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FORTY-SEVENTH SESSION

Antimissile defence: the implications for European industry

# REPORT

submitted on behalf of the Technological and Aerospace Committee by Mr Valleix and Mr Cherribi, Rapporteurs

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on antimissile defence: the implications for European industry

#### AMENDMENT

<sup>&</sup>lt;sup>1</sup> Adopted unanimously by the Committee on 6 November 2001.

<sup>&</sup>lt;sup>2</sup> Members of the Committee: Mr Atkinson (Chairman); MM Cunliffe, Kolb (Vice-Chairmen); Mrs Aguiar, MM Arnau Navarro, Azzolini, Ceder, Cherribi, Danieli, *Díaz de Mera*, Dimas, Etherington (Alternate: Meale), Haupert, Jung, Le Guen, Luís, Maass, Marshall, Martínez Casañ (Alternate: Puche Rodríguez), Mauro, Mrs Melandri, Mr Monfils, Mrs Onur, MM Valk, Valleix, Wodarg, Mrs Zissi, N....

Associate members: MM Bergvinsson, Cerrahoglu, Eörsi, Kalkan, Macé, Malat, Marthinsen, Pokol, Saglam, Zemke, Zielinski, Zlotowski, N ...

NB. The names of those taking part in the vote are printed in italics.

#### **RECOMMENDATION 703<sup>1</sup>**

#### on antimissile defence: the implications for European industry

The Assembly,

*(i)* Recalling that the implications of antimissile defence for European industry come under the responsibility of the Council, as the custodian of Article V of the modified Brussels Treaty, and fall within the purview of WEAG, which remains part of WEU, and that these issues cannot therefore be left exclusively to the Atlantic Alliance or the European Union;

(*ii*) Noting with satisfaction the new position of the United States Administration in favour of a discussion with its friends and allies on the deployment of an antimissile system whose title, moreover, it has changed from "National Missile Defense" to simply "Missile Defense";

*(iii)* Considering that Europe perceives its security as continuing to be guaranteed mainly by agreements on disarmament and armaments control, in particular the ABM Treaty on the limitation of antiballistic missile systems;

*(iv)* Taking the view that any revision or abrogation of that Treaty can only come about as the result of a consensus between the United States and Russia, as signatory states;

(v) Welcoming in this connection the meeting of minds between the United States and Russia during recent talks between the Presidents of both countries;

(*vi*) Considering that it would be desirable for China to be involved in any future agreement and with that perspective in mind for that country and Europe to draw closer together on antimissile defence;

(*vii*) Recalling that the non-military use of space must continue to be an essential aim for all countries;

(*viii*) Stressing the need for Europe to acquire a European missile defence capability that is compatible with the ABM Treaty, for the protection of its forces during operations;

(ix) Recalling the proposals Russia has made to NATO for, on the one hand, a non-strategic pan-European missile defence system (Euro-ABM) and on the other hand, cooperation in the field of satellites;

(x) Noting, furthermore, that Japan is also developing a theatre missile defence system with a naval component similar to the American Navy Theater Wide system;

(*xi*) Taking into account also the NATO feasibility study on a theatre missile defence system, currently in the invitation-to-tender phase;

(*xii*) Taking into account the discussions that have started at industrial level between Israel and the United States on possible cooperation in the field of BPI (boost phase interception of missiles);

(*xiii*) Noting that, notwithstanding the considerable political as well as technical differences between the American and European analyses of antimissile defence, there are nevertheless areas of agreement, in particular in the field of terminal defences and early warning satellites;

(*xiv*) Recalling in that connection, among other examples of transatlantic industrial cooperation, the MEADS programme being conducted as a cooperative venture by Italy, Germany and the United States, as well as the industrial partnership involving EADS, Lockheed Martin and Boeing for a study of the NATO tactical antiballistic missile system;

(xv) Emphasising that current antimissile defence studies involving Europeans focus on theatre missile defence and in most cases are being conducted in cooperation with the United States;

 $<sup>^1</sup>$  Adopted unanimously by the Assembly on 5 December (11<sup>th</sup> sitting) on the basis of the amended draft recommendation.

(xvi) Welcoming the major rationalisation and restructuring effort made by the European defence industry over the last decade, enabling it to face the future in circumstances similar to those of its American competitors;

(xvii) Considering that the development of a European defence industry, particularly in the field of antimissile defence, is both the consequence of the setting-up of a European defence and a prerequisite for it, and that the prospects for the industry's future development are, to a large extent, interlinked with it;

(*xviii*) Considering, finally, that the implications for European industry of possible participation in a missile defence system can only be evaluated once the United States and Russia have decided on the systems they wish to develop and propose to the European states,

## RECOMMENDS THAT THE COUNCIL

Task WEAG to assess the implications for European industry of an antimissile defence system, with the aim of drawing up a European R&D programme for the purpose of demonstrating Europe's technical and industrial capacities in this field, taking into account the following factors:

- (a) a future European antimissile defence strategy could be based on an architecture consisting of a first line of defence composed of land-based, naval or air-based BPI (boost phase interception) systems deployed in Turkey and the Black Sea, a second line of defence composed of naval TMD systems deployed in the eastern Mediterranean and a third line of defence composed of sea- or land-based TMD platforms for the terminal defence of ports and towns;
- (b) terminal defence and early warning systems would offer synergy with both American missile defence systems and the European Security and Defence Policy, and with satellite warning systems it would be possible to pool technologies and data among the United States, Europe and Russia;
- (c) it would make sense to establish an architecture reflecting the specificities of each country and allowing a differentiated approach, in other words a sharing of tasks, the United States taking responsibility, for example, for intercepting missiles during the boost phase and mid-course, while the Europeans would be responsible for terminal defence;
- (d) that division of responsibilities should take place at both operational and, of course, financial level;
- (e) a number of cooperation programmes are already under way, but further in-depth industrial cooperation should be envisaged.

#### EXPLANATORY MEMORANDUM

#### submitted by Mr Valleix and Mr Cherribi, Rapporteurs

#### I. Introduction

1. The election of George W. Bush as President of the United States strengthened the feeling among Americans that it was not so much a question of whether the United States would develop a National Missile Defense plan (NMD), as when it would do so. The new Administration hastened to reassure its allies that it would consult them on the matter, and it tried to tone down the national character of the project by stating its desire to place all its allies under the protection of an antimissile shield. Indeed, the initial acronym NMD has now been replaced by the more global acronym MD (for Missile Defense) in official speeches by members of the US Administration. Since the United States was so devastatingly hit by the terrorist attacks of 11 September 2001, the debate on the need for such a system has been fuelled by both the advocates and opponents of such a system.

2. The United States' reason for wishing to include its European allies in its defence project is obvious. A Europe which felt vulnerable to missile attack would certainly not encourage the United States to intervene militarily – and would be even less inclined to engage at its side – in regional conflicts, whereas the United States needs the political and military support of its allies in order to conduct such military operations. A missile defence system which did not guarantee Europe's security could therefore lead to a loosening of transatlantic ties. Hence, in the present context of international terrorism, the Americans are trying to convince their European allies, as well as Russia and China, of the immediate need for such a missile shield.

3. The main obstacle to a missile defence system remains the ABM Treaty (on the limitation of antiballistic missile systems) which prohibits the United States and Russia from deploying national missile defence systems to protect their territory against attack from intercontinental ballistic missiles (ICBMs). Each side is authorised to maintain a small site containing 100 interceptors in order to protect its capital, or an offensive missile facility, but it is not allowed to shield the whole of its national territory. The proponents of the arms control concept, first and foremost Russia, argue that the ABM Treaty – emanating from the 1969-72 Strategic Arms Limitation Talks (SALT) – paved the way for the Strategic Arms Reduction Treaties (START), by providing each side with the guarantee that their remaining missiles would be capable of reaching their targets, enabling deterrence to be maintained using a smaller number of missiles.

4. Many European arms control advocates oppose the idea of an antimissile shield, because they are concerned that if the ABM Treaty were to be revoked, this would lead Russia to abandon the START process and to keep 6 000 missiles at a time when it cannot safely maintain such an arsenal. They also fear that China would feel obliged to considerably increase its stocks of 18-20 ICBMs in order to continue to protect itself against an attack from the United States, although in fact it has already adopted a more confrontational attitude and plans in any event to build up that arsenal. In any case, a power build-up by China could lead to an arms race with India and Pakistan, with repercussions at global level. It is therefore in the European countries' interest to encourage negotiations between the United States and Russia, rather than just stating their objections or reservations.

5. This is why the WEU Assembly recommended to the Council on 17 May 2001 during its 47<sup>th</sup> session<sup>2</sup> to "develop in the broad forum of strategic reflection involving the 28 countries a common position on European antimissile defence, based on a joint assessment and definition of ballistic threats and on the development of a European non-strategic antimissile concept that harmonises the American antimissile programme, the Russian proposal on a Euro-ABM and European interests in that area, and that it submit that position to the Alliance".

<sup>&</sup>lt;sup>2</sup>Assembly Document A/1737 on "European antimissile defence: a role for Russia", submitted on behalf of the Technological and Aerospace Committee by Mrs Kestelijn-Sierens and Mr Martínez Casañ, Rapporteurs, 20 June 2001.

European countries must consider which capabilities they will have at their disposal to protect 6. their forces during operations. It is not certain that they will in the future be able to engage forces without at least a lower-layer antimissile shield, particularly in regions where the presence of weapons of mass destruction is suspected. They must therefore decide whether they are to be totally or only partially dependent on the United States (or NATO) in that area<sup>3</sup>. However, there is a major difference between the notion of a national defence against ICBMs, which is prohibited by the ABM Treaty, and a defence against shorter-range missiles, which it allows. The United States and several other NATO countries are currently developing theatre missile defence (TMD) systems precisely against such shorter-range missiles. NATO itself has launched a feasibility study for a tactical missile defence system which is currently in the invitation-to-tender phase. TMD involves a defence against the whole spectrum of short-range threats to troops on operations and includes theatre systems designed to protect a territory against all missiles with a range of less than 3 500 km. Given the fact that there are several potential missile threats at a shorter distance than that from Europe, a TMD system could be used to defend the whole national territory of a European country. Conversely, the threats to the United States and Canada would come from ICBMs.

7. The WEU Assembly has twice submitted recommendations to the Council on this matter. First of all, in the report submitted during its  $46^{th}$  session<sup>4</sup> on "transatlantic cooperation on antimissile defence", it recommended that the Council "task the Special Working Group to resume immediately the process of reflection on antimissile defence and (...) establish a European R&D programme in order to demonstrate Europe's technological and industrial capacities in this area". Then, in its report submitted during its  $47^{th}$  session<sup>5</sup> on "antimissile defence: a role for Russia", it recommended that the Council "use the WEAG framework to evaluate the impact of an antimissile defence on European industry, taking into account that European technological and industrial capabilities will be duly incorporated into any joint system (and) that Europe must have an autonomous early warning system as envisaged in WEU's Noordwijk Declaration".

8. In spite of those initiatives, the interest of the European countries for a European antimissile defence remains limited, and they are in any case only considering lower-layer systems. Turkey is the only country interested in acquiring a system to defend its territory (probably against Iranian ballistic missiles), but development contracts will not be placed before 2004. However, the events of 11 September have brought home to the Fifteen the need to speed up European integration in the fields of defence and justice. Indeed, the 15 heads of state and government have declared that they wished to make the European Security and Defence Policy operational more rapidly.

9. This report will take stock of the present situation and likely developments as regards the American programme for defence against long-range missiles, as well as TMD systems in the NATO framework, before evaluating progress on the Russian missile defence programme. It will study the position of China on this issue, then those of the European countries, and will conclude with an analysis of Europe's technological and industrial capacities in the field of antimissile defence.

#### II. Antimissile defence in the United States

10. The first antiballistic missile defence studies were carried out in the United States in 1955. For 25 years the United States searched for technically feasible solutions to ward off ICBM attacks from the then Soviet Union. The various systems it envisaged were based on nuclear-tipped ballistic interceptors. During the SALT (Strategic Arms Limitation Talks) negotiations between the United States and the USSR, the experts from each side agreed on the technical definitions of the terms ABM radar, ABM interceptor and ABM site. Those definitions can be found in the 1972 ABM Treaty.

11. During that period the United States deployed and regularly upgraded a warning and tracking network using DSP (Defense Support Program) infrared satellites and PAVE PAWS (Position and

<sup>&</sup>lt;sup>3</sup> "Missile defense: the view from the other side of the Atlantic", Arms Control Today, September 2000.

<sup>&</sup>lt;sup>4</sup> Assembly Document A/1717 on "transatlantic cooperation on antimissile defence", submitted by Mr Atkinson, 6 December 2000.

<sup>&</sup>lt;sup>5</sup> Assembly Document A/1737 on "European antimissile defence: a role for Russia", submitted by Mrs Kestelijn-Sierens and Mr Martínez Casañ, 20 June 2001.

Velocity Extraction Phased Array Warning System) radars, five of which remain operational to this day. Given the technical, financial and political difficulties involved in keeping nuclear-tipped interceptors in operational condition, the United States turned in 1978 to exo-atmospheric hit-to-kill ballistic missiles as part of its HOE (High Overlay Experiment), SDI (Strategic Defense Initiative) and BMD (Ballistic Missile Defense) programmes. Those technological developments formed the basis for the NMD solutions proposed by the Pentagon.

12. In 1999 the US Congress voted the National Missile Defense Act (NMDA) under which the Administration was to deploy, as soon as technologically possible, a system of defence for the whole United States territory (including Alaska and Hawaii) against three types of threat to US citizens: those emanating from the so-called states of concern (formerly called "rogue states"), accidental launches of ballistic missiles and unauthorised launches. The Americans were concerned at the time about the proliferation of ballistic delivery vehicles which could reach the United States<sup>6</sup>. The "rogue states" were clearly identified from the outset by the NMDA: these were, in particular, Iran, Iraq and North Korea. It should, however, be noted that the lack of a clear definition of the other two types of threat allows us to include in them the Russian and/or Chinese arsenals.

13. In response to that decision by Congress, the Clinton Administration instructed the Pentagon to make proposals regarding the technical solution, timeframe and funding for such a project. The result was the NMD programme. Following the disintegration of the Warsaw Pact, it was also necessary to redefine the requirements for the protection of American troops deployed in theatres abroad (TMD: theatre missile defence). The Pentagon therefore proposed to Congress that the forces (and the corresponding budget requests) be dimensioned for two simultaneous deployments in external theatres. The proposed NMD architecture was based first of all on an upgrading of existing satellite warning systems (DSP/SBIRS and PAVE PAWS) and secondly, on proven technologies for the XBR fire control radars and the ground-based interceptors (GBI). For the deployment of the NMD system the United Kingdom and Denmark would need to agree to modernise the UEWR (upgraded early warning radar) systems in Fylingdale (UK) and Thule (Greenland), while Germany's agreement was necessary for the reception of the space-based infrared system (SBIRS) in Ramstein.

14. In response to the – in some cases hostile – reactions of the rest of the world to NMD, the Bush Administration instructed the Pentagon to define a defence system which met with the requirements stipulated by Congress but which could also afford protection to the United States' friends and allies. This gave rise to MD – missile defence. The result of that new approach, which is currently being developed, should be an architecture which is not very different to that of NMD. The extension of the system to include not just the United States (including Alaska and Hawaii) but also its European allies should not involve insurmountable problems. Under the Washington Treaty, the European allies undertake to defend the United States, just as the United States undertakes to defend its European allies. Hence, just as the United States and Canada must take account of the repercussions of their defence plans for Europe, the European allies should also ensure that their missile defence policy contributes to the effective defence of North America.

15. In the long term, however, the high degree of dependence on the European allies is likely to prove an obstacle to the development of MD. The Pentagon therefore, encouraged by the US Navy, proposes in the medium term to deploy radars or even interceptors on ships, to reduce the United States' dependence on its friends and allies for the purpose of defending the American people. The Bush Administration has not, to date, made a final choice among these different options.

16. The United States' 2002 defence budget makes provision for several boost phase interceptor (BPI) studies<sup>7</sup>, one involving sea-launched, another, space-launched interceptors. Indeed, the Pentagon has just made budget requests for 2002 for each of those concepts, to the tune of \$50 million (57 million euros) and \$63 million (70 million euros) respectively. If Congress accepts, the two projects will be added to the airborne laser (ABL) project for next year, which, at \$410 million (450 million euros), is even more generously funded. The ABL being developed by Boeing and TRW on the basis of the 747-400F is to be tested in real conditions against a Scud missile by the end of 2003. Boost

<sup>&</sup>lt;sup>6</sup> The vote was triggered by the Taepo-Dong 1 missile flight tests conducted by North Korea in 1998.

<sup>&</sup>lt;sup>7</sup> Air & Cosmos No. 1808.

phase interception (BPI) is gaining support, because it offers the tactical advantage of only having to deal with the enemy launcher and not with possible multiple re-entry vehicles. Moreover, it has a psychological advantage in that the enemy warheads pose a threat to the aggressor himself as they fall on his own territory. BPI proponents point out that a system of this type could be deployed on a ship stationed off the coast of North Korea. Iran and Iraq could, however, pose a more tricky problem in view of their size and geographic location. One solution would be for Turkey to agree to the stationing of a missile defence system close to its borders with Iran and Iraq. Another would be to ask Russia for assistance.

17. Although the space-launched kinetic projectile designed to intercept a missile in the boost phase resembles the Brilliant Pebbles project of President Reagan's Star Wars programme, the naval interceptor is an entirely new missile in terms of the kinetic performance required. The Pentagon concept refers to a two-stage missile with acceleration of up to 30 g and velocity of up to 8 km/s, performance levels which are not attained by any existing missile in the US Navy. This is why the American engineers will probably not be able to base their work on the Standard missile and Aegis cruiser. Finally, the hit-to-kill concept so favoured by the Americans is less justified for boost phase than for re-entry phase interception. The "Naval BPI" could therefore fall back on a classic fragmentation warhead – less demanding in terms of the guidance system – if the development of a homing device capable of "seeing" through the plume of the target it is chasing proves to be too complex.

18. Israel and the US have started discussions at industrial level, since the former expressed the wish for cooperation in the field of  $BPI^8$ , with a view to supplementing Arrow with a system of UAVs to patrol zones in order to detect and prevent the launch of ballistic missiles. The system proposed by industry, which has not yet been endorsed by the authorities, would be based on Global Hawk (Northrop) – a HALE (High Altitude Long Endurance) UAV – carrying sensors which would transmit target data to a series of Heron 2 UAVs (Israeli Aircraft Industries) carrying interceptor missiles. The Heron-2 could benefit from developments made in partnership with EADS in connection with France's SIDM system, for which both partners have been chosen.

19. In the longer term the US Navy is also envisaging equipping some of its Hawkeye Advanced aircraft (the successors of Hawkeye 2000) with IRST (Infrared Sensor and Tracker) sensors which would be integrated in the mission system and in the CEC (Cooperative Engagement Capability) highbit rate data transmission chain. Thus equipped, the surveillance aircraft could then be part of the US Navy's antiballistic missile system by detecting missile launches and determining their trajectory, then transmitting the data to Aegis cruisers via the CEC system. The Aegis cruisers could then launch Standard SM-2 Block IV A missiles to intercept the enemy missile in the re-entry phase, or SM-3 missiles to intercept them in the ascent phase, or else transmit the target tracking data to other interceptor units.

20. This is in fact the third time since the 1960s that the United States has pleaded in favour of a missile defence system to guarantee its security. While the Johnson and Reagan projects failed due to the lack of sufficiently advanced technology, the Bush missile defence project has a real chance of giving rise to tangible developments. However, the Administration has yet to specify the precise nature and scope of this new shield by answering two key questions: who is it aimed at and whom is it designed to defend? Moreover, the Administration will also need to convince both the US Senate (which now has a Democrat majority) and its European and Asian allies that the project is indeed justified. That will only be possible if the United States complies with four basic principles: to link the missile defence project with a broader non-proliferation strategy, to extend the shield to protect Washington's friends and allies against attacks from the new holders of nuclear weapons (and not China and Russia), to subject the system to scrupulous testing and only deploy it if its effectiveness is proven and finally, to cooperate as soon as possible with Russia.

21. On 2 October 2001 the US Senate unanimously approved draft legislation on a \$345 billion (376 billion euros) defence budget for 2002. Indeed, the supplementary budget request for \$18.4

<sup>&</sup>lt;sup>8</sup> Air & Cosmos No. 1795.

million submitted last summer by the President was passed by the members of the Senate who gave the President almost unanimous support in the troubled times following the 11 September terrorist attacks. In that envelope, which is up by 11% on last year's budget, a sum of \$8.3 million has been earmarked for the antimissile shield, despite the controversial nature of the project. The members of the Senate also made a gesture for the war on terrorism by approving an additional \$217 million as compared with last year's budget<sup>9</sup>. All that remains therefore, is for the United States to convince its allies.

22. Even though George W. Bush, in his 1 May 2001 speech on missile defence, described those four points as essential to MD, he did not at all specify whether the antimissile shield was designed to counter the threats likely to emanate from North Korea or Iran over the next ten years, or whether it had the more ambitious objective of rendering the Russian and Chinese arsenals ineffective. And while Mr Bush has underscored his hope for cooperation between the United States and Russia on defence – without ever defining this new strategic structure with Russia or the defence system being envisaged – he only mentioned China in passing. The new Administration will therefore need to be a lot more explicit if it wishes to obtain the agreement of its friends and allies for the development of MD.

## III. Russia and antimissile defence

23. Russia plays an important role in the missile defence debate, for two reasons. First of all, the Russian Federation is the only country at the moment to have an operational strategic antimissile system. That system, which has been upgraded several times over the past three decades, is authorised by the ABM Treaty, because it covers only a limited area around Moscow, while the aim of the American system would be to cover the whole territory of the United States. The second reason is that the ballistic proliferation which the Americans, Russians and Europeans claim to want to counter is in large part due to the former USSR.

24. The Russian ABM system was deployed in two stages. The first, in the 1970s, led to the creation of the first ABM (A35) system, based on a radar early warning network known as "Hen House". The system consisted of not very sophisticated "Dog House" and Cat House" radars which controlled "Galosh" ballistic interceptors. In 1972 the ABM Treaty authorised 200 interceptors on two sites, but the 1974 Protocol limited them to 100 on one site (ICBM or capital). The Russians therefore chose Moscow. However, the system could only intercept a dozen ICBMs, was easily overwhelmed and was not sufficiently sophisticated to deal with countermeasures. Furthermore, the interceptor used a warhead with a yield of several megatons. The final result of the A35 system was to prompt the United States, United Kingdom and France to increase their offensive capabilities.

25. In the 1990s, with a view to achieving earlier interception for the purpose of creating a layered defence system, a second generation was introduced using a new two-tier system (A135). Early detection was provided by Oko and Prognoz infrared (IR) satellites, working with large phased array radars (LPARs) positioned around the periphery of the territory. The data they provided enabled SH-11 Gorgon exo-atmospheric interceptors with a 400 km range to be engaged at an early stage<sup>10</sup>. A second layer of defence used data from a central radar (Pillbox) for the control of slower interceptors (SH-08 Gazelle<sup>11</sup> and S-300V). The Gorgon and Gazelle interceptors are housed in underground silos to make them less vulnerable. They are 4 to 33 tonne multi-stage launchers with a nuclear warhead. The new system also contains an upgraded Pillbox broad band radar network, as well as Hen House radars. This antimissile system, which can be used against very low orbit satellites, can in principle intercept long-range missiles equipped with penetration devices.

26. Russia is currently trying to modernise its arsenal with a view to deploying an American-type ABM defence system. Thus a recent addition to the Russian arsenal, the S-400 Triumph (SA-20),

<sup>&</sup>lt;sup>9</sup> Since the House of Representatives adopted slightly different draft legislation on 25 September, the two texts must now be harmonised.

<sup>&</sup>lt;sup>10</sup> The new system comprises three dozen Gorgon exo-atmospheric interceptors.

<sup>&</sup>lt;sup>11</sup> The new system comprises more than five dozen Gazelle endo-atmospheric interceptors with a 100 km range (SH8).

seems to have a range of 120 km and can intercept targets up to an altitude of 35 km. The higher performance S-500 should be able to reach targets up to a range of 3 500 km. However, it would seem that Russia has not yet engaged in the development phase of the S-500, due to a shortage of financial resources. It has apparently proposed to the United States a joint development of the system. Furthermore, Russia is also focusing on the development of low-orbit optical observation satellites of the LEO or SBIRS type (for example, Brilliant Eyes), optical sounding rockets and non-nuclear exoatmospheric interceptors of the ERIS type and finally, new central radar systems with optical observation aircraft of the AST type and non-nuclear endo-atmospheric interceptors of the HEDI type.

27. There seems then to be no doubt at the present time as to the lasting nature of the Russian ABM system. Nevertheless, at a time when Russia is accusing the Americans of calling the ABM Treaty into question – at least partially – with their missile defence projects, there are two points which raise doubts about Moscow's own compliance with that Treaty. First of all, the coverage provided by the system beyond the capital, on which there have long been doubts<sup>12</sup>, and the positioning of the early warning radars, which since the collapse of the Soviet Union have been outside Russian territory. Furthermore, the Krasnoyarsk radar, no longer operational, was for a long time considered to be the beginning of a new defence system that was incompatible with the Treaty. Those elements have now lost their strategic importance, but in strictly legal terms Russia is not necessarily the obedient pupil it makes itself out to be with regard to the ABM Treaty.

28. Above and beyond its unique experience in the field of antimissile defence, Russia has also played a leading role in the proliferation of ballistic missiles in third world countries. The current ballistic programmes of countries like Egypt, Iraq, North Korea, Iran and Syria are still based on Soviet missiles (Frog or Scud). This is the case, for example, of Iraq's Al Hussein missile (600 km range), North Korea's No-Dong (1 000 to 1 300 km) and Taepo-Dong (1 5000 to 2 000 km) missiles and indirectly also, via North Korea, of Iran's Shehab and Pakistan's Ghauri missiles (both 1 000 to 1 300 km). Hundreds of those missiles were fired during the Iran-Iraq war and the Gulf war. The 70 km-range Frog and 300 km-range Scud missiles built by the Soviet Union in the 1950s were sold to Warsaw Pact countries and to allies such as Egypt, and then more widely in the third world.

29. These days those missiles have spread all over the world and have been upgraded and their role adapted. The beneficiaries (Syria, Pakistan and Iran, for example) have got together to maximise their chances of modernising the system and procuring essential components abroad. In many cases those countries, in particular North Korea, have become exporters themselves. A number of countries – India, South Korea, Egypt and the United Arab Emirates – are currently interested in purchasing the Russian SA-12 system, which Russia presents as being comparable to Patriot. China has already imported some 100 to 200 SA-10 systems which are deployed around Beijing, and would be interested in producing the missile under license. Furthermore, China's HQ-18 missile is said to be a copy of Russia's SA-12 and to possess an antimissile capability, although this cannot be confirmed. Some of the more recent problems also originated in Moscow, whose non-proliferation policy has been one of the main victims of the various economic reforms implemented over the last ten years.

30. Russian sales of ballistic missile technology to North Korea and the Middle East have caused much acrimonious discussion with Washington. The possibility of ballistic attack – or indeed blackmail – by a growing number of countries cancels out one of the major protective features of previous defence systems with regard to most countries, namely, distance. This has become a reality which Europe, in view of its geographic position and alliance with the United States, must face up to. However, the dangers of ballistic proliferation are not limited to Western countries. They are slow to emerge, but when they do, they can also pose a threat to the proliferating countries themselves. This is the conclusion that seems to be implicit in many of the statements made periodically by Russian

<sup>&</sup>lt;sup>12</sup> See *Défenses antimissiles, la France et l'Europe,* Groupe X-Défense, FEDN, Paris, 1986: "The ongoing modernisation of this system concerns the radars in particular. Once these are operational they could make a decisive contribution to an ABM defence capable of protecting an area much larger than the region of Moscow alone. Furthermore, the Soviet Union has now acquired a network of early-warning radars which, as it stands, could provide an essential element in an ABM system which would protect a much larger part of Soviet territory than is authorised by the 1972 ABM Treaty (150 km radius)".

representatives, recognising the existence of a ballistic threat from a number of new countries, but not always drawing the logical conclusions. This was even the reason put forward for an ABM3 deployment.

31. In order to better counter those threats, Russia and the United States, during their 1997 negotiations on the demarcation between strategic and non-strategic missile defence systems, drew up a series of confidence-building measures which included: reciprocal notification of interceptor missile launches and of test stations from which missiles could be launched; exchange of information on the nature and number of non-strategic antimissile sites; exchange of information on the operating concept of non-strategic antimissile systems and on the specifications of non-strategic interceptor missiles and antimissile radars - information enabling ballistic and flight characteristics to be evaluated. Furthermore, it was stipulated that one party would have the possibility of monitoring demonstration tests performed by the other party (on a voluntary basis) on non-strategic antimissile systems or components. In June 2000, the two countries decided to conduct joint military exercises at Fort Bliss, Texas, on the theme of defence against short- and medium-range missiles. Two similar exercises had already taken place in Moscow in 1996, and in Colorado in 1998. Furthermore, the parties pledged to make a unilateral statement each year to the effect that they did not intend to develop non-strategic antimissile systems whose parameters exceeded the agreed values, or to test strategic antimissile systems involving the use of missiles equipped with MIRVS (multiple independently targetable reentry vehicles).

32. However, Russia seems to be more tempted by a BPI system aimed at specific countries than by limited long-range missile defences which could be extended, thereby neutralising Russia's nuclear deterrent. This is why it proposed to cooperate with NATO on a joint missile defence system. In February 2001, Russia submitted to NATO Secretary-General Lord Robertson, as well as to several European governments, a proposal for an antiballistic missile system known as Euro-ABM. One of its features is that it complies with the ABM Treaty, while allowing the Russians to cooperate with European countries on warning and active defence in the field of non-strategic missiles. Just like the antimissile defence system currently under study within NATO, Euro-ABM does not offer protection against threats exceeding a range of 3 500 km. In fact this project is geared more to European states than to the United States or Canada, since its aim is to defend Europe, including Russia, but not North America<sup>13</sup>.

33. The United States nevertheless has declared its readiness to study the Russian proposal. Indeed, it is seeking by all available means to get Russia and China to agree to its withdrawing from the ABM Treaty so that it can launch its MD programme in all legality. It is therefore in its interests to support the Russian proposal. To that end, President Bush reminded his Russian counterpart during the APEC meeting in Shanghai on 20 and 21 October that the 11 September attacks made it necessary to continue research on the deployment of a missile shield to protect the US and its allies against possible terrorist attacks using ballistic missiles to deliver weapons of mass destruction. Mr Putin did not hide his scepticism, stating that he found it difficult to believe that terrorists would be capable of acquiring and launching ICBMs. The ABM Treaty was in his view a key element of global stability. Nevertheless, he concluded, it was necessary to be prepared for possible future threats. The two heads of state noted that they had made progress in their discussions on the ABM Treaty and agreed to hold another summit in Washington on 11 and 12 November at Mr Bush's private ranch in Crawford<sup>14</sup>.

34. The European states have not yet responded to that proposal, but in any case it considerably strengthens their negotiating position vis-à-vis the United States. One of its advantages is that it envisages an effective missile defence system which takes account of Russian concerns. Thus it could

<sup>&</sup>lt;sup>13</sup> On 16 June in Berlin, President Putin made reference to the idea of a pan-European antimissile shield which would reliably shield the whole of Europe from the Atlantic to the Urals.

<sup>&</sup>lt;sup>14</sup> According to the *Herald Tribune* of 23 October 2001, Mr Bush also seized the opportunity to inform the Russian foreign affairs minister, Igor Ivanov, that the United States was prepared to make considerable reductions in its nuclear arsenal. That decision, which has not yet been publicly announced, would not meet the Russian proposal of 1 500 nuclear warheads. A US government spokesman nevertheless stated that the Russians were satisfied with that result.

help preserve the strategic arms reduction process and offset the negative consequences of deploying a long-range missile defence system. NATO-Russia cooperation would also enhance control over Russian exports of ballistic missiles and related technologies, thereby reducing the risk of accidental or unauthorised ballistic missile launches which the Americans are so concerned about. Russian involvement in a joint antiballistic missile and theatre missile defence system could therefore help improve the climate of Russia's relations not only with the United States, but with the West in general.

## *IV.* The specific case of China

35. Four years on from the "historic" visit of Chinese President Jiang Zemin to the United States on 28 October 1997, and three years after President Clinton's visit to Beijing, there has been a considerable deterioration of Chinese-American relations. There is no talk any more of the "strategic partnership" announced by Bill Clinton in June 1998, or even of the less ambitious and more pragmatic programme proposed by Jiang Zemin, which would involve strengthening communication, increasing contacts, building a consensus and developing bilateral cooperation. On the contrary, the climate of suspicion that reigns over US-Chinese relations is fanned by nationalists on both sides. While the two countries' mutual economic and geopolitical interests make a breaking-off of relations unlikely, the coolness of those relations is a sign of their fragility. The first consequence of that tension is China's hostility with regard to the American missile defence programme and to the United States' ambitions to exert influence in eastern Asia through its TMD project. The second consequence is a tightening of the political and defence links between China and Russia.

36. China claims that the United States' missile defence plan risks upsetting the global strategic balance, severely hampering the process of nuclear disarmament and international anti-proliferation efforts, as well as threatening world peace and regional stability and even triggering a new arms race. In order to protect their interests, the Chinese authorities are continually underlining the important role of the ABM Treaty for maintaining global strategic stability, promoting nuclear disarmament and strengthening international security. China, in cooperation with Russia and Belarus, tabled a resolution on preserving and complying with the ABM Treaty, which was adopted by an overwhelming majority at the 54<sup>th</sup> UN General Assembly in December 1999. The resolution reminded the signatories to the Treaty that they were not authorised to set up an antiballistic missile defence system to protect the whole territory of a country and supported the ongoing efforts of the international community to preserve the Treaty's integrity and inviolability. The resolution, then, was an expression of its resolve to counter the development by the United States of an antiballistic missile defence system, thereby safeguarding the ABM Treaty.

37. Since then, China and Russia have strengthened their common position on the subject. On 18 July 2000, the Chinese and Russian heads of state signed a joint declaration in Beijing on antimissile issues in which they stressed that the ABM Treaty remained the cornerstone of global strategic stability and international security and provided the basis for major international framework agreements on reducing offensive strategic weapons and countering the proliferation of weapons of mass destruction. Finally, more recently, on 16 July 2001, Vladimir Putin and Jiang Zemin signed a friendship and cooperation treaty at the Kremlin in which both countries pledged to work to achieve a global strategic balance and international stability, and to join forces in opposing the American missile defence project. For the Chinese President, Russia's U-turn at the APEC meeting in Shanghai on 21 and 22 October is therefore difficult to swallow.

38. However, what upsets China most is the fact that since 1997 the United States has strengthened its defence ties with Japan, the Philippines and Singapore, and in 1999 announced its intention of deploying the latest generation of theatre ballistic missile defence (TBMD) systems in Japan, South Korea and possibly also Taiwan. Such a system provides protection against regional ballistic threats by intercepting enemy missiles before impact. China feels indirectly threatened by a missile defence system that would seriously weaken its nuclear deterrent capability. Indeed, such missile shields would clearly reduce the margin for manoeuvre it currently enjoys as a result of its nuclear arsenal and medium-range weapons. Moreover, the technological gap with which China's People's Liberation Army (PLA), and its naval forces in particular have to contend have forced the Beijing government to scale down its regional ambitions for the moment, particularly as regards Taiwan. The prospect of an

American MD system being installed therefore only accentuates its fear of losing Taiwan, particularly in view of the dangerous game Taiwan's President has been playing for the last two years in connection with the island's future status. With the active support of the right wing of the US Republican Party, he is calling for state-to-state relations with China.

39. Furthermore, Japan is developing a TMD naval component similar to the American Navy Wide system, whose mobility would enable it to protect the island of Taiwan in case of need. While China understands the need for the Seoul government to protect itself against North Korea, it nevertheless feels threatened by Japan which, under the protection of the TMD shield and a strengthened alliance with the United States, might want to develop its own nuclear arsenal. Japan has a large stock of plutonium for civilian use which could be used for military purposes, as well as powerful computers capable of simulating an explosion, and a space programme which could also be used for the purpose of building ballistic missiles.

40. This, then, is the context in which China has defined its responses to the possible setting-up of a TMD system. Its first reaction has been to upgrade and increase both its ballistic and nuclear arsenals. It is working in particular to develop a MIRV (multiple independently targeted re-entry vehicle) system. This system, initially developed in the 1960-70s by the United States and Soviet Union, allows a missile to be equipped with several nuclear warheads, making it capable of reaching several targets. MIRV-type missiles can therefore inflict more damage during the first strike, thereby preventing a retaliatory strike. They can more easily penetrate a missile defence system, since the warheads separate and enter enemy airspace independently of each other, and the system is reinforced with countermeasures to thwart enemy air defences. Although China has been working on the system since the 1980s, it has not yet, apparently, installed it on its ballistic missiles. However, that could change in the years to come. In parallel to the MIRV project, the acquisition of AWACS-type surveillance aircraft has been placed high on the list of priorities for China's PLA, as part of its modernisation drive. China plans to procure such equipment towards the end of 2005. The acquisition of those technologies would give China a real capability.

41. Another possible response by China would be for it to pull out of the arms control regime (the 1992 Non-Proliferation Treaty, NPT, and the 1996 Comprehensive Test Ban Treaty, CTBT) which it joined only relatively recently. Such a response would contribute to ballistic and nuclear proliferation in Asia, particularly since an increase in China's arsenal might prompt its Indian rival to upgrade its own arsenal, in turn inciting Pakistan to follow suit. China, however, which fears a new arms race above all else, has no interest in such a scenario coming about. Hence it is the first of the abovementioned responses which remains the most likely.

## V. Antimissile defence debates in Europe

42. European countries are divided on the issue of antimissile defence. France and Germany were very wary of the NMD project at the outset, but have toned down their position in recent months, now that they feel reassured that the Bush Administration will not be developing the system unilaterally. The United Kingdom has been far more conciliatory, even going so far as to offer its assistance or cooperation to the US. However, despite the absence of a joint European position on antimissile defence and the changing nature of the problem over the last two years, there are several factors which the European states have in common.

43. The main European criticism of the American missile defence project is that it violates the existing nuclear arms control and disarmament regimes and could trigger a new arms race. Like Russia and China, the European states wish to preserve the ABM Treaty, which they view as the cornerstone of strategic stability. They are therefore urging the United States to sign an agreement with Russia before deploying any kind of missile defence system. The aim is to support the American missile defence policy while avoiding an arms race, whether it involve defensive or offensive weapons. This means preventing the United States' unilateral withdrawal from the ABM Treaty, which could prompt strong reactions from Russia and China.

44. Another point of disagreement between Europe and the United States concerns the justification for such a system. The Europeans have doubts about the existence of a real ballistic threat from the so-called rogue states – Iran, Iraq, Libya and North Korea – with which they have more cooperative and

less hostile relations than does the United States. They doubt that those countries will really be capable in the near future of equipping their long-range missiles with nuclear warheads. A number of French defence specialists take the view that terrorism, in particular chemical or biological attacks – against which a missile defence system offers no protection – poses a much greater threat to the United States. Moreover, any ballistic missile defence system is easily saturated by a system of decoys. Hence there are doubts as to the relevance of such a system, unless its aim is to satisfy certain industrial interests or to engage certain states in an exhausting arms race.

45. Following a series of unsuccessful American interception tests in 2000, there is growing scepticism in Europe as to the feasibility of a ballistic missile defence system, and there are doubts about the relevance of a system which will take ten years to develop, when the threat, supposedly, is immediate. This explains why little work has been done in this area in Europe. Indeed, the work currently under way in Europe focuses rather on theatre missile defence (TMD) and in the majority of cases is being carried out in cooperation with the United States. Germany and the Netherlands, for example, have decided to procure the Patriot Advanced Capability 3 (PAC-3) system from the United States. Germany is also working with Italy and the United States on MEADS (Medium Extended Air Defence System). Furthermore, France, Italy and the United Kingdom are working on PAAMS (Principal Anti-Air Missile System), a frigate-based system, which could be enhanced to give it a theatre ballistic defence capability, while the European allies are involved in NATO feasibility studies on the development of low and high altitude TMD systems including ground stations, ships, aircraft and satellites<sup>15</sup>.

46. To conclude, it should be noted that there are considerable divergences between the American and European analyses of the missile defence issue. Generally speaking, the Europeans are sceptical about the reality of the threat to the current system of deterrence emanating from the so-called rogue states. They are not convinced of the need to supplement deterrence with antimissile systems, which supposedly give the states which possess them a greater number of possibilities for a strategic response. They are concerned that the American missile defence system would lead to decoupling, making it a central factor in their relations with the United States. Moreover, they have doubts about the opportunity costs of this mode of defence, in particular in terms of its impact on relations with Russia and on Chinese strategy, and the military and budgetary choices it entails. However, we will see that there are points of convergence between European and American interests in the field of terminal defences and early warning satellites, and that there are two possible architectures for a European antimissile defence.

## VI. Europe's technological and industrial capacities in the field of ballistic missile defence

47. To fully appreciate Europe's current missile defence capabilities, it is important to bear in mind the far-reaching changes that have taken place in Europe's defence industries over the last decade. Since the early 1990s, the United States' defence industry has been totally restructured, leading to the creation of five major companies which, due to the effects of size and synergy, enjoy a strong competitive position on both the domestic and export markets. Meanwhile, the defence budgets of Western countries, and of European states in particular, have continued to decline in the new geopolitical context of the post-cold war era. At the 1992 Maastricht Summit, the concept of a Common Foreign and Security Policy emerged as one of the three pillars of European integration. To implement that new policy, the European states need to define common political and operational objectives, while European industry must offer commercially competitive products in compliance with those objectives. The development of a European defence industry, particularly in the field of antimissile defence, is therefore both the consequence of the setting-up of a European defence and a prerequisite for it, while the prospects for the industry's future development are, to a large extent, interlinked with it.

48. The general decline of defence budgets that started at the end of the 1980s, and which was not offset by any growth of exports, encouraged a process of consolidation among Europe's defence companies. This led, in particular, to the creation in 1996 of Matra BAe Dynamics (MBD), involving a

<sup>&</sup>lt;sup>15</sup> See Chapter VI of this report for a detailed presentation of these technological developments.

merger of the missile activities of the French company Matra Défense and the British company BAe Dynamics. On 9 December 1997, the French, German and British governments signed a joint declaration calling for a reorganisation of the aerospace and defence sectors, with a view to achieving European integration on the basis of a well-balanced partnership. The same day, Spain, Italy and Sweden publicly declared their support for that initiative, which led, six months later, to the signing by all six countries of the Letter of Intent (LoI) which was intended to facilitate the process of restructuring the European defence industry. In July 1998 Aerospatiale and Matra announced their plans for privatisation and a merger, while at the end of 1999, Aerospatiale Matra, DaimlerChrysler Aerospace (DASA) and the Spanish company CASA launched EADS<sup>16</sup> (European Aeronautic Defence and Space Company), which was officially set up in July of the following year. In the UK, British Aerospace and GEC Marconi set up BAe Systems at the beginning of 1999. On 20 October 1999, Matra BAe Dynamics (jointly owned by BAe Systems and EADS), Aerospatiale Matra Missiles (owned by EADS), Alenia Marconi Systems (jointly owned by the Italian company Finneccanica and the British company BAe Systems) and the German company LFK jointly set up the European company MBDA, specialised in missiles and missile systems.

49. In spite of all those initiatives, however, technological progress in Europe has remained relatively limited in the field of ballistic missile defence. There was nothing on the subject in the United Kingdom's 1999 Strategic Defence Review, for example. Since it withdrew from the MEADS programme in 1996, France has taken an occasional interest in tactical ballistic missile defence systems, in particular with a project for an extension of the PAAMS-SAMP-T programme (Principal Anti-Air Missile system, which is equipped with the Aster missile). A naval component – SAAM, developed in cooperation with Italy<sup>17</sup> – will be deployed on the Horizon frigates for the defence of ships. The terrestrial version (SAMP/T) designed for the defence of troops in external theatres and for coastal defence will not be operational before 2008. Finally, Spain has a few low-performance Aegis vessels which could be modified to provide limited local area defence in the Mediterranean.

50. This lack of dynamism is due in large part to the limited budgets allocated to missile defence in Europe. Apart from Aster<sup>18</sup> and the other European industrial programme MEADS<sup>19</sup>, developed by EADS, most European industrial programmes still depend to a large extent on cooperation with the United States. EADS is also partner to Lockheed Martin and Boeing for a study of the NATO tactical ballistic missile system<sup>20</sup>. European countries and the United States, having understood the importance of technology transfers in the field of terminal defence systems, are also beginning to invest in satellites for the detection and tracking of ballistic missiles, both for strategic reasons and for the purpose of transatlantic cooperation. The cost of a capability enabling some degree of autonomy and cooperation is fairly accessible – some 500 million euros for two satellites in geostationary orbit providing stereoscopic coverage of the Mediterranean and Middle East.

51. Progress has already been made in this area. At the beginning of 2001, for example, EADS signed an agreement with Northrop Grumman on the Eurohawk UAV, which is a derivative of the American Global Hawk. For crisis-management purposes, this UAV can usefully replace geostationary satellites at a lower cost and with greater flexibility. The EADS ISR (Intelligence,

<sup>19</sup> MEADS (Medium Extended Air Defence System), a US-European air defence programme (involving

<sup>&</sup>lt;sup>16</sup> EADS is currently the European leader and world number 2 in terms of turnover.

<sup>&</sup>lt;sup>17</sup> France and Italy have been cooperating since 1988 on the FSAF project (Future Surface-to-Air Family) designed to equip their armed forces with air defences adapted to the tactical missile threat of 2000-2010. The programme is to provide the French and Italian navies with the PAAMS missile defence system, and the French air force and army, as well as the Italian army, with a local area defence system (SAMP/T: surface-to-air medium range terrestrial system). The SAAM system short-range, multi-target system to be carried on surface vessels of more than 2 000 tons, to provide them with local area air defence, including against anti-ship missiles. The UK has joined the PAAMS programme for the equipment of Royal Navy type-45 frigates.

<sup>&</sup>lt;sup>18</sup> Aster is one of the three main programmes of MBDA (with the air-to-surface system Storm Shadow/Scalp and the air-to-air system Meteor), bringing together the three countries which founded MBDA (France, Italy and the United Kingdom). The Aster 15 Naval antimissile missile successfully hit a missile in flight as it skimmed a few metres above the ocean surface, during a self-defence exercise involving short-distance interception.

Germany and Italy) with PAC-3-type antimissile capabilities and for which the funding in 2001 was \$50 million. <sup>20</sup> *Planet Aerospace* No. 5 (October-December 2001), page 4.

Reconnaissance and Surveillance) operational centre has sound experience in the field of tactical UAVs through the Piver/CL289<sup>21</sup> tripartite programme involving Canada, Germany and France and through the experience of its French subsidiary CAC Systèmes with its Fox series (in particular Fox MLCS). Finally, for maritime reconnaissance purposes, EADS Dornier has developed the vertical take-off rotary-winged Seamos UAV with coaxial rotors<sup>22</sup>. Alcore Technologies has also enhanced its range of reconnaissance UAVs with upgrades to Azimut and Futura and micro-UAV studies<sup>23</sup>. While part of the technology is already available, the political and operational defence objectives still need to be clearly defined.

#### VII. Conclusions

52. The question arising at the moment, particularly since the events of 11 September, is whether Europe will participate in the defence of its territory by joining the American or Russian missile defence programme, or by developing its own strategy. Even if the European and American viewpoints one day coincide, it will nevertheless be very difficult to create a transatlantic missile defence system which is politically, technically, diplomatically and financially feasible. There is, however, a strategy taking all four elements on board. The first line of defence in an "allied" architecture could consist of land-based, naval or air-based BPI (boost phase interception) systems deployed in Turkey and the Black Sea. The second line of defence could be naval TMD systems in the eastern Mediterranean and in the territorial waters of the NATO member countries. The third and final line of defence could consist of sea- or land-based TMD platforms for the terminal defence of ports and towns. For maximum effectiveness, various mobile missile interception systems could be used in each of the three missile flight phases, in order to neutralise a good part of the ballistic threats from the Middle East. Such an architecture could be more easily adapted to technological developments and evolving threats.

53. Hence in political and strategic terms, terminal defence and satellite warning systems would offer a twofold advantage. They offer compatibility – and indeed synergy – with American missile defence systems on the one hand, and the European Security and Defence Policy on the other hand. Furthermore, with satellite warning systems it would be possible to pool technologies or gathered data among the United States, Europe and Russia. Nevertheless, NATO will doubtless have to wait for years before the European countries reach a consensus, for two reasons. First of all, because a European missile defence system could not be operational for at least another ten years. And secondly, because the Americans cannot commit themselves to a precise architecture before having completed the development and testing of the different systems and technologies, which could take a number of years. Moreover, a cost-sharing system can only be debated once the technological development and testing have been completed<sup>24</sup>. The budgetary issues will only crystallise once the systems that have been chosen have reached the production stage. Hence it is not in Washington's interest to press its allies to take a rapid decision.

54. In this situation it would make sense to adopt a strategy of "differentiation" based on an architecture reflecting the different conditions and constraints confronting NATO member countries for the development of a common transatlantic system. The United States and its allies should therefore consider an approach involving a sharing of the responsibilities. At operational level, the United States could, for example, assume responsibility for intercepting missiles during the boost phase and mid-course. This would correspond to the first line of defence in an architecture consisting of several layers. Its European allies would then take responsibility for terminal defence, in particular

<sup>&</sup>lt;sup>21</sup> CL289 is a high-speed turbojet-propelled UAV which can be recovered by parachute and which provided 70% of the optical intelligence data for Kosovo, other data sources being unavailable for reasons of bad weather.

<sup>&</sup>lt;sup>22</sup> *Planet Aerospace* No. 5, October-December 2001, pages 46-49.

<sup>&</sup>lt;sup>23</sup> Air&Cosmos No. 1810, 21 September 2001, pages 32-33.

<sup>&</sup>lt;sup>24</sup> The Senate has granted \$8.3 billion (in place of the \$3.63 billion initially foreseen for the financial year 2002) to the missile defence project, i.e. an increase of 128%. From 1997 to 2003, the BMDO planned to allocate a budget of \$25.4 billion to BMD, including \$4.356 billion for the fiscal year 2003. Given the sums already allocated this year, that budget will probably be considerably overstepped. Moreover one cannot be sure today what sums will be allocated in 2003. Sources: BMDO, President's press communiqué on the budget (financial year 1998) and the website <a href="http://www.senate.gov/legislative">http://www.senate.gov/legislative</a>

against short-range missiles. If the principle of responsibility for costs is complied with, the United States would assume the entire costs for the naval, air- and land-based boost phase and mid-course interception systems, while its allies would concentrate on the development or acquisition of terminal defence interceptors and/or platforms.

55. Finally, the most effective system would be one enabling everyone's operational objectives to be met, while giving each allied country the possibility of choosing from among a series of lower-cost defence architectures and technologies. Hence it is up to the Europeans to decide whether they really need a missile defence and if so, the price they are prepared to pay. All this will depend on the EU's budgetary priorities in the years to come<sup>25</sup> and the architectures from among which European governments will be able to choose. The implications for European industry of possible participation in a missile defence system can therefore only be evaluated once the United States and Russia have decided on the systems they wish to develop and propose to the European states.

<sup>&</sup>lt;sup>25</sup> One of the budgetary and political priorities of the EU at the moment is eastwards enlargement, which makes it unlikely that it will embark on a costly and uncertain missile defence. Moreover, on the grounds that the countries which may be the target for a European military reaction do not have a long-range missile capability, the modernisation of European military capabilities is focusing on an enhancement of combined joint intervention capabilities, in particular with the creation of a 60 000-strong rapid reaction force.

#### DRAFT RECOMMENDATION

#### on antimissile defence: the implications for European industry

#### The Assembly,

(*i*) Recalling that the implications of antimissile defence for European industry come under the responsibility of the Council, as the custodian of Article V of the modified Brussels Treaty, and fall within the purview of WEAG, which remains part of WEU, and that these issues cannot therefore be left exclusively to the Atlantic Alliance or the European Union;

(*ii*) Noting with satisfaction the new position of the United States Administration in favour of a discussion with its friends and allies on the deployment of an antimissile system whose title, moreover, it has changed from "National Missile Defense" to simply "Missile Defense";

*(iii)* Considering that Europe perceives its security as continuing to be guaranteed mainly by agreements on disarmament and armaments control, in particular the ABM Treaty on the limitation of antiballistic missile systems;

*(iv)* Taking the view that any revision or abrogation of that Treaty can only come about as the result of a consensus between the United States and Russia, as signatory states;

(v) Recalling that the non-military use of space must continue to be an essential aim for all countries;

(*vi*) Stressing the need for Europe to acquire a European missile defence capability that is compatible with the ABM Treaty, for the protection of its forces during operations;

(*vii*) Recalling the proposals Russia has made to NATO for, on the one hand, a non-strategic pan-European missile defence system (Euro-ABM) and on the other hand, cooperation in the field of satellites;

(*viii*) Noting, furthermore, that Japan is also developing a theatre missile defence system with a naval component similar to the American Navy Theater Wide system;

(ix) Taking into account also the NATO feasibility study on a theatre missile defence system, currently in the invitation-to-tender phase;

(x) Taking into account the discussions that have started at industrial level between Israel and the United States on possible cooperation in the field of BPI (boost phase interception of missiles);

(*xi*) Noting that, notwithstanding the considerable political as well as technical differences between the American and European analyses of antimissile defence, there are nevertheless areas of agreement, in particular in the field of terminal defences and early warning satellites;

(*xii*) Recalling in that connection, among other examples of transatlantic industrial cooperation, the MEADS programme being conducted as a cooperative venture by Italy, Germany and the United States, as well as the industrial partnership involving EADS, Lockheed Martin and Boeing for a study of the NATO tactical antiballistic missile system;

(*xiii*) Emphasising that current antimissile defence studies involving Europeans focus on theatre missile defence and in most cases are being conducted in cooperation with the United States;

(xiv) Welcoming the major rationalisation and restructuring effort made by the European defence industry over the last decade, enabling it to face the future in circumstances similar to those of its American competitors;

(xv) Considering that the development of a European defence industry, particularly in the field of antimissile defence, is both the consequence of the setting-up of a European defence and a prerequisite for it, and that the prospects for the industry's future development are, to a large extent, interlinked with it;

(xvi) Considering, finally, that the implications for European industry of possible participation in a missile defence system can only be evaluated once the United States and Russia have decided on the systems they wish to develop and propose to the European states,

## **RECOMMENDS THAT THE COUNCIL**

Task WEAG to assess the implications for European industry of an antimissile defence system, with the aim of drawing up a European R&D programme for the purpose of demonstrating Europe's technical and industrial capacities in this field, taking into account the following factors:

- (a) a future European antimissile defence strategy could be based on an architecture consisting of a first line of defence composed of land-based, naval or air-based BPI (boost phase interception) systems deployed in Turkey and the Black Sea, a second line of defence composed of naval TMD systems deployed in the eastern Mediterranean and a third line of defence composed of sea- or land-based TMD platforms for the terminal defence of ports and towns;
- (b) terminal defence and early warning systems would offer synergy with both American missile defence systems and the European Security and Defence Policy, and with satellite warning systems it would be possible to pool technologies and data among the United States, Europe and Russia;
- (c) it would make sense to establish an architecture reflecting the specificities of each country and allowing a differentiated approach, in other words a sharing of tasks, the United States taking responsibility, for example, for intercepting missiles during the boost phase and mid-course, while the Europeans, in cooperation with Russia and other European powers, would be responsible for terminal defence;
- (d) that division of responsibilities should take place at both operational and, of course, financial level;
- (e) a number of cooperation programmes are already under way, but further in-depth industrial cooperation should be envisaged.

# AMENDMENT<sup>26</sup>

## tabled by Mr Valleix

1. After recital (iv) of the preamble to the draft recommendation insert two further recitals as follows:

"(v) Welcoming in this connection the meeting of minds between the United States and Russia during recent talks between the Presidents of both countries;

(vi) Considering that it would be desirable for China to be involved in any future agreement and with that perspective in mind for that country and Europe to draw closer together on antimissile defence;"

Signed: Valleix

<sup>&</sup>lt;sup>26</sup> See 11<sup>th</sup> sitting, 5 December 2001 (amendment adopted).