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Nato, the F35 and European Nuclear Dilemmas

Abstract

As their current fleets are progressively retired by the 2020-2030s, the European states currently involved in NATO's nuclear sharing mission will be expected to acquire new dual capable aircrafts if they want to preserve this role. Italy, the Netherlands and Turkey have already decided to procure F-35As as their new fighter, while Belgium is still hesitating. Germany has postponed any decision for a couple more years. But no country has publicly made known its choice concerning the ability of these aircrafts to carry nuclear weapons. Studying each specific country gives us a chance to better understand what are the stakes for each host and what will decide the final decision to acquire - or not -dual capacity aircrafts. It therefore gives an understanding of the current state and development of acquisition foreseeable programs that will strongly influence the future of extended deterrence in Europe.

Résumé

Confrontés au retrait anticipé de leur flotte de chasseurs bombardiers d'ici à 2020-2030, les États européens impliqués à ce jour dans la mission nucléaire de l'OTAN devront décider s'ils veulent se doter d'avions à double capacité et ainsi préserver leur rôle particulier. L'Italie, les Pays-Bas et la Turquie ont déjà décidé de faire l'acquisition de F-35A, la Belgique hésite encore. L'Allemagne, de son côté, a repoussé toute décision pour encore quelques années. Mais aucun État n'a fait connaître publiquement son choix concernant la capacité des avions à emporter des armes nucléaires. L'étude de chaque pays donne donc la possibilité de comprendre les enjeux dans chacun d'entre eux et ce qui sera à l'origine de la décision d'acheter – ou pas – des avions à double capacité. Cette étude offre donc un aperçu de l'état présent des programmes d'acquisition et de leur futur prévisible, programmes qui auront une influence majeure sur l'avenir de la dissuasion élargie en Europe.

In 2012, the issue of the future of the nuclear weapons stationed in Europe received a lot of publicity as NATO debated its Deterrence and Defense Posture Review. This attention was derived mostly from the positions taken by the German Minister for Foreign Affairs Guido Westerwelle, who publicly called for the removal of nuclear weapons from Europe and especially from Germany. However, the 2012 summit preserved the status quo, and it was tacitly agreed that no host state would make the unilateral decision to ask for withdrawal of the weapons. Given that some members are particularly attached to their presence on the European territory, such as Poland or the Baltic states, and that the recent escalation of tensions between Russia and the West has if anything increased such a feeling, it is unlikely that any consensus will be found in the near future to proceed to the removal of the systems, despite the popular opposition to their presence in the certain host states such as Germany, Belgium, the Netherlands.

However, two factors may make it more difficult for NATO to quietly maintain this situation. First, the B61 gravity bombs that are currently deployed on six European bases will have to be replaced by new versions, the B61-12, maybe as early as the end of the decade.1 This change, which could be interpreted as a mere technical formality, will probably lead to a political challenge, since the action of taking away old weapons and bringing in new ones could cause a public outcry, especially if media report on the last part of the process in a biased way, as seen in September 2015 when certain German newspapers and Russian media – mistakenly - announced the "provocative arrival of new nuclear weapons in Europe" and forgot to mention or downplayed the removal of the old ones.2 Moreover, the B61-12s are associated with a series of negative reports linked to the escalating costs of the program, its delays, the new military capabilities of the weapons, and the issue of burden-sharing within NATO.3

The other element that could threaten the status quo is the need to replace in the near to medium term the F-16s and Tornado airplanes

that are currently used by the states that participate in the NATO nuclear mission, with new dual-capable aircraft. For most countries flying these planes, despite life extension programs and efforts to modernize their equipment, they will have to invest in new airplanes and deploy them by 2020-2030 if they want to continue to be able to deliver the gravity bombs. This is the reason why most of these states have informed the United States of their interest in buying new F-35s, and some have played a role early on in the process of developing the Joint Strike Fighter (JSF). Yet, the acquisition of F-35s is a bone of contention for many governments. The costs of the program is seen as too high for some who question their affordability in a time of austerity and their military use. The popular opposition to nuclear weapons is another difficult issue that leads to question as to whether or not the current host states will opt to pursue their nuclear sharing commitment in the long term.

Moreover, this program has indeed been fraught with difficulties, which have led to criticism for its technical performances and its costs. Many in Europe feel that the aircrafts are being shoved down their throat by the United States. This impression is accentuated by the fact that European host states are all concerned to some extent by budgetary concerns and may find it difficult to obtain the resources necessary to pay for the program. Finally, if and when the dual-capacity of the F-35 is made public in recipient countries, it is not certain if these countries will find a consensus to acquire a capability that will commit their nation to the NATO nuclear mission for the decades to come.

While the question of the B61 stationing in Europe is rather confidential (there is no official data on stationing and numbers), the F -35 is more openly debated, which gives an opportunity to test the opinion on this important question in host states and to have a preview of the sustainability of NATO's nuclear sharing mission in the coming 20 to 30 years. If it is useful to do an update of the contracts and purchase promises in each host states, it is also important to understand what is at stake in each country and what considerations arguments and will instrumental in shaping the final decision.

Overview of the program

The F-35 program is a multinational initiative launched in 2001 which aims at replacing different aging aircrafts currently used by the

^{1.} Hans Kristensen, B61-12, "Nuclear Bomb Integration On NATO Aircraft To Start In 2015", Federation of American Scientists, 13 mars 2014.

^{2. &}quot;US to bring in new advanced nuclear bombs to Germany – report", RT, 22 September 2015 or Dirk Hautkapp and Alexander Kohnen, "USA planen Stationierung neuer Atombomben in Deutschland", *Die Westdeutsche Allgemeine Zeitung*, 23 September 2009.

^{3.} Jeffrey Lewis, "A Steal at \$10 Billion", Foreign Policy, 5 September 2012.

American Air Force, Navy and the Marine Corps, as well as by eight other international partners (Australia, Canada, Denmark, Italy, the Netherlands, Norway, Turkey, and the United Kingdom). Its main assumption back when it started was that a single design would be able to, with three principal variants, assure a variety of missions and thus save costs throughout the life of the program. The three main variants include conventional takeoff/landing (CTOL), carrier variant (CV) and short takeoff/vertical landing (STOVL) aircraft.⁴

Relying on many technological innovations, the F-35 program has over the years made itself a name for its difficulties, cost and setbacks rather than for its successes. By 2015, it was almost 70% over initial cost estimates, and years behind schedule. The original sin seems to come from the idea of building a single core platform whose development happened to be much more difficult and expensive than expected. Moreover, in January 2015, it was disclosed that Chinese hackers had stolen many sensitive documents regarding the program, adding another layer of weakness for this contested aircraft.

However, after many years of overcoming technical hurdles, the program seems to have achieved some level of progress, including in its European component. In May 2015, the Pentagon defined the specificities of the Block 4B, which is the components that will be installed on the F-35A to give it a nuclear capacity and make it able to carry two B61-12s.5 By the end of the year, the program managers testified that the production rate had met its annual objectives with 45 planes delivered, mostly to the US Air Force.⁶ In September, the first aircraft flew on the European continent as tests took place on the Cameri Air Base, where some of the aircrafts destined to Europe are being assembled.⁷

Although this paper tends to assume that the perpetuation of the nuclear mission by NATO host states would require the acquisition of F-35s in replacement of current dual-capable aircrafts (F-16s and Tornados), other possibilities are technically possible. In 2012,

some officials from NATO indicated that the new B61 could be made "platformindependent", which means that host states would be able to choose another fighterbomber (like the Boeing Super Hornet, the Dassault Aviation Rafale, the Saab Gripen or the Airbus Eurofighter Typhoon) which would later receive the necessary adaptations to carry nuclear weapons.8 But this option does not seem very likely. Not only would it be more expensive to adapt many different systems to the bomb, than one, but it is doubtful that foreign companies would readily agree to share industrial secrets with the United States to receive the necessary license for nuclear missions.9 Airbus in particular might by hesitant to transfer all technical details of its Typhoon to the Pentagon and Sweden. with its well-known disarmament stand, might not allow Saab to undergo modifications that would make its aircrafts nuclear-capable.10

If the F-35 therefore appears to be the most obvious choice for this mission, it is still not clear who is going to pay the extra-cost of giving the aircrafts a dual capacity. While the European buyers are supposed to finance this adaptation, some have apparently already let on to the United States Air Force that they needed support to afford the price. The United States (and NATO) appear to be ready to help the states that would fail to meet their commitments. As it is, the Air Force received 15.6 million dollars in Fiscal Year 2015 to work on the dual capability, and requested an additional 4.9 million in FY2016.¹¹

The level of commitment and decision of the different states involved in the nuclear sharing mission differs. Italy, the Netherlands and Turkey were initial participants to the program, and took part to the development phase. Italy is especially noteworthy as hosting an assembly line for the planes sold to Europe. Belgium is still uncommitted but the likelihood that it will turn to Lockheed for its

^{4.} F-35 Joint Strike Fighter (JSF) Lightning II, Global Security, 24 October 2015.

^{5.} James Drew, "Pentagon firming F-35 Block 4 configuration," *Flight Global*, 26 May 2015.

^{6.} Mitch Shaw, "Pentagon says F-35 program on the right track", *U.S. Air Force*, 29 December 2015.

^{7.} Tom Kington, "F-35 Soars Over Italy, First Time Outside the US", *DefenseNews*, 8 September 2015.

^{8.} Ted Seay, "Escalation by Default? The Future of NATO Nuclear Weapons in Europe," *NATO Policy Brief*, n°2, May 2012, interview by the author of members of the International Staff and national delegations at NATO, February 2-16, 2012.

^{9.} Oliver Thränert, "Nuclear Arms and Missile Defense in Transatlantic Security", in ed. Riccardo Alcaro and Erik Jones, *European Security and the Future of Transatlantic Relations*, Istituto Affari Internazionali, 2011.

^{10. &}quot;Saab haakt af als België kernwapens wil", *De Morgen*, 14 September 2015.

^{11. &}quot;John Tirpak, "Nuclear Lightning", *Air Force Magazine*, 17 March 2014.

fleet is quite high. Finally, Germany is a big question mark, since it extended the life of its Tornados until at least 2024 and has not discussed publicly so far neither what could be contemplated to replace them after this date, nor if the replacement would have a role in NATO's nuclear mission. As illustrated in the following table, the four states that have invested in the Joint Strike Fighter, or will probably do so, have different plans and their procurement decisions vary.¹²

	Current DCA aircrafts	Initial plans	Current pro- curement status	Decision about a dual- capacity
Belgium	12 F-16s dedicated to the nuclear mission (out of 54 in service since 1979	Selection of a replacement expected for 2018, five candidates invited to take part in the tender		No official stance, two different decisions
Italy	59 Tornados IDS total in service since 1983	Initial plan of 131 F- 35s, reduced to 90	8 ordered, 38 budgeted	No com- muni- cation by the go- vernment
The Neth- er-lands	16 F-16s dedicated to the nuclear mission out of 61, in service since 1979	85 aircrafts	8 aircrafts ordered in 2013, 29 more in 2015	Officially not made until 2024
Turkey	About 250 F- 16s total, in service since 1987	Between 100 and 120 F-35s	6 officially ordered in 2014 and 2015	No infor- mation available

Belgium

The Belgian Air Component currently flies 54 F-16s that entered in service in 1979 and intends to keep them at least until 2023, thanks to recent investments to upgrade and further equip them.¹³ Having refused to join Joint Strike **Fighter** international in the early partnership 2000s, government, now led by Charles Michel (Mouvement Réformiste), can no longer postpone the issue and is expected to make a decision during its term on a successor aircraft. This was acknowledged in the coalition agreement of 2014.14

The planned investment has not found consensus among the Belgian political spectrum, mostly because of its expected cost. Belgium's military budget reaches only one per cent of its GDP, from which 4.5% is dedicated to investments in equipment, one of the lowest rates in NATO. Put in a context of austerity, this budget is unlikely to grow, while some political parties, like the socialists and the greens argue for further cuts that would lead to the abandonment of the tactical fighting mission of the Belgian Air Component. The program is even more at risk since the military needs other investments in the short to medium term, and in particular the replacement of its frigates. It is uncertain that the government will find the necessary funds to afford the replacement of all capabilities. 15 Finally, it receives very little popular support since only a quarter of Belgians are in favor of replacing the F-16s.16

Five candidates have indicated their interests in the F-16 replacement program: the F-35 of Lockheed Martin, of course, but also the Super Hornet, the Gripen, the Rafale and the Typhoon. Most believe that if Belgium is to remain committed to the nuclear sharing mission, it will have to choose the F-35, but this plane is bound to be the most expensive and both the Federal Parliament and the Flemish one are likely to fight this proposition.¹⁷ This opposition will to some extent find a support in popular movements such as the petition launched by the NGO Agora Erasmus in 2015 which asks the Belgian government to renounce to the acquisition of the F-35.¹⁸

To this day, the government has insisted that no decision had been made on the replacement. In January 2015, a Preparation Survey was made public, which detailed the technical specifications expected for the plane. ¹⁹ It was primarily made to enable the Ministry of Defense to compare the different options in terms of capabilities, and also timeframe and costs. This survey did not mention the issue of

^{12.} Malcolm Chambers, "NATO Dual-Capable Aircraft: A Stocktake", in Malcolm Chalmers and Simon Lunn, *NATO's Tactical Nuclear Dilemma*, RUSI Occasional Paper, March 2010.

^{13.} News Release, Defense Security Cooperation Agency, 12 May 2014.

^{14.} Accord de gouvernement, 9 octobre 2014.

[&]quot;Le gouvernement prendra une décision qui permettra à la Belgique de conserver pour le long terme une capacité de chasse et de bombardement en vue de la fin de vie annoncée du F-16 actuel."

^{15.} Christophe Christiaens and Miguel Nunes Silva, "Belgium's F-16 fighter-jet replacement", *European Geostrategy*, 30 August 2014.

^{16.} Opinies over de aankoop van nieuwe gevechtsvliegtuigen voor Defensie, Vlaams Vredes Institut, March 2014.

^{17. &}quot;Kernwapens weg uit België, van woorden naar daden", Mondiaal Nieuws, 22 April 2015.

^{18. &}quot;Elus belges : avec la modernisation des armes nucléaires, l'OTAN envoie un mauvais signal", Solidarité & Progrès, 8 September 2015.

Belgian Ministry of Defense, Air Combat Capability
Successor Program - Preparation Survey, January
2015.

dual capacity to leave all doors open to the five manufacturing companies. The final decision is expected to come in 2018. In the meantime, the many political parties in Belgium offer a variety of views and perspectives on whether or not the F-16 should be replaced and what should be selected as a replacement. Except for a few ecologist and far-left parties, most parties agree on the need for Belgium to preserve an Air Component, but some (like the Ecolos or the Parti socialiste) have made clear that they would not support the acquisition of dual-capable aircraft. The Dutch conservative party CD&V stands out by its open pronuclear position.²⁰

Because of the official position taken in favor of the replacement of the program by important figures of the government, the issue has received some coverage in the media and has been debated in Parliament. Most critics have focused on the cost of the acquisition, the choice to bolster a close strategic relationship with the Netherlands or the participation in the nuclear sharing mission. This last point is probably not going to be decided in an open and blunt way, but may come as a settlement by default with the selection of the aircraft manufacturer, since, as seen, it is unlikely that companies other than Lockheed Martin would agree to the process necessary to obtain a nuclear certification.²¹ Both Saab²² Dassault²³ have officially announced that they would not take part in the tender process if Belgium made known its wish to have dualcapable aircrafts.

The nuclear issue is therefore mixed with various considerations going from budgetary concerns, military and technical requirements, diplomatic and geopolitical arguments, industrial factors and leads to a fundamental questioning on the role of Belgium on the world stage and the necessary capabilities to fulfill this role. And yet, because of the nature of the nuclear sharing mission, and the importance for Belgium of being a loyal ally within NATO, a decision to preserve the nuclear weapons on Kleine Brogel Air Base

could trump all other concerns and lead to the acquisition of a dual-capable aircraft and therefore in all probability the F-35. This was hinted by the press about a year ago which claimed access to confidential documents that would have referred to the military's wish to possess a new fighter-bomber able to carry nuclear weapons.²⁴ No official declaration has however confirmed or denied the validity of these reports.

Italy

The Italian F-35 acquisition program is the subject of an important internal debate, which mostly stems from its important cost. As the country has been the victim of a major economic and budgetary crisis in the recent years, successive governments have had to slash public expenditures and implement unpopular measures such as raising the country's retirement age or increasing taxes.²⁵ In this context of austerity, defending the spending of billions of euros on military equipment became a very arduous task. The Ministry of Defense was indeed expected by the public to share the sacrifices imposed on the society as a whole. As a result, many debates in the Chamber of Deputies and the Senate have been dedicated to the opportunity of purchasing as planned F-35s for the Italian Air Force as a replacement of the current 59 Panavia Tornados fighters.

The Italian contribution to the JSF program started in 1998 when the government led by D'Alema chose to contribute an initial 10 million dollars to the Concept Demonstration Phase. In 2002, Rome agreed to take part to the System Design & Development phase with a participation of around 1 billion dollars. Finally, the Prodi government committed Italy to participating in the Production Phase with a contribution of 903 million euros, an expense made with the firm hope of industrial benefits of the Italian aerospace industry. This materialized with the construction of a Final Assembly and Check-Out and a Maintenance, Repair, Overhaul and Upgrade (MROU) plant on the Cameri Air Base.²⁶ The first factory is currently assembling Italian F-35s and is also going to work on the Dutch aircrafts. The first plane assembled in Cameri was delivered in

^{20. #}BEdiplodays: discours du Secrétaire d'Etat Pieter De Crem, 2 February 2015.

^{21.} Wally Struys, Joseph Henrotin and André Dumoulin, *Le remplacement des F-16 belges: une analyse exploratoire*, Réseau Multidisciplinaire d'études stratégiques (RMES), Brussels, 15 August 2015.

^{22.} Peter De Lobel, "Als er kernwapens onder moeten, zegt Saab 'nej", *De Standaard*, 29 April 2015.

^{23.} Dominique Simonet, "Succession F-16: en cas d'option nucléaire, Dassault se retire", *La Libre*, 26 June 2015.

^{24.} Freek Williams, "Opvolger F-16 moet kernbommen kunnen inzetten", *De Redactie*, 31 March 2015.

^{25.} Rachel Donadio, "Italy's Leader Unveils Radical Austerity Measures", *The New York Times*, 4 December 2011.

^{26.} Michele Nones, Giovanni Gasparini and Alessandro Marrone, *Il Programma F-35 Joint Strike Fighter e l'Europa*, Quaderni IAI, Istituto Affari Internazionali, October 2008.

March 2015. The Maintenance center should enable Italy to benefit economically from the program in the long term.²⁷

At the outset of the program, Italy evoked the purchase of 131 aircrafts, including 109 F-35As and 22 F-35Bs. But this number was reduced by the Monti government in the wake of the financial crisis to 90 planes in total. This reduction was presented as a way to save 5 billion euros. In 2013, the cost of the acquisition was estimated to 11.8 billion euros.28 Under Matteo Renzi, there was talks, both in the Parliament and within the government of finding new savings by cutting the program deeper, but it seems that the Prime Minister was convinced to keep the order to 90,29 probably because of the attribution of major contracts to the Italian public group Finmeccanica in 2013 and 2015. The reluctance to sacrifice the viability and the autonomy of the fleet in the long term may also have played a part.³⁰ In any case, his unwillingness to further reduce the plan of acquisition was criticized and seen as inconsistent with previous declarations. As for now, the Defense budget for 2015 allocated 582.7 million euros to purchase 38 fighters by 2020.31

Of those 38, 8 have been ordered, one is finished and is undertaking flight tests, six are expected by October 2016, four in 2017, four in 2018, seven in 2019 and 13 in 2020.³²

While the controversy on the F-35 is open and public, the potential dual-capability is never mentioned. The subject is not evoked by the media and only rarely by politicians or activists.³³ The budget voted so far does not specify if part of the sums will be dedicated to adapt the F-35A to a nuclear mission. Following declarations by member of the Dutch

- 27. "Creating Jobs; Strengthening the Economy", F-35, f35.com.
- 28. Steve Scherer, "Italy government coalition averts split over F-35 jet purchase", *Reuters*, 26 June 2013.
- 29. Vicenzo Sinapi, "F35, l'Italia mantiene impegno per acquisto 90 aerei caccia, ma taglia costi", *ANSA*, 18 February 2015.
- 30. Steve Scherer and Andrea Shalal, "Italy to maintain F-35 jet orders despite political pressure –sources", *Reuters*, 16 February 2015.
- 31. Tom Kington, "Italian Budget Protects JSF Buy", *DefenseNews*, 30 May 2015. See also the Documento Programmatico Pluriennale per la Difesa per il triennio 2015 2017.
- "Oggi, il Governo intende procedere entro tale data all'acquisizione di un numero di velivoli sino a 38 unità [...]".
- 32. Tom Kington, "F-35 Soars Over Italy, First Time Outside the US", *DefenseNews*, 8 September 2015.
- 33. Massimiliano Moretti, "The nuclear role of the F-35. An untold story", *Nuclear politix*, 16 May 2014.

government, several member of the Chamber of Deputies asked however to the Minister of Defense if the renewal of the fleet was seen as an opportunity for the Italian government to abandon the possibility of carrying nuclear weapons.³⁴ The Under-secretary for Defense Gioacchino Alfano gave an extremely vague response referring to NATO's Deterrence and Defence Posture Review and to the membership to NATO being a cornerstone of Italy's security.³⁵ Deputies declared themselves unsatisfied with this answer and criticized the lack of information about nuclear weapons in Italy and the F-35 program as such, pointing in particular to the lack of consistency of the Prime Minister and the Minister of Defense on these subjects.³⁶

A similar dialogue took place in the Senate. In April 2015, a group of about eighty Senators wrote a motion asking the government to renounce to the acquisition of the "hardware

34. XVII Legislatura, Allegato A Seduta di Venerdì 4 aprile 2014, Interpellanze Urgenti, Chiarimenti in merito alla capacità di trasporto di armi nucleari per gli F-35 ed intendimenti circa la possibilità di non rinnovare la capacità nucleare dei reparti aerei – 2-00484

"I sottoscritti chiedono di interpellare il Ministro della difesa, per sapere – premesso che: [...] se alla luce delle dichiarazioni del Governo olandese, il Ministro interpellato non intenda chiarire le intenzioni dell'Italia in quanto alla capacità di attacco nucleare dei velivoli F-35 che dovrebbero entrare in servizio nell'Aeronautica militare; se non ritenga opportuno aderire alla scelta tedesca di non rinnovare la capacità nucleare dei propri reparti aerei una volta ritirati dal servizio i velivoli Tornado attualmente adibiti a tali missioni."

35. Gioacchino Alfano, Resoconto stenografico dell'Assemblea Seduta n. 205 di venerdì 4 aprile 2014

"Ciò posto, per quanto concerne gli aspetti affrontati dagli onorevoli interpellanti in tema di capacità nucleari, si deve necessariamente considerare la nostra appartenenza all'Alleanza Atlantica, cardine essenziale della nostra sicurezza. In ragione di tale appartenenza, l'Italia partecipa, come tutti gli altri membri, a tutti i processi decisionali alleati, condividendone le decisioni collettive e onorando gli impegni che ne scaturiscono. Ciò avviene anche per la definizione della «Politica nucleare della NATO», la quale viene attuata con il pieno consenso esplicito di tutti i Paesi alleati, siano essi potenze nucleari o non nucleari. Si rammenta, in proposito, che nell'ambito del vertice di Chicago del maggio 2012, i Capi di Stato e di Governo hanno adottato la Revisione della difesa e della deterrenza dell'Alleanza, ribadendo la necessità di disporre di strumenti convenzionali, antimissile e nucleari, avendo riconosciuto che, finché nel mondo ci saranno armi nucleari, l'Alleanza dovrà mantenere una sua capacità di deterrenza analoga. Detto questo, resta l'impegno forte dell'Italia nella direzione di un disarmo nucleare, rafforzato anche dal nuovo concetto strategico della NATO e della dichiarazione di Lisbona, che rappresenta uno dei principali punti qualificanti della nostra azione internazionale.

36. Id. Emanuela Corda

"Da un anno noi stiamo cercando di raccogliere informazioni sugli F-35, su questo programma d'arma che comunque sembra continuare nonostante il Ministro Pinotti abbia affermato in tv che c'era una volontà di ridurre gli acquisti, salvo poi ripresentarsi in Commissione a dire l'esatto contrario."

and software requirements necessary to equip the various versions of the F-35 with the capabilities to carry and release the type B61-12 nuclear weapons". This motion was very precise and stated that the repartition of the cost for the development of the Block 4B, that will give a nuclear capacity to the F-35, was still unknown. It also pointed to the political risk for Italy in remaining one of the only European country involved in the nuclear sharing mission if Germany, Belgium or the Netherlands should choose to opt out.³⁷

This type of conversation remains however very rare and often limited to the discussions set in the Defense Commissions of the Parliament, the main concern of Italians with regard to the JSF program is bound to remain its cost.

The Netherlands

As Italy, the Netherlands is an initial participant to the JSF program. In 2002, it was agreed that The Hague would purchase 85 F-35As as a replacement for its fleet of 61 remaining operational F-16s. By 2009, the Dutch government had given orders for the delivery of two aircrafts as part of the testing and evaluation program. But it is only in September 2013 that the formal decision to invest in the F-35 was taken. Eight planes were ordered at this date, and a follow-up order was made in 2015 to bring this number to 37. While member of the Dutch military expect this number to grow in the coming years, it is very unlikely that the Royal Netherlands Air Force will ever acquire of the 85 aircrafts initially announced. As it is, 37 planes would enable the Force to have about four F-35s deployed on duty at a given time.

Consistently with the 2002 JSF program agreements, the Dutch aircrafts are also being finalized at the Italian Cameri assembly plant. The first batch of aircrafts should join the Air Force by 2019. Two of them are already assembled and are being tested at the

Edwards Air Force Base in California, and the Dutch are working closely with the United States to increase the interoperability of the F-35 with older systems and prepare for the transition period, which will span many years, during which several models of fighters will be used simultaneously.³⁸ Finally, four Dutch pilots have been trained to fly the new planes in the United States alongside Administrators, Security, Maintenance and Logistics personnel.³⁹

As the procurement decisions were made by the government, the issue of the potential dual -capacity of the aircraft was never official tackled. Answering to a parliamentary question in 2015, the Defense Minister Jeanine Hennis-Plasschaert indicated that it was too early to know if the plane would be able to carry nuclear weapons.40 In her response to a motion of the Representative Jasper Van Dijk against this possibility in 2014, the Minister had already stated that the government could not commit itself in any direction at the time, and would not considered itself bound by the content of the motion, but that "the motion was an incentive for the Netherlands to pursue its policy in favor of the reduction and the eventual elimination of nuclear weapons".41

As it released a document presenting the F-35 acquisition program in June 2015, the Dutch government remained uncommitted since it stated that by the time the F-35s were

^{37.} Atto n. 1-00405 (procedura abbreviata) Pubblicato il 29 aprile 2015, nella seduta n. 439

[&]quot;Il Senato [...]premesso che: almeno alcuni dei 90 velivoli F-35 previsti per il nostro paese apparterranno ai lotti convenzionalmente denominati "Block 4A" e/o "Block 4B"; rimane indefinito l'onere finanziario relativo all'acquisizione di tali eventuali capacità aggiuntive necessarie per il ruolo nucleare; rimane altrettanto indefinito se a sostenere tale onere sarà esclusivamente il nostro Paese oppure uno o più Paesi terzi; impegna il Governo a non procedere all'acquisizione dei requisiti hardware e software necessari per equipaggiare le varie versioni del velivolo F-35 delle capacità necessarie per trasportare e sganciare armi nucleari del tipo B61-12, il cui schieramento operativo sul territorio europeo è previsto a partire dalla fine del presente decennio nell'ambito dei programmi di condivisione nucleare dell'Alleanza Atlantica."

^{38.} Tony Osborne, "Netherlands Preparing For F-35 Introduction", *Aviation Week*, 8 December 2015.

^{39. &}quot;F-35 Lightning II for the Netherlands", F-35, f35.com.

^{40.} Vragen van de leden Jasper van Dijk en Van Bommel (beiden SP) aan de ministers van Defensie en van Buitenlandse Zaken over de plaatsing van nieuwe kernwapens in Duitsland (ingezonden 28 september 2015). Antwoord van Minister Koenders (Buitenlandse Zaken) en de Minister van Defensie (ontvangen 16 november 2015).

[&]quot;Het zal nog geruime tijd duren, zeker tot 2024, voordat de F-16 niet meer in gebruik is. Hoe het geheel van afschrikkingsen defensiecapaciteiten van de NAVO er dan uitziet, is nu niet te voorspellen. Wel staat vast dat het thema tot die tijd regelmatig onderwerp van discussie zal zijn in het bondgenootschap. Nederland wil in deze discussie een actieve rol blijven spelen".

^{41.} Brief van de Ministers van Defensie en van Buitenlandse Zaken aan de Voorzitter van de Tweede Kamer der Staten-Generaal Den Haag, 14 January 2014

[&]quot;Het kabinet ziet in deze motie een aansporing om het Nederlandse beleid gericht op het terugdringen en uiteindelijk elimineren van alle nucleaire wapenswaaronder de niet-strategische nucleaire wapens in heel Europa – met kracht voort te zetten. In lijn hiermee is het kabinet het met uw Kamer eens dat de inzet van Nederland erop gericht moet zijn dat Nederland op het moment dat de opvolger van de F-16 aantreedt geen nucleaire taak meer zou hoeven te vervullen – omdat op dat moment de internationale omstandigheden en de afspraken binnen de NAVO dat hopelijk mogelijk maken".

operational in the country (around 2024), it hoped that NATO would have been able to renounce the deployment of nuclear weapons in Europe, and that it would be a collective decision belonging to the Alliance which would be extremely difficult to take in the current context.⁴²

This official lack of decision at the top is seems however unconvincing. The adaptation necessary to enable the planes to carry the B61 -12 will mean additional costs, which should been anticipated by the government by now given the state of progress of the program. To the least, if willing to continue to have this option, it should have started to negotiate with NATO and/or with the US government on the repartition of the costs. It is improbable that such a question would remain unaddressed until Finally, the evasive response to the 2014 motion may suggest that the Ministry of Defense has already made its choice in favor of a dual-capable aircraft.

Turkey

Turkey is the last European state that could be involved with the F-35 project in connection with the nuclear sharing mission. Turkey currently relies on 136 F-16s, which have undergone modifications and upgrades making them operational until 2030. Some of them are known to have a nuclear capacity and even though they are at a very low level of alert, still theoretically qualify for the nuclear sharing mission, even if the training concerns apparently only (or mostly) escort and support missions. Therefore, while the aircraft are probably still able to carry nuclear weapons,

42. J.A. Hennis-Plasschaert, Beantwoording feitelijke vragen voortgangsrapportage Verwerving F-35, BS2015012305, 16 June 2015

"Vraag: 70 Bent u nog steeds voornemens om de F-35 een kernwapentaak te geven zoals u in maart 2002 aan de Kamer meldde (Kamerstuk 26488, nr. 9)? Waarom wijzigt u dit voornemen niet, gezien de aangenomen motie Van Dijk, waarin wordt aangegeven de F-35 geen kernwapentaak mee te geven?

Antwoord: Het kabinet deelt nog steeds de mening van de meerderheid van de Kamer dat de inzet van Nederland erop gericht moet zijn dat Nederland op het moment dat de F-35 wordt ingevoerd geen nucleaire taak meer zou hoeven te vervullen, omdat de internationale omstandigheden en afspraken binnen de Navo dat mogelijk maken. Het kabinet blijft er echter van overtuigd dat eerst binnen het bondgenootschap overeenstemming moet worden bereikt over nucleaire positionering van de Navo. Het kabinet constateert dat er vanwege de verslechterde veiligheidssituatie in Europa onder de Navo-bondgenoten thans weinig animo is om te spreken over aanpassing van de Navo-kernwapentaak. Echter, juist in tijden van internationale spanningen is het nodig te blijven zoeken naar mogelijkheden voor ontwapening. Hiertoe blijven wij werken aan bouwstenen die bijdragen aan toekomstige ontwapening Het kabinet zet zich in om de dialoog over ontwapening gaande te houden".

questions have been raised about the certification of Turkish pilots to deliver them.⁴³

To replace its strongly criticized F-4 fleet, the government has announced its willingness to acquire 100 F-35s.⁴⁴ Recently, the Prime Minister Ahmet Davutoğlu announced that two F-35As had been ordered in May 2014 and four more were being purchased in 2015 with the aim of deploying the four by 2019.⁴⁵

As a Tier III participant to the program, Turkey contributed to the system development and demonstration phase, a participation estimated at 175 million dollars.⁴⁶ Its participation to the production phase has not been smooth, and many disagreements and diplomatic tensions called into question Ankara's commitment to Lockheed Martin. Among the main frictions, Turkey contested the integration of Turkish industry into the program, its cost, and the refusal by the United States to share the software source code. The final procurement decision was made in May 2014 after several delays.

There is very little public discussion on this issue, and the only announcements come from the Ministry of Defense. The Turkish military seems to focus on the conventional military capabilities that will be offered by the new fighter, and in particular its contribution to increasing the Turkish Air Force's offensive and stand-off capacity.⁴⁷ This is reinforced by the current work of the Turkish defense industry on the SOM cruise missile, which will be adapted, in cooperation with Lockheed Martin, to be carried by the F-35.48 This focus on the contribution of the new fighter to the military power of the Air Force is even more important given the degradation of the relations between Turkey and Russia, the deteriorated environment in the Middle East and the involvement of the Turkish military in Svria.

^{43.} Aaron Stein, "Turkey's Airplane-less Nuclear Weapons," *Turkey Wonk*, April 15, 2014.

^{44. &}quot;Turkey keeps plan to buy 100 F-35 fighter jets", *Reuters*, 23 February 2012.

^{45. &}quot;PM Davutoğlu announces major defense projects", *Daily Sabah*, 8 January 2015.

^{46. &}quot;Turkey keeps options open for fighter buy", *Hurriyet Daily News*, 27 September 2005.

^{47.} Can Kasapoğlu, "Turkey's National Security Strategy and Nato Nuclear Weapons", in eds. George Perkovich and Sinan Ülgen, *Turkey's Nuclear Future*, Carnegie Endowment for International Peace, Washington DC, 2015.

^{48.} Marina Malenic, "Lockheed Martin Announces Roketsan Teaming on New F-35 Standoff Missile," *IHS Jane's Defence Weekly*, October 22, 2014

In this context, no mention has ever been made publicly of a potential dual-capacity. Given the lack of public debate on the nuclear status of Turkey, there is little chance that is will be a matter of discussion, even if extra costs are necessary to adapt the planes to their mission. One could however suppose that the Turkish government will prefer conserving its role in NATO's nuclear mission by opting for dualcapable aircraft. In addition to bolstering the US-Turkey relationship and confirming a decade-old policy on the matter, this choice could come as an answer for some genuine security anxieties of the Ankara, which seems convinced of the pertinence of deterrence to counter rising threats such as an aggressive Russia or the still-concerning risk of WMD proliferation in the region.⁴⁹

Conclusion

The acquisition by European countries of dual -capable aircraft will carry a significant message about their willingness to pursue the nuclear sharing mission. Assumed to be very unpopular among the European public (despite the paucity of reliable polls), this mission is also often criticized by political parties and members of Parliament. Among the current host states, some national have (non-binding) **Parliaments** voted motions that try to prevent the acquisition of the Block-4B, which will enable F-35As to carry the B61-12s. To this day, this activism has however had a limited impact on acquisition developments. When answering questions about this issue, governments have

49. Aaron Stein, *Turkey and Tactical Nuclear Weapons: A Political Love Affair*, Ekonomi ve Dış Politika Araştırma Merkezi, 2012.

been very vague and non-committal, and have seemed more bound to their obligations towards the Alliance than to decisions made in Parliament.

philosophical countries, this most opposition has in fact been overshadowed by a debate on the cost of the aircraft itself. In a time of austerity, the necessity to renew air capabilities with an expensive stealthy and technologically advanced system does not create a consensus. While the desire to get rid of an operational Air Force that can be deployed abroad remains a minority view in all countries, most political parties in the host states where the issue is debated are skeptical opportunity to support the about the acquisition of additional capacities that will serve more clearly NATO's interests than their own. While they often evoke the need for industrial and economic benefits for their home country, these politicians also insist that the procurement program must be affordable. In this context, the financing of the adaptation of part of the fleet to the B61 is bound to provoke heated debate. The United States already anticipates such difficulties since it evoked the possibility of NATO or Washington covering the additional costs.

In any case, following the evolution of the JSF program in Europe will give clues on the future of extended deterrence on the continent. The same can be said about the deployment of B61-12s in the host states, which is scheduled for the coming years for the first weapons, and is probably going to be very unpopular if and when known. Whether elected governments will find it easier to resist the pressure of public opinion or of NATO will determine the nuclear landscape in Europe for the coming decades.

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