role combat aircraft that can execute several tasks. For instance, the aircraft is equipped for air combat, can support ground troops from the sky, attack ground targets, protect home airspace (for instance, with Quick Reaction Alert interventions in which unidentified aircraft in the airspace are quickly intercepted), and drop tactical nuclear bombs. After the Cold War, the aircraft were deployed during international missions in Bosnia, Kosovo, the Baltic, Afghanistan, Libya and during European summits. Two F-16s are always on standby.

From a strategic perspective, should the F-16 combat aircraft be replaced? In order to answer this question, it is not enough to demonstrate that a threat exists, or could exist, against which such an aircraft may be deployed. At the very least, a comprehensive threat analysis must be made and a hierarchy established as to which challenges should be addressed as a priority. If a certain resource is used against a certain threat, it must be determined whether its use has been effective in terms of operational as well as strategic objectives. Evaluation of the use of the F-16s since the end of the Cold War in the light of these questions could provide a useful input to discussions on their replacement. The standard view is that their use assured Belgium's status as a valuable alliance partner, by joining in combat at the high end of the spectrum of force. Whether this recognition could have been obtained in another way is difficult to judge. Looking ahead, the recent emergence of armed drones already provides a challenge for evaluating the further development of conventional air forces.

A fundamental intellectual exercise is needed that provides a precise listing and critical examination of Belgian armed forces; ventures to identify the potential tensions between different interests at stake; and, if necessary, ranks these according to priority. Which interests are viewed as central determines which type of armed forces should be developed, and whether or not replacement of the F-16s is desirable. An analysis was made in the Netherlands¹ that may inform and inspire our own decision-making procedure for the armed forces. The specific debate on buying combat aircraft was expanded and existing budgetary constraints were taken into consideration. According to the authors of the resulting report, the task is to test the ideal types against the interests and values that the armed forces aim to defend, the armed forces' established strengths, and the collective needs of the EU and NATO. This analysis will come out differently for each country.¹⁰

¹ "Clingendael envisions four possible types of armed forces extrapolated from key interests of the Netherlands:

¹ the 'flying intervention force' which possesses the most modern air assets - including the Joint Strike Fighter – and can 'keep up with' the United States and large European countries in the opening stage of military interventions;

² the 'maritime trade force', in which the navy is the core with a broad range of modern resources for defending Dutch economic and trade interests around the world:

³ the 'robust stability force', which should be able to contribute to operations at sea, in the air and on land for terminating conflicts, and for the stabilization phase using broad 3-D (Defence, Diplomacy, Development) capacities;

⁴ the 'supporting peacekeeping force', which has very limited fighting power but is maximally equipped to assist with normalization and rebuilding in order to bring about lasting peace and stability, and is also well capable of providing support for emergency response." http://www.clingendael.nl/sites/default/files/20130200 clingendael visie krijgsmacht toekomst.pdf

Existing Belgian defence policy is developed mainly in the NATO and EU context. At the Ministry of Defence, there is little support for relinquishing this principle¹¹ and it is also not often questioned politically. Belgium also lacks the capacity to react autonomously to many threats. In this setting, it does not make obvious sense to create our own 'geo-strategic analysis' and to frame our own responses to it. Our integration in - and dependence on - international structures is too deep for that. This kind of collective defence offers opportunities, but also creates (shared) burdens. Specifically, international cooperation in the field of material capability development in defence mainly takes shape at bilateral level, where task specialization is the norm. New 'pooling and sharing' initiatives therefore partly set the parameters for analyzing the future development of Belgian Defence Forces. The presence of tactical nuclear weapons and their strategic military usefulness is contested in Belgium: ¹² but foreseeing the possible use of new combat aircraft for tactical nuclear operations in the framework of 'burden sharing' in the NATO alliance needs to be a factor in strategic thinking on the purchase decision.

3 The economic return for industry: many unknown factors

In the political-social debate on replacing the F-16 combat aircraft, the economic return is often referred to alongside defence and strategic considerations. A possible purchase of new combat aircraft can in this regard be favourable for the industry in general and the aviation sector in particular. The Belgian aviation industry has indicated that it seeks a 100% industrial payback for the purchase of new combat aircraft in the form of employment and technology transfer, or partnerships in high-tech fields. Various suppliers are preparing proposals, but at present it is plainly still not clear exactly what would be the scope and nature of the potential economic return in the event of a successor being chosen to the F-16 combat aircraft.

Major defence contracts from the Belgian Armed Forces are traditionally characterized by an arrangement whereby, in exchange for the purchase, the seller of the weapons system (or his home country) reinvests in Belgium, for instance by having components of the new weapons system manufactured or by purchasing goods of an equivalent technological level in Belgium. This is also standard practice in most other countries. In order to calculate the economic return on new combat aircraft, it is therefore also crucial to focus on the so-called 'compensation arrangements' (offsets). The aims of such offsets are generally of an economic and/or strategic nature. Proponents point out that, by means of such arrangements, local companies can make use of the purchase of weapons systems to increase their turnover and/or market share; that local employment is created (at least temporarily), and that local companies can potentially make use of the technology and expertise gained to expand and/or diversify their activities. For countries without a significant defence industry, offsets can be applied as a tool for promoting further development in this branch of industry. Offset arrangements between the purchasing country and the supplier of the defence products ordered are generally formally agreed, but not made public.

It is important to make a distinction between different sorts of offsets. For direct offsets, it is agreed that companies from the purchasing country will be responsible for part of the production of the new weapons system, for instance through co-production of the weapons system or by delivering certain components as a subcontractor for the principal supplier. Indirect offsets are not related to the products or services that are purchased; they concerns investments that do not directly form part of the relevant purchase contract for new weapons systems. They may concern various technology transfers, education and training activities for engineers from local companies, or investments in sectors other than those directly involved in the defence contract. Indirect offsets do not only occur in the defence industry, but also in civil sectors. Compensation arrangements often combine different types of offsets.¹

Despite the widespread practice of offsets, they also come under criticism from various quarters¹⁴ - first and foremost because of their potential effect in distorting the market. In the context of harmonizing tendering procedures for defence and security contracts, the European Commission defines offsets as restrictive measures that go against the fundamental principles of the European Union because they obstruct the free movement of goods and services. However, exceptions remain possible on the basis of Article 346 of the Treaty on the functioning of the European Union. In recent years, the European Commission and the European Defence Agency have taken several measures to discourage offsets in the interests of a level playing field.ⁱⁱ As a result of these European initiatives, there is currently less mention of offsets and increasing talk of 'industrial participation'. Critics of offsets also often refer to the added purchase costs for weapons systems resulting from these arrangements: ultimately, the supplier passes these on to the customers, including the purchasing country. Furthermore, increased employment is often mainly of a temporary nature, and it is impossible to claim a clear positive impact in terms of technology transfer to the civil sector. Critics of offsets further cite the increased risk of conflicts of interest and corruption.¹⁵

Relevant and reliable information on European offsets is rare.¹⁶ There are also few scientific studies available that systematically map out the advantages and disadvantages of these offsets and weigh them against one another.¹⁷ In large part this is because the macro-economic impact of offsets is not easy to measure reliably, i.a. because it is very hard to isolate the precise impact of a specific offset from other factors. As a result, the causal relationship between (especially indirect) offsets and economic indicators is often not demonstrable. The results of the available studies are therefore ambiguous. In Europe, there are indications for positive as well as negative effects of offsets.¹⁸

In the current debate on replacing the combat aircraft, mention is regularly made of the large economic return on the Belgian F-16 programme. Aircraft manufacturer Lockheed Martin stated

For instance, semi-direct compensations in which goods or performances identical or similar to those of the contract signed with the Ministry of Defence are ordered with a view to export from Belgium.

In economic jargon, the notion of a 'level playing field' refers to concept of fair competition in which each entrepreneur enjoys equal opportunities because everyone plays by the same rules.

in 2007 that the purchase and modernizing of the Belgian F-16 combat aircraft had generated US \$ 278 million for Belgium over a thirty-year period. The Federal Public Service (FPS) Economy confirmed this figure. According to the FPS Economy, this programme was of crucial importance for the development of the Belgian aviation industry, and has led among other things to a number of long-term trade relationships, the potential to penetrate foreign markets, spin-offs in civil sectors, and employment. This study is not sufficiently detailed to allow evidence-based and comprehensive claims to be made about the economic return on defence purchases in Belgium.

The economic return from the F-16 programme cannot simply be projected onto the current discussion on replacement of the F-16 combat aircraft. The most important reason is that, on that occasion, the Belgian government decided to purchase these combat aircraft at an early stage of development; Belgian companies thus took a significant part both in the production of their own aircraft, and in that of aircraft ordered by other countries over the years. In addition, the F-16 programme was a great success, with more than 4,500 aircraft sold to more than 25 countries²¹, so that the economic return ended up being larger than initially expected. Furthermore, Belgian companies were able to win a major share of the European allocation of agreed offsets.²² By contrast, all the options currently on the table for replacement of the F-16 aircraft are already fully developed aircraft. Thus in contrast to the F-16 programme, there is little margin for direct offsets and mainly indirect offsets will have to be negotiated.

The expected economic return for a purchase of new combat aircraft for the Belgian Armed Forces cannot be estimated adequately at this point. This is not just because of the inherent difficulty of conducting such studies and the impossibility of comparison with the Belgian F-16 programme, but also because each option for a new combat aircraft comes with its own specific offering of offsets from the relevant supplier. The aviation industry is currently gathering draft proposals for industrial participation from the various relevant aircraft manufacturers. Only after the Federal government decides to purchase new combat aircraft and launches a formal request for such proposals will the aircraft manufacturers concerned be able to make more formal arrangements with the Belgian aviation industry. ²³ For the relevant industry, the purchase of new combat aircraft undoubtedly offers potential for new contracts and new markets. However, the potential return for the Belgian economy from the purchase of a new combat aircraft still cannot be calculated properly at this time.

One thorny issue in the Belgian political debate on defence purchases is the regional allocation of the offsets. In previous years, this has often been the object of fierce competition between the linguistic communities. From an analysis by the Ministry of Economy of the regional distribution of economic returns from major defence programmes since 1983, it appears that 56% of the economic return was realized in the Flemish Region (mainly indirect offsets), compared with 34% in the Walloon Region (mainly direct offsets). What is striking is that when we look specifically at the aviation industry, the Flemish Region was able to obtain less than a quarter of the economic return for this industry since 1970, compared with approximately 70% for the Walloon Region and less than 10% for the Brussels-Capital Region. It is still unclear

what formula of allocation - in the event that new combat aircraft are purchased - will be used in the present case.

4 The need for informed public debate

Many actors are involved in the debate on a successor to the F-16. A decision is expected from the federal political level in the new coalition. The Defence Ministry is an important stakeholder for whom the decision will have far-reaching implications on the budgetary level, as well as for the level of ambition on future operations. Potential foreign suppliers are lobbying - sometimes supported by their government - for the purchase of their aircraft. The Belgian industry, brought together in the BSDI *Aeronautical Working Group*, is also following developments closely with a view to winning maximum returns for the Belgian industry. Academics, experts and civil society organizations, including the peace movement, are offering their opinions on the planned purchase, both for and against. From a recent opinion poll, ²⁶ it appears that 25% of Belgians are in favour of replacing the F-16s and 47% are against it. 28% of Belgians say they do not (yet) have an opinion on the desirability of a purchase.

The stakeholders named have different current levels of information on and involvement in the debate on whether or not to purchase new combat aircraft for the Belgian Armed Forces. Few relevant documents at the Ministries of Defence or Foreign Affairs are also available to the public, which makes an informed public debate more difficult. Policy statements by the Minister of Defence (2010-2014), the answers given to relevant parliamentary questions, and the documentation published by the Ministry of Defence²⁷ do not provide enough elements to assess the advisability of the purchase. Alongside the Defence Ministry, political parties and relevant actors from civil society also need to be able to formulate answers to questions about the suitability of a purchase and to put the different options on the table. Reliable public information is also lacking on the economic returns in the present case, and much will depend on the specific offers from suppliers.

Given the significant impact of a possible purchase on public finances, the lack of a politically and publicly supported long-term vision of the role of the Belgian Armed Forces, the lack of clarity about the impact of economic offsets, and the limited support for such a purchase among the population, there is a need for an informed public debate. It would be valuable for the responsible policy makers to have independent and impartial studies made in preparation for such a significant decision. It is important that these studies should also be made public so as to allow a substantively grounded debate.

End notes

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In the run-up to the election of 25 May 2014, the University of Antwerp (M2P research group) conducted a representative survey among more than 1,000 Flemish and more than 1,000 Walloon respondents about the propositions that would be included in the Vote Test from the VRT and De Standaard. On commission from the Flemish Peace Institute, the results of questions concerning peace issues, including those relating to the replacement of the F-16, were analysed.

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