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Understanding the emergence of STI policies in the EU: The genesis of EU security research and the role of the EU commission as policy entrepreneur

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Understanding the Emergence of STI policies in the EU.

*The Genesis of EU Security Research and
the Role of the EU Commission as Policy Entrepreneur.*

MBS Working Paper 630

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Abstract

This paper contributes to our understanding of agenda shaping and decision making in science, technology and innovation policy and the role of political entrepreneurship in this process. It does so by looking at the emergence of a particular new STI policy area, security research, in the specific political setting of the European Union. This emergence was in many ways a remarkable new development in EU STI policy and is a puzzle that has yet to be analysed. This paper asks why, how, by whom and in what form security research was put on to the policy agenda and then finally included in the Framework Programme at this specific point in time. The paper emphasises the interplay between discursive mechanisms and power and interest based negotiations. The analysis focuses on the role of the European Commission as policy entrepreneur in pushing the topic onto the agenda and through the decision making process. The main argument is that the Commission was the originator of the Security theme and that the institutional role, entrepreneurial competencies and discursive skills of the Commission helped to capture and utilise a window of opportunity and orchestrate change. However, diverse interests in Member States and in the EU Parliament as well as the lack of a broader normative consensus severely limited the scope of the Security theme. The Commission was thus a *constrained entrepreneur*, successful in pushing a new area – security research – onto the agenda, but falling short of altering the landscape of defence research in Europe. To explain this complex story of policy change in STI policy and to understand the role and limitations of the European Commission as policy entrepreneur, the paper builds on neo-institutional and European integration theories.

This paper makes four contributions: First, it delivers a more complete picture of the current landscape of European research policy, as the Security theme under the seventh Framework Programme has not been discussed in any great detail so far. This serves, second, to illustrate and further develop our understanding of the levers and limitations of policy entrepreneurs in STI policy making. Thirdly, the paper highlights the meaning of ambiguity in discursive development of policy and, finally and most generally, demonstrates how important it is to understand the interplay of ideas and interests in STI policy and the meaning of policy origins.

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1 Introduction

If we do not know where policy comes from, we cannot understand its shape, scope and intentions. The academic science and technology policy community has had an enduring interest in the content and effect of policy and the emergence of new institutions to govern science and innovation. In contrast, we have paid arguably less attention to the *origins* of those science, technology and innovation (STI) policies. Indeed, public policy analysis writ large too often ignores questions such as why particular issues emerge as policy “problems”, the timing of their emergence, the representation of the “problem” and finally the acceptance of a policy solution space (Bacchi, 1999).

This paper seeks to contribute to our understanding of the under-researched topic of agenda shaping and decision making in science, technology and innovation policy. We do so by looking at the emergence of a particular new STI policy area, security research, in the specific political setting of the European Union. Since the early 1980s, the European Framework Programme funded transnational collaboration in selected technological areas. Only in 2007 did the 7th Framework Programme for the first time include security research as one of the ten themes within the Cooperation Programme. Formally, the Security theme has an exclusively civil application focus and does not work on any technology for lethal and/or destructive weapons. The Security theme is focused on the development of technologies and knowledge for building the capabilities assumed to be necessary to ensure the security of citizens from threats such as terrorism, natural disasters and crime, stimulating cooperation between the providers and users of civil security and improving the competitiveness of the European security industry (European Council, 2006). A total of € 1.4 billion has been allocated for funding this theme over the duration of FP7 (2007-2013).

The emergence of the security theme under FP7 was in many ways a remarkable new development in EU STI policy – a puzzle not yet analysed. It represented an attempt by the European Commission to depart from the strictly civilian character of the supranational Framework Programme and raised questions that touched on the fundamentals of national sovereignty. This paper asks why, how, by whom and in what form security research was put on the policy agenda and then finally included in the Framework Programme at this specific point in time. It traces the major interactions, discourse arenas and conceptual developments from the initial idea to the final codified programme and explains the final shape and content of the security research programme. The paper emphasises the interplay between discursive mechanisms and power and interest based negotiations. Our analysis focuses on the role of the policy entrepreneur – in our case the EU Commission – in pushing the topic onto the agenda and through the decision making process. Our main argument will be that the Commission was the originator of the Security theme and that the institutional role, entrepreneurial competencies and discursive skills of the Commission helped to capture and utilise a window of opportunity and orchestrate change. However, diverse interests in Member States and in the EU Parliament as well as the lack of a broader normative consensus severely limited the scope of the Security theme. The initial idea had been a broader one, i.e. to include *defence* research in the Framework Programme and link joint defence research both to the European competitiveness agenda and the European security discourse which re-emerged and intensified following the 9/11 attacks on the United States. This broad idea was curtailed in the process and the theme was limited to civil security research. The Commission was thus a *constrained entrepreneur*, successful in

pushing a new area – security research – onto the agenda, but falling short of altering the landscape of defence research in Europe.

To explain this complex story of policy change in STI policy and to understand the role and limitations of the European Commission as policy entrepreneur, we build on complementary bodies of political science literature. This literature is severely under-utilised when debating policy dynamics in STI policy in general. The literature on *policy entrepreneurship* gives an understanding of the ways in which organisations and individuals within them can shape agendas and influence decisions. We further mobilise a combination of *neo-institutionalist political science* theories of policy change to better tailor our understanding to specific dynamics and issue areas. The story of the emergence of the Security theme in the EU Framework Programme can – we believe – only be explained if we analyse the interplay of interests and power constellations *as well as* the discursive developments, i.e. the interactions of key stakeholders and organisations and the causal and normative ideas that were discussed and re-aligned to define and justify security research at EU level. In other words, we need to combine rational choice perspectives and their focus on power and given interests with sociological-discursive perspectives that stress the content of ideas and the interplay of form and content in discourses.

By utilising those theories to trace and understand the emergence of security research at European level this paper makes four contributions. On a very concrete, empirical level we deliver a more complete picture of the current landscape of European research policy, as security research has not been discussed in any great detail so far. This serves, second, to illustrate and further develop our understanding of the levers and limitations of policy entrepreneurs in STI policy making. The paper will, thirdly, highlight the meaning of ambiguity in discursive development of policy and, lastly and most generally, demonstrate how important it is to understand the interplay of ideas and interests in STI policy and the meaning of policy origins.

The paper will begin by discussing the previous attempts to include defence research in the EU and then outline the main elements of the policy as it stands in the 7th Framework Programme (section 2). It will then outline the main theoretical building blocks that help us to explain this significant policy change and the role of the European Commission (section 3). It subsequently traces the story of the basic ideas and the interactions that led to the emergence of the Security theme (section 4). Here we will analyse this story using and combining our theoretical concepts around entrepreneurship and policy change at the EU level. A final section 5 will summarise the contribution this article can make to the literature on entrepreneurship and policy change in the field of STI policy – at EU level and more generally – and outline a set of further research questions.

2 The New Policy in Context

2.1 The Pre-history

The idea that defence research might be funded through the European Union has been debated since the 1970s. The issue of defence research was part of a broader debate about the role of the Commission and other European institutions in the defence industry and arms procurement

that began in the 1970s.¹ Arguments about the increasingly dual-use nature of many technologies were used as a justification for a potential Commission role.² Figure 1 provides a timeline of the major developments towards the establishment of the Security theme under the 7th Framework Programme. A Communication from the Commission on the European defence industries published in 1997 noted that: “A third of EU research funds are spent on sectors producing dual-use goods (aerospace, information and communications technologies, energy saving and new materials). The Commission plans to maintain the civil bias in research programmes, but it proposes coordinating programmes with those of the Western European Armaments Group (WEAG) to avoid duplication” (Commission of the European Communities, 1997).

This so-called Bangemann initiative (after the German European Commissioner for Industry who promoted it) was very controversial. It was rebuffed by Member States who saw it as an unwelcome attempt by the Commission to enter a policy area close to the heart of national sovereignty. The Commission Directorate-General for Research (DG XII) and the Cabinet of the Commissioner for Research expressed concerns that the introduction of dual-use technology in to the Framework Programme could “militarise” European science and technology policy (Mörth, 2000).³

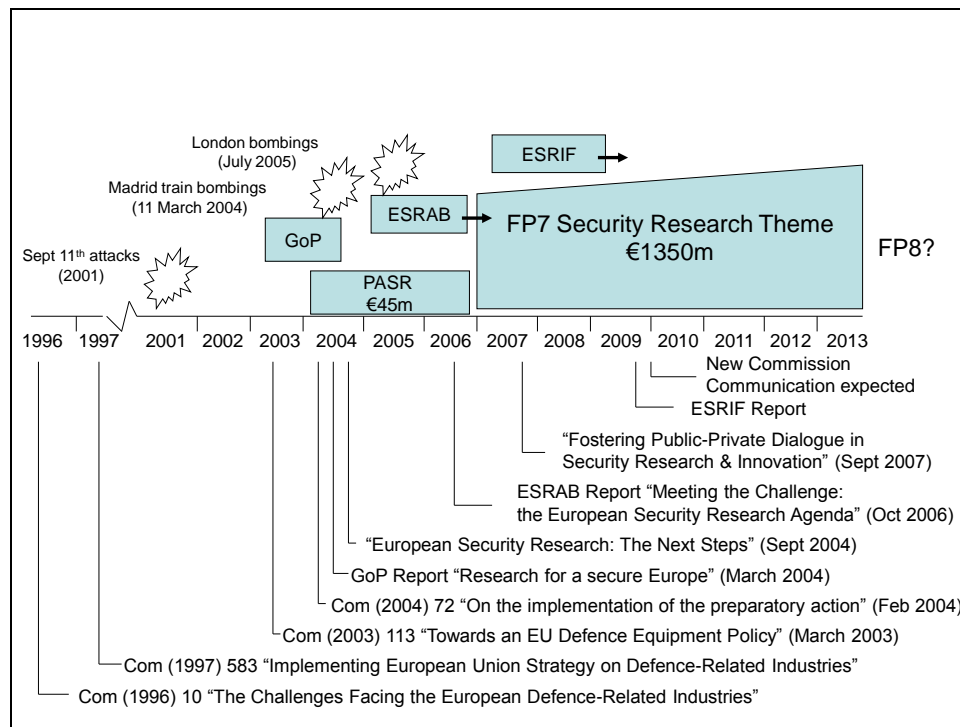
Despite its sensitivity, the issue of dual use research was raised again a few years later in a Commission Communication on the European Research Area. The Communication observed that in areas such as aeronautics, advanced materials and information technologies and communications, research projects could give rise to “dual use” applications in both the civil and the defence sector and that this issue needed to be looked at more deeply (Commission of the European Communities, 2000).

¹ Terence Guay notes how the late 1970s saw a growth in interest in the topic. In 1978, the European Parliament debated the Klepsch Report “which called on the Commission to make proposals for the creation of a single, structured Community market in defence equipment proposed a European Armaments Procurement Agency”. In response, the 1980 Greenwood report – on behalf of the Commission – argued that member States were unwilling to support such a move. The Fergusson Report (1983) called for the Commission to support Klepsch’s goals for arms procurement but – like Klepsch – was opposed by Member States. At the Rome European Council of December 1990 the Commission proposed a common policy for defence research and production. In March 1992, Industry Ministers failed to agree on Commissioner Bangemann’s proposal for a special initiative on the arms industry (Guay, 1997).

² Technological change – not least developments in Information and Communications Technologies – had meant that the distinction between “military” and “civilian” technologies was breaking down and that many civil-origin technologies were increasingly important to weapons systems (Alic et al, 1992; Cowan and Foray, 1995; Molas-Gallart, 1997).

³ However, it should be recalled that the Bangemann initiative had sought to retain the civil character of the Framework Programme whilst coordinating programmes with the (defence research) activities of the Western European Armaments Group – the predecessor of the European Defence Agency.

Figure 1: Key events in the emergence of the security research theme



In 2001 (and *before* the events of September 11th), the Commission established the European Advisory Group on Aerospace (STAR 21) to analyse the competitiveness of the European aerospace industry. STAR 21 comprised – amongst others – the Chairmen of Europe’s leading defence aerospace companies. In its report (published in July 2002), STAR 21 argued: “It is in the areas of security and defence and related research that the most pressing need for added efforts to secure the future of the European industry is identified” (STAR 21, 2002: 8). STAR 21 called for greater coordination of defence procurement and research and declared that: “all available means have to be explored, including action, where appropriate at Community level, in order to remove the impediments to the competitiveness of European industry” (STAR 21, p.9). Significantly, STAR 21 was chaired by Erkki Liikanen the Member of the European Commission responsible for Enterprise Policy who was to become – as we will see – an advocate of the inclusion of a security theme in the 7th Framework Programme.

2.2 The Policy “Problems”

What is clear is that a number of interrelated policy “problems” existed in the minds of some European policy makers prior to the events of September 11th 2001. We will go on to discuss how these problems became the pre-conditions that allowed the security theme to be discussed even if they were not universally accepted by all stakeholders.

One “problem” was that of European military capability. The 1990s saw the emergence of a European Union Common Foreign and Security Policy (CFSP) and a European Security and Defence Policy (ESDP) that focused on the development of civilian and military capabilities for international conflict prevention and crisis management. In 1999, the Member States agreed to the so-called “Helsinki Headline Goal” to enhance EU military capabilities towards the achieving the “Petersberg Tasks” of military humanitarian, peacekeeping and peace enforcement that the

EU is powered to undertake. This was supported in December 2001 by the launch of a European Capabilities Action Plan (ECAP). Advocates of closer European integration argued that the exclusion of armaments questions (including defence R&D) from the European Union had important implications for the development of the ESDP. The European Union – it was argued – was identifying the military capabilities that it required for ESDP missions but had no mechanism to coordinate its capability requirements, procurement or defence R&D.

A second “problem” was that of the transatlantic defence industrial and technological “gap”. The 1990s saw growing concerns about the competitiveness of the European defence industry especially in relation to the United States. The end of the Cold War prompted a significant consolidation of the U.S. defence industry and the emergence of a number of large U.S. defence contractors prompted concerns that the European defence industry would be at a competitive disadvantage in domestic and export markets. Taken together with the huge transatlantic gap in defence procurement and R&D spending, there was a concern that it would also have implications for the ESDP.⁴

A further “problem” was that of European growth and competitiveness. The “artificial” divide between civil and defence research in the Framework programme was argued to put Europe at a disadvantage against the United States and – it was argued – made it more difficult for Europe to realise synergies between defence and civil research in an environment where dual use technologies were increasingly important. Advocates of defence R&D argued that it could contribute to the Lisbon strategy and the objective of raising the level of European research investment to 3 per cent of GDP.⁵

2.3 Nature and Scope of Security Research Within the Framework Programme

The discussion so far has emphasised a point that we regard as important to our story, namely that the idea that the European Union should engage in defence research in predated September 11th 2001 and that it was not only triggered by security concerns. By extension, we will go on to argue that 9/11 was not the starting point for such thinking but its importance was in providing the European Commission with a window of opportunity and a rhetorical device with which to advocate a long standing policy ambition.

Ultimately, the FP7 Security theme fell short of the Commission’s ambition to fund defence research under the Framework Programme. Within the Seventh Framework Programme, Security research was established as one of the ten themes of the Cooperation programme. The Security theme is focused on the development of technologies and knowledge for building capabilities needed to ensure the security of citizens from threats such as terrorism, natural disasters and crime, stimulating cooperation between the providers and users of civil security and improving the competitiveness of the European security industry (European Council, 2006).

⁴ James (2006) provides a detailed discussion of European concerns about the transatlantic “R&D gap”, its causes and the consequences for the thinking of some European policy makers. The issue is emphasised in a number of European Commission documents, see for instance Commission of the European Communities, 2002 and 2003.

⁵ This thinking can be illustrated in the following statement from the European Commission: ‘Defence-related research plays a major role in innovation in the U.S.; it benefits the whole of industry, including the civilian sector’ (Commission of the European Communities, 2003: 12). The European Commission argues that a significant proportion of the overall gap in R&D spending between the European Union and the United States is accounted for by the difference in spending on defence and security related R&D (Commission of the European Communities, 2002b).

The Commission stated that particular emphasis would be given to the following activities⁶:

- Increasing the security of citizens
- Increasing the security of infrastructures and utilities Intelligent surveillance and border security
- Restoring security and safety in case of crisis
- Improving security systems integration, interconnectivity and interoperability Security and society Security research coordination and structuring - coordination between European and international security research efforts in the areas of civil, security and defence research (our emphasis).

The latter activity is important to our argument that the Security theme represents a potential step change in European Union STI policy. Formally, the security theme is not a defence research programme and the Framework Programme emphasises that it has an exclusively civil application focus and will not work on any technology for lethal and/or destructive weapons. Nonetheless, encouraged by the Member States, the European Commission and the European Defence Agency have sought to coordinate funding in some complementary areas. In May 2009 it was announced by the European Defence Agency that it aimed to establish a European Framework Cooperation for Security and Defence Research together with the European Commission to promote closer coordination between the (defence) research activities of the European Defence Agency and the (civil) research activities of the Framework Programme (European Defence Agency, 2009). The security theme may have fallen short of the ambitions of the policy entrepreneurs who put it on the agenda but it has allowed the Commission to more or less achieve the objectives of the Bangemann initiative in so far as research is concerned.

Before analysing the emergence of the security theme in the EU Framework Programme, the next section develops a theoretical understanding that helps us to make sense of the process and the role of the main players.

3 Theoretical background

In this section we present different strands of literature that help us to analyse and interpret the role of policy entrepreneurship as well as the meaning of discourse and interests in the emergence of new policy. We start by discussing policy entrepreneurship and how it can be understood more generally. Here, we take advantage of the role of entrepreneurs in Kingdon's multi-stream model of policy making and introduce the explanatory power of discursive and rational choice neo-institutionalism. We then focus on the capacities of the EU Commission as the key policy entrepreneur in our empirical case and to do so mobilise key insights of the two leading – and competing – paradigms of EU integration theory, neo-functionalist and liberal-inter-governmentalist. A final section reminds the reader of previous attempts to explain the Commission's role in European STI policy making.

3.1 Policy entrepreneurship in agenda setting and decision making

The Policy entrepreneur: linking streams

⁶ Source: http://cordis.europa.eu/fp7/security/home_en.html

Policy entrepreneurs influence political processes in a way that alters policies or institutions. We follow a very general definition whereby policy entrepreneurs are “organisations” (Perkmann 2003) or individuals “who seek to initiate dynamic policy change” (Mintrom, 1997: 739). Policy entrepreneurs are argued to play an important role in identifying opportunities for new policy initiatives, mobilising and linking interests, creating new policy venues and framing policy debates (Hargrove, 1987; Roberts 1991; Mintrom, 1997). Their key function relates to the process of agenda setting, policy formulation and decision making. The agenda setting and policy formulation function can best be thought of in the well established three streams model of Kingdon (1984). In this model, based on the organisational garbage can model (Cohen et al 1972), there are three streams of policy problems, policy solutions and political processes. A window of opportunity for policy change opens when these three streams are linked, i.e. when a dominant problem definition emerges, a solution that is seen to be appropriate is formulated and the politics – interest mediation and the general political climate – is favourable or can be organised in a favourable way. It has been argued that policy entrepreneurs play an active role in opening those windows, i.e. in organising the coupling of streams (Bendor et al 2001, Bossong 2012). It is obvious, and endogenous to that model, that the way the entrepreneur can and will be able to play this role depends on a whole variety of variables: the institutional and constitutional context, the capacities and skills of the entrepreneur, the actor networks that are involved or can be mobilised, the initial differences between the various actors influencing and shaping the decision making in cognitive and normative positions and the mechanisms by which the decision makers can and will exert power.

Understanding entrepreneurial roles

There is a diverse literature on policy entrepreneurship⁷. The various approaches either stress the *personal or organisational characteristics* of the entrepreneur (risk taking, social position etc.) or the *institutional structure and institutional role* of the entrepreneur that shape the way the entrepreneur can learn (Kingdon 1984, Metcalfe 1995, Witt 2003), mobilise support, forge coalitions and make others learn and adapt in the process (van der Steen and Groenewegen 2008).⁸ To better understand how entrepreneurs exert their influence and what factors might limit that influence, we take a step back and look at major neo-institutionalist political science approaches. These approaches enable a more systematic linkage of personal and organisational characteristics and institutional structures. Further, as our particular case requires an understanding of the role of the European Commission and individuals within it, we link the discussion of neo-institutional approaches to policy making in the EU.

There is a whole range of variants of neo-institutionalist approaches in political science (most recently Schmidt 2010). For our purposes it is sufficient to focus on the two most pronounced of those neo-institutional families who both link agency (and thus potentially the role of entrepreneurs) with institutions: (1) rational choice and (2) discursive (Radaelli and Schmidt 2004) or reflexive (Edler 2000) institutionalism. However, both approaches conceptualise the

⁷ For an overview of different entrepreneurship approaches see van der Steen and Groenewegen (2008).

⁸ Kingdon himself (1984) identifies three features of the successful policy entrepreneur. First, “the person must be taken seriously, as an expert or leader. Second, the person must be known for her political connections or negotiating skills. Third, the successful policy entrepreneur must be persistent and wait for the opening of a “policy window””. Kingdon’s claims are an important entry point for entrepreneurship. However, this definition neglects the corporate actor, organisations, as entrepreneurs and it neglect the role of the entrepreneur to actively link the streams, i.e. influence what is recognised as a problem, how the solution is formulated and how the political decision makers and those influencing them work towards a decision.

role of policy entrepreneurs differently, and thus help us to sharpen our understanding of that role in our empirical case.

In the rational choice variant, actors with clearly defined interests negotiate with each other, using power, bargaining and coalition building to define policies that seek to maximise benefit within their well defined and fixed interest. Political institutions are seen as having more or less fixed incentive structures. A *policy entrepreneur* here is a power broker, forging coalitions of those actors with clear preferences and mediating conflicting interests in ways that maximise the likelihood of outcomes that suit the self-interest of the entrepreneur. The policy entrepreneur functions like a “structural leader” whose basis is material or constitutional power and who translates this power into influence over the behaviour of others (Young 1991).

In contrast, discursive or reflexive institutionalism assumes that the interests of actors are not fixed, but determined and changed by causal and normative ideas. Ideas influence which issues are seen as problems, how those problems are defined and which solutions are seen to be appropriate. Ideas are dynamic, they change and re-assemble over time, and they change – lose or gain – legitimacy. The ways in which ideas are produced, processed and discussed in the agenda setting process are crucial and thus the interactions that shape which ideas have access into the debate and the decision making process, which ideas are combined or refuted and which are defined as legitimate and appropriate determine to a large degree problem definition and policy formulation and the negotiation process of decision makers.⁹ The *role of the policy entrepreneur* is thus very different, it is about “intellectual leadership” (Young 1991, p. 288), reshaping policy “images” (Wendon 1998), presenting credible cognitive and normative ideas and organising the discourse by establishing arenas and forums for interaction and exchange of ideas. This role of the entrepreneur then shapes the bargaining and negotiation process to move in certain directions. Here, the positions and the perceived interests of the stakeholders that are involved (including the entrepreneur himself) may change over time due to the nature and dynamics of the social interaction and the discourse that unfolds.

Having established the basic idea of policy entrepreneurship, we now turn towards the specific role of the European Commission as a policy entrepreneur.

3.2 The European Commission as a policy entrepreneur

3.2.1 Mediating national interests or catalysing neo-functional dynamics

Scholars of European Union policy making have noted the role played by the European Commission as a policy entrepreneur that – in certain circumstances - identifies policy problems, proposes and advocates new policy ideas and brokers compromises between the diverse interests that comprise the European union policy environment (see for instance, Majone, 1992; Pollack, 1996). Hooghe and Keating (1994: p.373) emphasise the role of leadership by the Commission as well as the presence of a winning coalition, a policy rationale and a value framework as the basis for the emergence of European regional policy. They comment that the “...Commission has asserted an autonomous and entrepreneurial role, shaping the agenda, widening the circle of interested parties, as ghostwriter of the policy rules, and as guardian of policy implementation” (Hooghe and Keating, 1994: pp.387-8). This role of

⁹ Therefore reflexive institutionalism is often separated into sociological institutionalism, focusing on interactions and identity building, and discursive institutionalism, focusing on the ideational processes.

the European Commission in institution building and policy development in the EU has been conceptualised in two different ways. Both ways are important as they allow us to draw on different capabilities and limitations of the Commission as an entrepreneur.

A first approach is shaped by the liberal inter-governmentalism school à la Moraviczik (1993, 1999) and its variants (see Rosamond 2000). In this perspective national governments are the key and decisive players, societal interests are aggregated mainly at national level, leading to preference formulation at national level which then are stable and represent the basis for the negotiation and bargaining with other Member States and with the Commission.

In the inter-governmental perspective, the *role of the Commission* is to represent the “interest” of the Community. This perspective acknowledges that the European Commission may play *three entrepreneurial functions*: (1) the potential agenda setting function through “highlighting problems, advancing workable proposals and underscoring potential material benefits, or linking the outcome to symbolic values” (Moravczik 1999, p. 172), (2) the mediation between differing views and the (3) mobilisation of societal and stakeholder support. Moravczik concedes that there can be cases in which the Commission as “informal entrepreneur” acts as a “two-level network manager” which helps to “mobilize new and previously unorganized domestic and transnational social actors...”. This function is enabled by the unique institutional properties of the Commission derived “from the superior administrative coherence, political autonomy, and centrality in transnational networks enjoyed by supranational officials” (ibid, p. 298). Thus, the Commission has the potential to shape the discourse and set the agenda for European Union policy making. However, liberal inter-governmentalists argue that the scope with which the Commission can play this role depends on the willingness and ability of national governments to define clear national preferences, the strength of those national preferences (and the societal groups backing them), the normative or material differences of national positions to the solutions proposed by the Commission and the relative importance the issue has for national governments in light of competing issues.

A second school of thought is rooted in the Neo-functionalist paradigm.¹⁰ It argues that European integration is driven by the increasing interdependence of societal and economic actors across Europe, and the *perception* that joint institutions and activities bring about a net-benefit. This integration of institutions and policies follows a functional need expressed by elites. The direction and speed of integration is determined by the perceptions of societal and governmental actors as to the functional necessities of this integration. Importantly, neo-functionalists emphasise the role of spill-over dynamics, whereby an integrative step in one policy area triggers further integrative steps in related areas, as actors realise the need for complementary joint action or as they learn, more generally, about the benefits of integrative action and institutions. In this process, the “interests” of states are not given or derived from rational calculations (alone), but are permanently re-constructed in interaction with societal actors who themselves are connected trans-nationally. Societal actors and pressures may thus push national governments and their representatives to take decision for coordination and integration. Thus, while this approach does not put state actors and Member State at the centre, it acknowledges that integrative dynamics are enabled, shaped or hindered by pre-existing institutional configurations and governance arrangements.

¹⁰ This school, founded by Haas (1958) has a range of variants and offshoots (for overviews see Schimmelpfennig and Rittberger 2006, Rosamond 2000).

From this perspective, the *entrepreneurial role of the Commission* is fundamental (Richardson 1994; Garret and Weingast 1993, Radelli 1995). The Commission is seen as the driver of the process that leads to the formulation of transnational interests, it plays a critical role in responding to (and stimulating) the needs of societal and economic actors to integrate and to organise or push for spill-over processes into other areas. Neo-functionalist analysis has pointed towards the fact that no matter how strong the societal urge for integrative steps will be, the integration needs a central promoter. Since Haas, the European Commission has been characterised as the policy entrepreneur for integration, and many empirical studies have shown this role (see below, for an overview see Edler 2000, 2003). The importance of the Commission may vary, it can start the integrative dynamics, act as facilitator and catalyst for those dynamics that point towards more integration from bottom up or simply support and shape the integrative process.

3.2.2 The entrepreneurial capacities of the EU Commission

Notwithstanding the fundamental differences as to the relative role of the Commission vis-à-vis the Member States in the dynamics of institutional and policy change, scholars of European policy making widely agree on the specific *means and ways* in which the Commission exerts influence. To start with, the EU is a system in development, the Lisbon Treaty being the latest but certainly not the last step in defining the range of policies that are supra-nationalised and the way in which the institutional multi-level fabric works. At the same time the specific structure and complexity of the European system mean that there are a large number of points of access, a large number of influential policy advocates and a wide range of policy options that have been legitimised in one or more Member State (Peters, 1994). This has made the European Union relatively open to new ideas, turning it into an “agenda-setter’s paradise” (ibid)). Moreover, it also means that new policy ideas at the same time are linked to the definition and re-definition of competencies at European level and thus for the Commission itself. The Commission, thus, is not seen as a neutral broker of ideas and interests, but any initiative is seen in relation to what consequences this initiative has for the position of the Commission in the unstable policy environment of the European Union. By shaping the ideational space, by linking policy solutions to expert input and technical rationality (Kohler-Koch 1996), the Commission can raise its political credibility and thus enlarge its space of influence (Wallace 1996).

Ironically, the institutional ability to perform as such a promoter of change is in fact caused by a structural weakness. The Commission *lacks* certain hierarchical powers of a national government (Wallace 1983; Cram 1994; Mayntz and Scharpf 1995), and thus it has no choice but to concentrate on a set of roles and capabilities that enable it to be an “interest broker”, “process manager” (Eichener 1996) and “idea exchange” (Mazey and Richardson 1994) of European policy-making. The Commission does so through a range of institutional features¹¹ (Edler 2000). It has the leading role in the preparation of decisions within the bureaucratic contexts of the EU “comitology”, the vast array of committees and groupings composed mainly of administrators (Eichener 1996: 273). In those forums the Commission consults with highly differentiated administrations and is *primus inter pares* in a often technocratic “negotiation space” (Polo 1996, p. 3). Inside and outside this comitology, the Commission is able to channel and shape horizontal administrative knowledge and orchestrates the “power of expertise” by shaping discourse and controlling entrance to European discourses (Richardson 1996, Peterson

¹¹ See among others Richardson 1994; 1996; Nugent 1995; Bach 1995; Jourdain 1996

1995). It is mainly the Commission which sets up tailored expert groups at EU level, sponsors expert studies and also forges discursive interactions with other international bodies. This can be networks with NGOs and interest groups who seek voice at EU level or issue specific relations to practices and analyses of other international institutions (OECD, WTO, World Bank etc.). More broadly even, the Commission is most often the main organiser of policy consultations at EU level which, albeit designed for democratic participation, nevertheless broadens its procedural and discursive leadership even further (Quittkat/Kohler-Koch 2011). All this institutionalises the build up of a transnational discourse, the shape of which can be heavily influenced by the moderator Commission (Edler 2000).

Finally, and very importantly for our argument on policy entrepreneurship, the Commission appears to be characterised internally by a high degree of specialisation and autonomy of staff, leading to the formation of "functional elites" and "technical" perspectives on issues at stake (March and Olsen 1989: 109; Bach 1995). Thus, at the heart of the policy entrepreneur Commission there often are individuals who are able to mobilise the support of the internal hierarchies and thus the capacity of the Commission in the negotiation space.

All those capabilities and roles are important for the Commission to play its entrepreneurial role. But it is important to understand, empirically, how exactly those functions are played out – and how they might be limited in the face of the overall political processes leading to policy decisions. From the characterisation of the capabilities of the Commission it follows that – in principle – it is best equipped to initiate and shape a discourse early on, i.e. to shape the policy agenda, relying on achieving the necessary critical mass of consensus for the decision making stage.

3.2.3 Earlier explanation of the Commission's role in research policy development

Before turning to the story of emergent security research at EU level, it is illustrative to recall earlier, slightly different attempts to explain the role for the Commission in STI policy. Some (Grande 1994a, b, Grande and Peschke 1999) have highlighted the role as mediator and mobiliser of strong economic interests at EU level. Commissioner Davignon mobilised the leader of the twelve most important IT companies in Europe (the famous "Round Table") and convinced them over a period of two years to buy into the rationale of co-operative pre-competitive research. Subsequently, those firms together with the Commission convinced national policy makers to buy into the supranational research programme ESPRIT, and that "...the adaptive process [of national governments, the authors.] resulted in collaborations is explicable only by the actions of an entrepreneurial IO [International Organization, J.E.] allied with a potent industrial coalition" (Sandholtz 1992: 173, similarly Peterson 1991; Shearman 1986). For the industrial research Programme BRIT Edler has shown a slightly different and more complex process, whereby the Commission acted in a combination of interest mediator and intellectual leader. It took advantage of an emerging academic consensus as regards pre-competitive research, shaped the discourse arena, created discursive linkages (academia, OECD; EU). It then managed to link the idea of cooperation across the whole manufacturing sector to the normative idea of a "technology community" (Edler 2000, 2003), taking advantage of the political window of opportunity opened in the deep Eurosclerosis of the mid 1980s in which EU leaders were in desperate need for a new mobilising idea. Technological cooperation appeared to be a perfect fit of economic interests and normative appeal. In the years since 2000, finally, the Commission has played a role as creative institutional entrepreneur in the area of STI policy, by introducing a whole range of new governance instruments to enable new modes of policy

coordination between nationally rooted agencies and ministries as well as between public and private actors at national level. The governance landscape in Europe has changed fundamentally as a result (Edler 2012).

4 The building blocks of a new policy

4.1 The opening of a window of opportunity

Accounts of policy entrepreneurship emphasise that the skill of the policy entrepreneur is to identify – and open – a window of opportunity to place their policy idea on to the policy agenda and to create a winning interest coalition. We have noted that the idea of a closer relationship between the European Union and security and defence research had been “in the air” for some time but that previous policy efforts – not least the Bangemann initiative – had ended in failure. The question is therefore what changed since the Bangemann initiative to put this issue on to the agenda?

The period since the Bangemann initiative had seen a further reshaping of the defence industry and developments in the European Security and Defence Policy. The European Convention that had been established in December 2001 to draft a European Constitution on the Future of Europe established a working group on European defence and proposed the setting up a European Armaments and Strategic Research Agency “to strengthen the industrial and technological base of the defence sector, allow Member States to pursue different cooperation programmes among themselves and ensure fulfilment of capabilities commitments” (European Convention, 2002). However, it was the 9/11 attacks on the United States that presented a window of opportunity for Commission policy entrepreneurs. One official from the Commission was quoted as saying: “The events of September 2001 have electrified the defense debate in Brussels.... attitudes in Brussels are changing now about what role the EU can and should have in this area” (Tigner, 2002). By January 2002, it was being reported that Commission officials were urging the creation of a single research fund to support the needs of the EU’s military forces (Aguera, 2002). Later that year, an article reported that the issue of using EU funds to directly finance defense research projects was being discussed by Commission officials, EU diplomats and independent policy experts (Tigner, 2002). An unnamed Commission official was quoted as saying: “The projects would have to be of common interest [to Member States] such as research into future capabilities needed for the EU’s planned 60,000-strong crisis-reaction force”. The Commission official added: “I’m thinking of things such as unmanned vehicles or smart bombs, not strategic things. No space-based weaponry such as Washington is pursuing” (Tigner, 2002).

What should be emphasised is that at this stage the Commission was not the only actor discussing possibilities to support defence research within the EU and the Framework Programme was not the only instrument being considered. The period saw discussion, preparation and inter-institutional competition between alternative ways to include defence research into European research. The thinking during this period was not only as to whether defence research should be Europeanised but how it should be Europeanised. Competing designs and frames were developed in different arenas for the solution of the same problem. The Commission sought to claim defence research for the Framework Programme but at the same time other ideas emerged. The European Convention has been noted. The Greek Presidency (2003) saw discussion of the idea of “a European DARPA” modelled on the U.S.

Department of Defense's research agency. The establishment of the intergovernmental European Defence Agency ran in parallel with the Commission initiative and – as we shall see – provided an alternative and competing institutional context for European defence research.¹²

What is striking is that the initial discourse after 9/11 was dominated by discussion of defence research in support of the EU's ESDP. Counter-terrorism and security were barely mentioned in these early discussions.¹³ What should also be noted is that the policy entrepreneurs who identified that window of opportunity and engaged in the early discussions were not senior Commission officials but desk officers in DG Research. One European Commission official observed:

“This is a general feature of working in the Commission.... it does allow you the scope to work on your own initiative... [what you need is]... a desk officer who is intelligent enough and has an idea”.¹⁴

Those desk officers had a number of motivations. Some of them had been working on aerospace research and been involved in the STAR 21 advisory group on the European aerospace industry. At the same time they saw it as another step towards the creation of a single Europe playing its role in the world.¹⁵ Defence was seen as the missing element in European Union integration. In the words of one senior figure in the European defence industry the motivation emerged out of “a political mission they discovered for themselves – to drive Europe forward in all areas, including defence... defence was a significant area that had been left behind [in the European integration process]”.¹⁶ Those desk officers began by convincing key figures within DG Research that this was a viable initiative. They began with the Head of their Unit, then the Commissioner's Cabinet and finally Commissioner Busquin himself.

In March 2003, the European Commission published a consultative Communication *Towards an EU Defence Equipment Policy*. The Communication included a proposal for a “European advanced research effort” and the Commission proposed consultation with Member States and industry to identify common needs. To prepare for the implementation of that advanced research agenda the Commission announced that it would launch a three year “preparatory project” aimed at supporting projects that were useful in carrying out Petersberg Tasks. The Communication pointed to the Commission's “great deal of experience in managing Community research programmes and coordinating national research activities and programmes” and made reference to the European Research Area. A European level initiative, the Commission argued, could create “a real European value-added”.

However, the Commission policy entrepreneurs were also acutely aware of the political challenges that they faced. Internally, DG Research was split over the idea of the pilot project just as it has been when faced with by the Bangemann initiative. Externally, the Commission was mindful of the potential for opposition from some Member States. In March 2003, a Commission official was quoted as saying:

¹² We wish to thank Thomas Teichler for his helpful observations on these matters and refer the reader to Teichler (2010) for a more detailed discussion of the wider issues and inter-institutional rivalries that characterised that provided the context in which the security research theme emerged.

¹³ This preoccupation with defence has been noted by Frank Gregory who observes the problems that it caused for police and civil security (Gregory, no date).

¹⁴ Author interview with a European Commission official, Brussels, July 2009

¹⁵ Author interview with a European Commission official, Brussels, July 2009

¹⁶ Author interview with a European defence industry executive, June 2009

“Getting it politically accepted and approved is the challenge, but things are stirring in that direction. There is definitely something in the air.... The EU’s framework program supports dual-use research in all these areas, so it would make sense to bump things over into the purely military realm... The important thing is to set the precedent” (Tigner, 2003).

4.2 Involvement and mobilisation

4.2.1 Discourse formation

With the experience of the failed Bangemann initiative in their minds, Commission officials set about mobilising stakeholders in support of their policy initiative. Commission officials looked to European defence industrial companies and some parts of the scientific community.¹⁷ As one European observer noted:

“To ensure that the Commission should not appear a lone voice crying in the wilderness, it has set about recruiting allies in industry to reinforce its message on defence cooperation” (Merritt, 2004).

The emergence of security research onto the policy agenda has been seen by some critics as evidence of the agenda setting role of the “military industrial complex” in European politics (Hayes, 2006; Mawdsley, 2009; Bigo and Jeandesboz, 2010; European Parliament, 2010). Our case study tells a different story. What is clear is that the emergence of the idea was not a case of an established and self-organised policy network forcing an issue onto the policy agenda. Instead, it was the Commission as policy entrepreneur that mobilised defence industrial interests. A Commission official interviewed for this study confirmed this, commenting:

“No, I don’t think there was [a coordinated effort by the defence industry]. My feeling was that they accepted and joined in the process and supported the initiative. But my feeling is that it was not their initiative. They did not drive the process. They were supportive [but] they never really coordinated the process”.¹⁸

This was confirmed in an interview with a senior executive from one European defence company who commented:

“To the best of my knowledge nobody was going into the Commission saying we want security in the Framework Programme – my impression is that it came out of the blue to most people”.¹⁹

We are not arguing that the defence industry did not have a role in the shaping of the Security theme and in a later section we will emphasise the key role that it played in the fora established by the European commission to advise on the content and implementation of the Security theme. But it was the Commission which took the initiative, created a new venue by bringing together the Group of Personalities on Security Research (the GoP comprising senior figures from the European defence industry, European Parliament, research institutes as well as notable figures from European politics and chaired by EU Commissioners Busquin (Research) and Liikanen

¹⁷ This is in contrast to the emergence of the Framework programme itself. Whilst Peterson (1991) emphasised how existing policy networks were the drivers of the emergence of the Framework Programme, in the security research theme it was the Commission that created and drove the policy network.

¹⁸ Author interview with a European Commission official, Brussels, July 2009

¹⁹ Author interview with a senior executive of a European defence company, July 2009

(Enterprise and Information Society). A Commission official who observed the process commented: “The idea was not to present this as a Commission initiative – the GoP was presented as something independent...”.²⁰ A European defence industry executive who participated in the Group of Personalities added:

“[The] Commission managed this with great political astuteness – how do we get a suitable number of people around a table – if we dangle some money we will interest industry leaders.... It was the Commission that drove it.... from the defence industry point of view, people had historically not seen the Commission as there to help – more threat than opportunity if you like”.²¹

The membership of the GoP - set out in Table 1 - is worthy of note and is set out in Table 1. as it is an example of how policy entrepreneurs can create privileged “insiders” to shape the dominant discourse (Nylander 2001). In this case, a privileged position was given to defence industrial interests with the Chairmen and Chief Executives of Europe’s leading *defence* companies all participating. Significantly, there were no representatives of European police forces or fire services on the GoP. More striking still, whilst the Commissioners for Enterprise (Liikanen) and Research (Busquin) sat on the GoP, the Commissioner for Justice and Home Affairs (whose portfolio included border security and counter terrorism) was not a member.²²

Table 1: The memberships of the GOP, ESRAB and ESRIF

Actors type	Group of Personalities on Security Research (GoP)	European Security Research Advisory Board (ESRAB)	European Security Research & Innovation Forum (ESRIF)
Member States ministries of home affairs/civil security	0	7	18
Member States Ministries of Defence	2	5	3
Member States other departments/agencies	0	4	7
Intergovernmental organisations	4	3	2
European Commission	2	(14)	2
European Parliament	3	(5)	0
Industry, defence	7	7	2
Industry, other	1	9	10
Research institutes	4	13	9
Universities	0	2	6
Other	4	0	4
Total	27	50	63

(Source: authors own analysis)

²⁰ Author interview with a European Commission official, Brussels, July 2009

²¹ Author interview with a senior executive of a European defence company, July 2009

²² The criticisms levelled at the composition of GoP (Hayes, 2006) were to reappear at a later stage when the Commission established the European Security Research Advisory Board. Accusations of industry bias in the expert groups formed by DG Enterprise was not confined to ESRAB. (“Open Letter to Commissioner Verheugen concerning the Expert Groups Formed by DG Enterprise”, Brussels, 8 August 2008, <http://archive.corporateeurope.org/docs/expertgroups/Letter-to-Verheugen-August-2008.pdf> (accessed 31 October 2011), The Alliance for Lobbying Transparency and Ethics Regulation (ALTER-EU)

At the inaugural meeting of the GOP in October 2003, Research Commissioner Philippe Busquin set the tone for its deliberations, declaring that:

“new and more sophisticated threats, combined with the public’s rising demand for better security, ‘require us to adopt a more structured and European approach to security research. Europe is paying a very high price for the artificial and uniquely European separation between civil and military research” (Tigner, 2003).

4.2.2 A pilot programme to create buy in and learning

In February 2004 (and before the Group of Personalities had published its report) the Commission announced the establishment of its preparatory project. The Preparatory Action for Security Research (PASR) was a small scale €45 million programme outside the Framework Programme established by the Commission to provide a test bed for a security research programme. In particular, the Commission stressed that it would define at the EU level ways to engage with an end user community comprising Member States government departments and services, security agencies, non-governmental organisations and industry (Commission of the European Communities, 2004a).

The establishment of PASR was the point at which European defence companies began to seriously engage with the Commission and its idea of a security research programme. Karampekios and Oikonomou (forthcoming) describe how – in preparation for PASR - industry representatives from the European aerospace and defence industry associations established an Industrial Working Group on Security (IWGS) with the aim of creating a common industry position on PASR and developing detailed inputs to the calls for proposals under PASR. The defence companies provided the resources – not least the technical expertise on security technologies, user requirements and so forth – that the European Commission – with no prior experience of the field – lacked. Karampekios and Oikonomou (forthcoming: p.10) note that these defence companies benefitted from their efforts and observe that: “Most of the contracts for the three funding rounds of PASR were won by defence industrial companies”.

4.3 Problem definitions and solutions – instrumental ambiguities

A striking feature of developments up to and including the PASR was the ambiguity in the definition of the scope and rationale for the Commission’s initiative. The Commission Communication *Towards an EU Defence Equipment Policy* argued the need for a programme of “advanced research relating to global security”. The Commission Communication announcing the establishment of the Preparatory Action on Security Research refers to “the development of a research agenda for advanced security” (Commission of the European Communities, 2003). The scope of such a programme was not defined. In places, security research appears to be directed to the achievement of the objectives of the European Security Strategy. Elsewhere there are references to the EU initiative for growth and EU objectives for justice and home affairs.²³ Concerns about European competitiveness in the defence industry and in the security industries are also mentioned as is the need for “bridging the current gap between generic civil research (as supported by EC Framework programmes) and national and intergovernmental programmes oriented to defence procurement needs” (Commission of the European

²³ This point is made in House of Commons (UK) (2004) Twelfth Report of Session 2003-04, European Scrutiny Committee, HC42-xii, para.5.15, p.17.

Communities, 2004a). There was frequent reference to the idea that international terrorism and the new security environment had led to a blurring of the boundary between security and defence research (Commission of the European Communities, 2004c)

This use of multiple policy rationales and ambiguity in problem definition is not unique to this case study. In their study of European regional policy, Hooghe and Keating (1994: 371) observe: “A policy with a single rationale, based on a well-defined and delimited problem, would have been unlikely to assemble a winning coalition in a decision-making system as complex as that of the European Union”. Nonetheless, it was particularly important in this field given the potential implications for Commission competence and member States sovereignty. The Commission was conscious that they were entering highly sensitive political territory and ambiguity in the definition of what constituted “security” was an important means of making progress. The Commission was supposed to limit Framework Programme funding to civil and dual use activities. However, in May 2003, an official from the Greek Presidency was quoted as saying that they would seek to work around that obstacle: “by grouping next year’s defense projects under the umbrella term ‘global security’ and calling them ‘test cases’” (Tigner, 2003). This – the article added – was merely a matter of nomenclature and that the security projects will have direct military application, along with civil protection uses.

Thus, where “advanced security” was directed at civil security tasks (policing and counter terrorism), the Petersberg military humanitarian and peacekeeping tasks or some combination of the two remained vague and – it seems – deliberately ambiguous. What the Commission emphasised, however, were the benefits for European industrial competitiveness. The mobilisation of defence industrial interests, venue creation and the causal and normative ideas that were discussed and re-aligned sought to define and justify security research at EU level. In large part, the policy entrepreneurs had sought to create a winning coalition by attempting to synthesise the two great mobilising ideas of European Union politics at the time. On the one hand, the “capability” concerns of Member States as expressed in the European Security Strategy with, on the other hand, the concerns about lagging European competitiveness that had been a staple of the First Pillar of European Union politics.

4.4 High politics

Entrepreneurial skills and discursive developments may have placed the ambiguously defined “security” research onto the policy agenda but the final shape and content of the Security theme in the FP7 can – we believe – only be explained if we analyse the interplay of interests and power constellations *as well as* the discursive element.

4.4.1 A challenge to national sovereignty

Defence issues are within the competence of Member States and the idea that the “security” theme would address defence-related research represented a direct challenge to the sovereignty of Member States, an extension of the Commission’s competence and a step change in the organisation of European defence R&D. Historically, European defence R&D cooperation had been undertaken outside the European Union framework through bilateral relationships between countries, an array of multilateral organisations of European countries as well as NATO. The second half of the 1990s saw developments in this approach and the six European

countries with the large defence industrial and technological bases began discussions on means of promoting closer cooperation on R&D.²⁴

A Commission initiative in this field raised the possibility of conflict with the Member States' own efforts to promote European Union cooperation. In 2003, European governments announced that they planned to establish a European Defence Agency (EDA) in the field of military capabilities, defence industry and markets and defence research and technology which has amongst its aims the promotion of defence R&D cooperation. At the same time, the European Council tasked the EDA to work with the European Commission "to maximise complementarity and synergy between defence and civil or security-related research programmes". The EDA's new Chief Executive made his views on the relationship with the Commission and the Framework Programme plain, commenting: "We'd like to help them spend their money" (Tigner, 2004). There was little inclination to let the mandate slip towards the supra-national actor EU Commission.

4.4.2 The gap in positions: Member States and the limitation to civil security

The Group of Personalities report *Research for a Secure Future* had been published early the same year on 15 March 2004. The symbolism of its publication only one week after the Madrid train bombing was not lost on the participants. The GoP called for a European Security Research Programme that would support "internal security" and external ESDP tasks with a minimum funding of €1 billion per year. The GOP emphasised a "comprehensive approach that links the external and internal dimensions of security"; support and carry-out EU out-of-area peacekeeping and conflict-prevention missions; and the need for tight links between the ESRP and the EDA to ensure efficient use of Europe's defence budgets.

In June 2004, the Commission published its ideas on FP7 and announced that it would include two new areas for the Union, namely space and security (Commission of the European Communities, 2004b). The aims of the European Security Research Programme would be to: increase public security in Europe in the fields of civil protection, for example, and combating bioterrorism; help the Union to fulfil its tasks of preserving peace, preventing conflict and strengthening international security, in keeping with the principles of the United Nations Charter (Commission of the European Communities, 2004b).

In September 2004, the main recommendations of the Group of Personalities were adopted by the European Commission (Commission of the European Communities, 2004c). Again, the ambiguity as to the extent to which they would involve defence research as well as civil security research remained. The Commission announced that it would table proposals to establish a European Security Research Programme as a specific research programme within FP7 with its own set of procedures, rules for participation, contracts and funding arrangements adapted to the needs of security research. The Commission also announced that it would establish a new body – the European Security Research Advisory Board (ESRAB) – to advise on the content of the security research theme.

²⁴ The so-called "LOI six" comprised France, Germany, Italy, Spain, Sweden and the United Kingdom. The LOI refers to the Letter of Intent on Measures to facilitate the Restructuring of the European Defence Industry signed by the Defence Ministers of the six countries in London in 1996. The aim was to establish a co-operative framework to facilitate the restructuring of European defence industry that included initiatives in the field of research and technology.

The membership of ESRAB was noticeably different to that of the GoP. Table 1 shows that defence industrial companies were strongly represented but so too were companies active exclusively in civilian security, representatives of border agencies, police forces and so forth. The Member States played a role in nominating its members.

Greater attention was now being paid to the scope of the Commission's proposals. In contrast to earlier statements, Commission officials were now becoming more cautious. No longer were they talking about the use of security research to support overtly military and offensive weapons.

"Officials insist that the research proposals are geared to tasks that the EU has already agreed on, such as crisis intervention and peace-keeping, policing its borders and co-operation among law enforcement agencies. 'We are not going to be producing Stealth bombers' said one official" (Castle, 2004: 22).

A number of Member States challenged the Commission's position. Especially the UK government played a prominent role in challenging the scale and scope of the Commission's ambitions.²⁵ In March 2004, the UK Minister for Europe set out the UK Government's position emphasising what the UK saw as a clear distinction between civil and defence-related security and the competence divide between the Member States and the Commission:

"The Government considers it important that *the Commission limits its work to the area of civilian security research* which falls under its *competence*. Research on defence-related security issues falls under the *competence* of member States. Respecting *the competence divide* is particularly important as, in November 2003, the European Council agreed to create a capability development agency to oversee all aspects of collaborative defence capability development, including Research and Technology [i.e. the European Defence Agency]" (House of Commons (UK), 2004, para.5.14, p.17) (our emphasis).

In March 2005 the UK Government submitted a "non-paper" that reiterated the UK's concerns about competence and stating that it was essential that the programme: "did not harm the security interests of Member States nor cut across either national defence research or European co-operation on defence research. This will require effective safeguards. Defence remains a member State responsibility, where decision making is by unanimity".²⁶

The United Kingdom House of Lords European Union Committee reported that in response Gunter Verheugen (who had become Enterprise and Industry Commissioner in 2004) had written to the UK Government assuring them that the programme would have "a very clear and exclusive focus on civil research both in terms of structure and substance and it is our intent that this remains the foundation on which the programme is built" (House of Lords (UK), 2006: Appendix 2, p.22). As one Commission official commented:

"if we'd tried to pursue research with extra territorial applications we would have failed... We had no mandate and this was reminded to us by a number of

²⁵ The UK was not the only Member State to have concerns. The French and German governments also submitted "non papers" that sought to clarify the aims of the security research theme and the competence of the Commission (see House of Commons, 2004).

²⁶ Quoted in House of Lords (UK) (2006), para.63, p.16.

Member States – particularly the UK. France also. Germany had to be careful politically in this area”.²⁷

Opposition also emerged in the European Parliament. Although security research and a Commission role in the armaments field had received active support from some high profile MEPs, the Commission’s proposals were also subject to criticism. An exchange during questions to the Research Commissioner gives a flavour of the opposition from some sections of the parliament with one German MEP saying:

“I should like to warn you against pretending to Europeans that military armament in the field of research can result in any kind of positive progress, and against making the same mistakes that history is full of. What we are seeing is a new armament by stealth in the EU, and I can only issue the most fervent of warnings against it”.²⁸

The final size, shape and rules of the Seventh Framework Programme were played out during 2005 and 2006 through the “co-decision” process between the Commission, the European Council and the European Parliament (Muldur et al. 2006). During this process, Member States – led by the UK – insisted on the focus on civil applications fearing that the security research theme would enter into defence research. The European Parliament insisted on the focus on non-lethal applications. By June 2006, the impact of Member States concerns through the European Council is evident. An analysis of the text of the amended proposal for the 7th Framework Programme reveals the insertion of revised text emphasising the civil character of the theme. “Security research at Community level will *maintain an exclusively civil orientation....*” (our emphasis) and “close coordination with the activities of the European Defence Agency (EDA) will be needed to ensure complementarity” (Commission of the European Communities, 2006).

By the time ESRAB made its report in September 2006 it included for the first time a clear definition of “security research” that made plain that it was focused on civil applications (albeit that ESRAB left open the possibility of coordination of research with the EDA).²⁹ ESRAB’s recommendations became the blueprint for the governance and management of the FP7 security research theme (ESRAB, 2006). Those recommendations included a strategic framework to structure the research content of the security research theme, including both priority technology areas and also the role of social sciences (an aspect that had been missing from earlier discussions). ESRAB recommended that the focus should be on multi-disciplinary mission-oriented research that should, as a matter of principle, combine end-users and suppliers in project definition and execution. ESRAB also made recommendations for special implementation rules for European security research and in particular a reinforced role for Member States’ authorities and new procedures for handling sensitive information. Ultimately, after a strong attempt of the Commission to reach out for defence research, the final outcome was a much more limited, but nonetheless crucial inclusion of security research in the Framework Programme.

²⁷ Author interview with a European Commission official, July 2009

²⁸ Hans Peter Martin MEP, European Parliament debate on *EU resources for research*, Thursday 24 February 2005.

²⁹ Security research was defined as “...research activities that aim at identifying, preventing, deterring, preparing and protecting against unlawful or intentional malicious acts harming European societies; human beings, organisations or structures, material and immaterial goods and infrastructures, including mitigation and operational continuity after such an attack (also applicable after natural/industrial disasters)” (ESRAB, 2006: 18).

The process that led to the security theme in the Framework Programme had an additional, maybe even more consequential effect. It as a catalyst for the “creation” of new European networks in the field of civil security research and the civil security industry. The actions of the Commission had reflexive consequences. The actors who the Commission mobilised to join the effort had to speak a “new” language in the new European security research discourse to be accepted. The participation in the discourse and the concomitant institutions contributed to the formation of a new or the alteration of existing identities: the “European” civil security industry was born. Some defence industrial companies sought to recast their activities in the language of “civil security” in order to play the new game and access the new source of research funding. End users who had not previously seen themselves as part of EU institutional structures such as Ministries of the Interior and emergency services were brought together in new forums such as ESIRAB and ESIRIF and became participants in FP7. In the field of European politics, these consequences were significant. The “civil security” research community that emerged was not simply a sub-set of “defence” research. Commission policy entrepreneurship combined with the negotiations over the security research theme crafted and created a new type of (European) research activity with its own institutions and networks. At the same time, the security research theme provided an instrument for the European Commission to engage in the field of defence research not least through cooperation with the European Defence Agency. The security research theme may have moved outside the field of defence research but the establishment of the theme was a considerable achievement for the Commission policy entrepreneurs and the interests that they mobilised.³⁰

5 Discussion and conclusion

Why should the STI policy community care about the analysis of the processes through which a new, relatively small and rather idiosyncratic theme emerged in the European Union Framework Programme?³¹ What is there to learn from the findings and the conceptualisation? We now can come back to our four claims made at the beginning of this paper and argue that this paper has put forward four different kinds of contribution to the analysis of STI policy: (1) a more complete account of the nature of the European Framework Programme, (2) the role and limitations of a constrained policy entrepreneur in STI policy, (3) the meaning of ambiguity in STI policy discourses and (4) the lessons about the interplay of ideas and interests in STI policy and the meaning of policy origin for the understand of its shape and functioning. The combination of those lessons offers a novel approach to understanding policy change in STI policy more generally, and at EU level more particularly, and it enlarges our understanding of the levers and limitations of policy entrepreneurship in policy making.

A **first**, narrow but important contribution of this paper is that it fills a serious gap in the knowledge about the nature and shape of the EU Framework Programme itself, since the security theme represents a significant – but surprisingly under researched – development in the character of EU science and technology policy. The level of funding for the security research

³⁰ We gratefully acknowledge the contribution of Thomas Teichler in highlighting this matter for us.

³¹ The security research theme accounts for less than 3 per cent of the € 50.521 billion Seventh Framework Programme budget and a little over 4 per cent of funding for cooperation on collaborative research. Equally, funding for civil security under the six years of the Seventh Framework Programme is approximately the same as the annual science and technology budget of the U.S. Department of Homeland Security.

theme may be relatively small but its implications for the character of European science and technology policy are potentially considerable:

- The Framework Programme has entered a new field. Historically, Framework Programme funding of research and technology with applications to defence and national security was a by-product of the growing dual use character of technologies. The security theme represents a deliberate act of research prioritisation.
- This new field of Commission activity is close to the heart of national sovereignty. The security research theme is a supranational programme that is not directly controlled by Member States and as such is very different in character from inter-governmental defence research cooperation in Europe. The security research theme represents an important development in the European science and technology policy mix not least as a move towards multi-level governance in the security field.
- The security research theme represents a departure from the strictly civil character of the Framework Programme. Although this is a civil security research programme, it provides a policy instrument for the Commission to engage in activities that complement defence research not least through the European Framework Cooperation for Security and Defence Research with the European Defence Agency.

Secondly, the paper provides further evidence of the role and limitations of policy entrepreneurs and the interaction between those entrepreneurs and entrenched interests in the shaping of STI policies. It thus contributes to the understanding of entrepreneurship in STI policy more generally. Our account emphasises the role of the European Commission as the key actor and this represents a very different perspective. In other accounts of policy development in STI policy, the role of policy networks (Peterson 1991, 1995) and strong lobby groups within them (Grande and Peschke 1999; Shearman 1986) were instrumental for shifts to European level instruments. Our perspective also challenges the traditional view of the role of the defence lobby and the “military industrial complex”. Academic literature (and popular thinking) on defence emphasises both the role of power and of strong closed policy networks in policy definition (see for instance Adams, 1982). In the security research theme, despite discursive support by industrial groups, it is clearly that the Commission created and drove the policy network, and in the end the support by industry was insufficient to push strong national interests of Member States.

Our main argument has been that the very fact that this research theme came back onto the European policy agenda after the Member States had rebuffed the Bangemann initiative can only be understood by the specific competencies, practices and constraints of the Commission. The Commission was the *entrepreneur* that re-formulated and re-activated an older idea to include defence research at EU level, forged new interactions around this issue (through setting up expert groups etc.), facilitated and moderated a multi-layered discourse around this basic idea and had the operational means to set up a concrete demonstration project to crystallise the debate around a tangible, concrete activity. This entrepreneurial process of generating and selecting of new policy “problems” also explains the *timing* of the emergence of this new policy. Within the field of STI policy, there are at any one time many “problems”. Some of those problems are deemed sufficiently “important” that they emerge on to the policy agenda and are allocated resources. Some can exist for years or decades without policy attention or – like the ideas contained in the Bangemann initiative – suffer rejection from the policy agenda. EU funding of defence research was being discussed before the events of September 11th 2001 but

it is an open question as to whether it would have emerged on to the agenda had Commission policy entrepreneurs not identified 9/11 as a window of opportunity. The window of opportunity opened as the Commission was instrumental in (1) supporting a dominant problem definition by exerting discursive and “intellectual” leadership (Young 1991) and by formulating a supranational interest (Radaelli 1995), (2) suggesting an appropriate solution and in taking advantage of a favourable political climate (Kingdon 1984, Bossong 2012).

The case study also demonstrates the **limitations** of discursive, entrepreneurial approaches in STI policy making. The Commission’s entrepreneurship did serve to successfully introduce security research on to the agenda and establish a minimum level of consensus that for the first time pushed *civil security* research into the Framework Programme. However, the entrepreneurship was constrained. The initial idea for “advanced security” had originally, been a broader one, i.e. to include *defence* research in the Framework Programme and link joint defence research both to the competitiveness agenda and the European security discourse which intensified following the 9/11 attacks on the United States. Against the established high politics interest of large Member States, the Commission fell short of altering the landscape of *defence* research in Europe and making the move towards defence research. The momentum built up while creating the window of opportunity and the discursive power of the rationale for an EU policy for security and defence research was not strong enough against the background of deeply rooted national logics and actor arenas in the area of defence. The *normative distance* between national approaches for defence and a supranational logic for defence research on the one hand prevailed over the conceptual logic of joining forces for defence research in an integrated programme on the other hand. A broad interpretation of the idea, encompassing defence and security, was curtailed in the process and the theme was limited to civil security research. This can be explained only when looking at how national interests and supranational logics interacted. The Commission lacked the capacities to be a structural leader (Young 1991). Despite early attempts, including pilot actions that clearly benefitted defence companies, the Commission could not mobilise a broad and strong buy in by national industry interests that let them turn strongly towards their national governments to make them support supranational approaches in defence research – as had happened in the 1980s with the early Framework Programme. The Commission thus also lacked the abilities to overcome opposition of strong Member States. The creation of the EDA and the cooperation agreements through the EDA were the mechanism by which the idea of defence research cooperation were rescued, however, in an inter-gouvernemental setting without a strong, integrative commitment and with a much more limited ambition. The inter-governmental EDA mechanisms is a mediation between national and supranational that offers an opportunity structure to combine cooperation with full national sovereignty over defence research. Nonetheless, the implications are long lasting, as it did pave the way for an on-going debate as to what the future boundaries for security and defence research at EU level should be (James et al 2011). However, the *neo-functional* logic whereby the common threat is supposed to lead to an integrative approach was curtailed in what was a classical *liberal-intergovernmentalist* process in which pre-existing interest definitions prevailed (Moravcsik 1999).

Thirdly, an important lesson as regards discursive entrepreneurial STI policy concerns the meaning of ambiguity. It appears that the relative success of the Commission – against those deeply inscribed national interests – was enabled by the deliberate ambiguity associated with the term “security” research from the outset. We have noted how the Commission deliberately kept the meaning and scope of the “advanced security” research concept ambiguous and thus

left the possibility of broad inclusion open. Ambiguity was used as a tool to blur pre-existing boundaries and to enable the development of new types of interest coalitions. Ambiguity in what was meant by “security” and the scope of its activities became a key area for negotiation between the policy entrepreneurs, member States and the European Parliament. The final definition of “civil security” research was the product of those negotiations and a reflection of the ambitions of the policy entrepreneurs on the one hand and the interests and anxieties of some member States and some parts of the European parliament on the other.

Finally, and most generally, this example demonstrates that the emergence of STI policy is, after all, a complex interplay of ideas, discourses, entrepreneurial action, interests, actor identities and power. Looking at the emergence of the security research theme allows us to reflect on the power and limits of discursive processes in STI policy development more generally. In its first phase our case is a classic example of the practices – and actor strategies – of discursive entrepreneurship, placing an idea on to the agenda through venue creation and organising discourse arenas. This discursive emergence is a major feature of STI policy more generally, which is characterised by ambiguities as relates to best ways of organising and supporting the creation of knowledge and turning it into innovation, and thus policy development was inherently a process of concept shaping. The second phase, however, is a classic instance of the role of interests and power in setting the policy agenda and how the interests of member States mobilised to limit the scale and scope of the proposed security theme. Neither the discursive institutionalist approach nor the rational choice approach alone could explain why we have security research at EU level the way we have it now.

Thus, while this paper analyses EU defence and security research, it has wider significance not least for the way that the STI policy community thinks about the nature of STI policy more generally as it shows how the origin of a policy determines its content and shape. As such, it is relevant not only to students of European Union politics but students of STI policy more broadly whether they be in Brussels, Boston or Brasilia. Only by understanding the processes that led to the emergence of the security theme can we understand its particular character, not least what is – and what is not – the subject of “security research”. Moreover, the origins help us to explain some of its idiosyncratic features – such as the fact that it is managed by DG Enterprise and not that part of the Commission that is responsible for home affairs, policing and counter-terrorism. All too often the academic science and technology policy community focuses on the shape of policy and the emergence of new institutions to govern science and innovation whilst paying rather less attention to the *origins* of those science, technology and innovation (STI) policies. In evolutionary mode, we need to pay more attention to the processes that lead to the generation and selection of new policies. The content and effect of policy is – like so much else in our field – path dependent and it is only right that we begin an analysis of the content (and effect) of policy at the beginning of that path – its origins.

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