

A new concept of deepening European integration? – The European Research Area and the emerging role of policy coordination in a multi-level governance system

Robert Kaiser and Heiko Prange

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Abstract

Within the discussion on European governance and constitutional reforms of the EU polity the so-called "open method of coordination" (OMC) has gained much attention as a procedure that occupies an intermediary place between intergovernmental cooperation and supranational legislation. In this paper we argue that the OMC is even likely to turn into a new concept of deepening integration within a multi-level governance system, if it is applied within certain boundaries and under specific conditions. We explore our argument with respect to the European Research Area which will be the new conceptual framework of the EU's research and innovation policies.

Kurzfassung

Im Rahmen der aktuellen europäischen Verfassungsdiskussion hat sich auch eine Debatte um das sogenannte "Verfahren der offenen Koordinierung" entwickelt, das zu einer größeren Kohärenz von Politiken auf verschiedenen staatlichen Ebenen führen soll und sich dabei zwischen intergouvernementaler Kooperation und supranationaler Gesetzgebung einordnet. In unserem Beitrag argumentieren wir, dass "offene Koordinierung" als ein neues Konzept zur Vertiefung der europäischen Integration verstanden werden kann, wenn es innerhalb bestimmter Grenzen und unter spezifischen Voraussetzungen angewendet wird. Wir entwickeln diese Argumentation am Beispiel des Europäischen Forschungsraums, der das neue Rahmenkonzept für die Forschungs- und Innovationspolitik der Europäischen Union darstellt.

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A new concept of deepening European integration? – The European Research Area and the emerging role of policy coordination in a multi-level governance system(*)

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1 The open method of coordination as a new concept of deepening integration? [↑]

Under the impression of growing challenges for European integration, the European Union (EU) is searching for new modes of governance in order to develop the European polity in a more effective, more efficient and more democratic way (e.g. Héri-tier 2001a; Jachtenfuchs 2001; Jørgensen 1997; Kohler-Koch and Eising 1999; Metcalfe 2001). Currently, the so-called European Convention seeks to find solutions, for example, to re-organize competences across varying territorial levels, to re-define the competences of the EU institutions, and to integrate societal groups (such as NGOs) as well as national and regional parliaments more carefully in the decision-making process. The Commission's White Paper on Governance has been a main vehicle in the process of transforming European governance (European Commission 2001a; Wincott 2001).

The emerging role of policy coordination needs to be seen in the context of these developments. Focusing on the "open method of coordination (OMC)", introduced by the Employment Strategy of the Amsterdam Treaty and reaffirmed by the Lisbon European Council in 2000, we show that the OMC is not only a new mode of governance (Eberlein and Kerwer 2002; Héri-tier 2001b; Hodson and Maher 2001), but is likely to turn into a "new concept of deepening European integration". The OMC establishes so-called "good" practices and benchmarking indicators that go beyond the initial Treaty provisions, thus bringing in new elements that may pave the way for greater effectiveness

and/or legitimacy. Consequently, the OMC might produce a higher level of integration (European Commission Working Group 4a 2001, p. 9).

While some authors expect policy coordination as the dominant mode in future EU policy-making (Wallace 2000, p. 23), the application of the OMC – according to the European Commission – may especially be suited in three cases⁽¹⁾: first, in areas touching upon national identity or culture, such as education, which are closely tied either to constitutional or historical peculiarities of a member state; second, where national legislation and structures are too diverse or too complex to be harmonized (e.g. social protection, employment); third, policies where member states are reluctant to embrace common legislation immediately, but do have the political will to take some steps towards a common objective – such as asylum or immigration.

Indeed, EU member states seem to apply the OMC preferably to policy areas which are “half way” of being “communitarized”, such as social welfare, immigration, education and research.⁽²⁾ In such policy areas decisions are taken both at the national and the EU level – and even at the regional level although to a varying degree (e.g. in Germany, Italy, Belgium, and Austria).

This paper examines the boundaries and conditions for the application of the OMC in different policy areas. We argue that for reasons of efficiency and legitimacy in an expanding Union, the open method of coordination is likely to constitute a promising concept of deepening integration in two different kinds of policies. First in policy areas which are characterized by:

- i. a high degree of decision-making powers and a significant amount of financial resources at different territorial levels (especially in federal member states)⁽³⁾,
- ii. considerable differences in the structures of the member states’ societal subsystems (such as the research or education systems), and
- iii. considerable differences in the performance of these subsystems across member states.

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Second, the OMC could prevent the EU from “overstretching” its resources and capabilities in policy areas in which the Community is heavily engaged in the implementation and management of policy measures even at the regional or local level, such as structural policies. With the OMC in place, the EU would be able to reduce its density of regulations by using framework directives that allow for different transpositions at the national or subnational levels “in the shadow of legislation” (Scharpf 2001).

However, we challenge the assumption that the OMC – by using so-called soft-law (e.g. benchmarking, guidelines) – can be interpreted as a first step towards a genuine Community dimension even in policy areas that are sensitive and difficult to integrate because of fragmented and diffused competences (European Parliament 2001). Such a development seems unlikely because it would easily meet with resistance primarily from regional actors that might consider the OMC as an instrument of centralization in areas in which the Community lacks legislative powers (Bocklet 2000).

We explore our argument with respect to research and innovation policies, where a multi-level governance system has emerged since the mid-1980s (Grande 1999; Kaiser forthcoming; Peterson and Sharp 1998), and where the EU plans to establish a European Research Area (ERA) applying the OMC as the main instrument of integration (European Commission 2000a; Presidency Conclusions 2000, point 13).

The following section addresses the main theoretical considerations using the concept of multi-level

governance (MLG) as an analytical framework and shows how the OMC might operate in this system. In section 3, we analyze how research and innovations policies are organized in the European MLG system pointing at differences in decision-making powers, financial resources, subsystems and performance. Finally, the paper evaluates the OMC as a new concept of deepening European integration in the context of the current debate on a European constitution.

2 The open method of coordination in a MLG system [↑]

In the following, we first highlight the characteristics of both the “system of multi-level governance” and the “open method of coordination”. In a second step, we will illustrate some likely effects of the OMC, if applied in the European system of multi-level governance.

2.1 Multi-level governance [↑]

Building on the analysis of the European Community’s structural policy, the model of “multi-level governance” was first introduced by Gary Marks in 1993 (Marks 1993, p. 407) and further elaborated in the following years by Hooghe (1996), Hooghe and Marks (2001a), Jachtenfuchs and Kohler-Koch (1996), Kohler-Koch (1996), Marks (1996), Marks et al. (1996), Peters and Pierre (2001), and Scharpf (2002) among others. Initially, the concept was developed to offer an alternative view on state-centric models of European integration, which basically claim “that policy-making in the EU is determined primarily by state executives constrained by political interests nested within autonomous state arenas that connect subnational groups to European affairs” (Marks et al. 1996, p. 345).(4) In contrast to these approaches, a system of multi-level governance reflects “a polity creating process in which authority and policy-making influence are shared across multiple levels of government” (Hooghe and Marks 2001, p. 2).

Among scholars it is widely accepted that the European multi-level governance system consists of three distinct features (Marks et al. 1996; Grande 2000; 2001; Hooghe and Marks 2001; Peters and Pierre 2002):(5)

- i. decision-making competencies are shared by actors at different levels (i.e. a “dynamic” dispersion of authority);
- ii. actors and arenas are not ordered hierarchically as in traditional inter-governmental relationships (i.e. non-hierarchical institutional design);
- iii. consensual or non-majoritarian decision-making among states, which requires a continuous wide-ranging negotiation process (i.e. non-majoritarian negotiation system).

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According to the first feature, decision-making competencies are dispersed across territorial levels, i.e. across supranational, national, and regional or local actors, or allocated sideways, which means e.g. to quasi-autonomous agencies or to non-public implementation bodies (Majone 1996; Thatcher and Stone Sweet 2001). Another popular instrument are public-private partnerships for enhancing the capability of public institutions (see e.g. Börzel and Risse 2001). However, the dispersion of authority can be organized in a more traditional, federal way, where competencies are allocated “in bundles to a limited number of non-overlapping governments, each catering for a particular territory at a particular scale”, or in a more radical manner by dispersing “competencies among a very large number of overlapping governments” (Hooghe and Marks 2001b, p. 16).(6)

Moreover, it is argued that the European multi-level governance system is a highly dynamic one, in which “the competencies and functions of the different levels have not been fixed precisely yet ...

and cannot be fixed precisely at all” (Grande 2001, p. 9). What follows is that European governance is not a stable pattern, “but varies over time and across policy areas” (Kohler-Koch 1999, p. 32). With regard to aspects of authority relocation that might be a consequence of introducing the OMC on a wider scale, it is of special importance that in contrast to federal systems, in a multi-level governance system the interactions between the different levels are not “disciplined” by constitutional norms, which results in a considerable competition for competencies (Grande 2001; Mayntz 1999; Peters and Pierre 2002).

This competition for competencies, which contributes to the dynamic character of the European multi-level governance system, can best be illustrated with regard to the functioning of the internal market. While residual or reserved authority belongs to the member states, the principle has nevertheless continuously been hollowed out by an expansive interpretation of the EC’s internal market provisions (cf. Bermann and Nicolaidis 2001, p. 491). EC institutions extensively used the tool of Article 95 (ex Art. 100a) of the Treaty to adopt “measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their objective the establishment and the functioning of the internal market”.

The idea of the second feature is that actors and arenas are not ordered hierarchically, so that “supranational institutions are not hierarchically superimposed upon the member states; and the member states and their regions are not subordinated to the supranational powers” (Grande 2001, p. 7). Rather, “political arenas are interconnected rather than nested” (Marks et al. 1996, pp. 346f), which means that subnational actors not only operate at the national but also at the supranational levels. The consequences of this constellation are two-fold: first, in the European system of multi-level governance, actors at different territorial levels form “integrated systems of joint decision-making” (Scharpf 1988), leading to a growing demand for policy coordination and a growing importance of interaction effects between the different levels and arenas of decision-making (Grande 2001, pp. 9f); and second, regional and local actors “by-pass” the national level to pursue their interests at the supranational level (Beauregard and Pierre 2000; Peters and Pierre 2002), so that national governments could no longer monopolize the contacts to the European level (Marks et al. 1996, p. 346; Wallace 2000, p. 31).

The third point stresses that the European system of multi-level governance is characterized by a non-majoritarian mode of decision-making (Grande 2000, pp. 8f; Moravcsik 2001, pp. 173f). The reasons for this observation can be found in the non-hierarchical nature of the MLG system and in the role of national governments. In a multi-level governance system, hierarchical command mechanisms or majoritarian decision-making would contribute to a lack of legitimacy of decisions and to high costs of implementation (Grande 2001, p. 8). Moreover, from a state-centric view it can be argued that national governments still play the most important role in the decision-making process of the EU (Moravcsik 2001, p. 175). Thus, a non-majoritarian mode of decision-making is necessary at least in matters of high importance to represent and enforce established territorial interests. Both the non-hierarchical nature of the MLG system and the still important role of national governments at the supranational level turn the European multi-level governance system into a negotiation system, in which bargaining capacities and skills – and not hierarchical power – determine outcomes (Grande 2001).

These characteristics of the European multi-level governance system are especially important with regard to the OMC, since the Lisbon European Council intended to apply the method in policy areas where national diversities and regional particularities have to be taken into account carefully (Presidency Conclusions 2000, point 38).

2.2 The open method of coordination

Policy coordination is not unprecedented in the European Union but already takes place in economic or employment policies (see Ahonen 2001; Goetschy 1999; Hodson and Maher 2001; Mosher 2000). Policy coordination among the EU member states comprise a variety of instruments designed to foster compatibility, consistency or convergence of national choices with a view to deeper European integration (European Commission Working Group 4a, p. 6).

The open method of coordination was finally codified with the Lisbon European Council applying it to policy sectors such as information society, research policy, entrepreneurial policy, and education policy. The Feira and Stockholm European Councils extended the scope of policy areas covered by open coordination further. The OMC is supposed to occupy an intermediate place between intergovernmental cooperation and the adoption of common rules (European Commission Working Group 4a, p. 5). It comprises four central elements (Presidency Conclusions 2000, point 37):

- i. guidelines for the Union combined with specific timetables for achieving the goals which they set in the short-, medium- and long-run;
- ii. establishing performance indicators and benchmarks against the best in the world and tailored to the needs of different member states and sectors as a means of comparing best practice;
- iii. translating these guidelines into national and regional policies by setting specific targets and adopting measures, taking into account national and regional differences;
- iv. periodic monitoring, evaluation and peer review organized as mutual learning processes.

As in the case of multi-level governance, certain core features of the OMC can be listed:

1. The OMC is “open” in several aspects: first, it is open because it allows for a different implementation in different policies; second, the OMC leaves it to the member states to implement coordination defined at the European level; third, the development of this method in its different stages is open to the participation of the various actors of civil society. Taking these points into account, the OMC can also be seen as a more flexible instrument, leaving broader space for closer cooperation between member states that wish to pursue deeper integration.
2. Applying the OMC is “non-binding”: defined goals are not mandatory and non-performance, measured through benchmarking indicators, peer review, and monitoring, is not accompanied by a system of sanctions (cf. Héritier 2001b, p. 9). However, it is more than simple cooperation, since it contains the intervention of Community authorities and those methods of soft regulation mentioned before. Even more important, multilateral surveillance and the fixing of common targets puts pressure on the member states to achieve these targets (i.e. it has a “disciplinary effect”).
3. The OMC is similar to policy transfer and diffusion through a process of mutual learning based on peer pressure (Hodson and Maher 2001, p. 727; Radaelli 2000). Hence, the OMC should favor a bottom-up approach to convergence in which “governments study each other’s different methods, gauge the success of various policy alternatives and mimic best practices employed elsewhere” (Bomberg and Peterson 2000, p. 6).
4. Applying the OMC might affect the institutional balance of the EU. The Lisbon Council decided to establish an additional spring meeting of the European Council to review the state of progress of the Union’s economic and social modernization strategy and to update its content each year. This gives the European Council on the one hand a central role in ensuring the political coordination of implementation of the OMC (see also Ahonen 2001, p. 10; Hodson and Maher 2001, p. 739), while on the other hand he is not in a position to exercise day-to-day control. As a direct consequence of these developments, the OMC provides the Commission opportunities to enhance its role as policy broker and catalyst, presenting broad guidelines, organizing the exchange of best practice, proposing indicators, and arranging peer review. Consequently, the OMC “can be seen as an aspect of the Commission’s search for new

roles” (Ahonen 2001, p. 10). Whereas the Councils (European Council, Council of Ministers) hold wide powers in decision-making, only the Commission can provide sufficient technical and organizational resources to ensure the continuity of common programs.

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Although it is clear that an evaluation of the effects of the OMC in a system of multi-level governance is not possible due to a lack of empirical evidence, the previous elaborations on “multi-level governance” and the “OMC” allow for several preliminary conclusions.

2.3 Preliminary conclusions: bringing MLG and OMC together

In accordance with the preceding explanations, it is very likely that the application of the OMC will have distinct effects on the European MLG system in all of its characteristics, i.e. dispersion of competencies, non-hierarchical institutional design, and the non-majoritarian mode of decision-making. First of all, the disputes over competencies may rise, since before an initiative is launched, “it is essential to check systematically (a) if public action is really necessary, (b) if the European level is the most appropriate one, and (c) if the measures chosen are proportionate to those objectives” (European Commission 2001a, p. 11). The Commission may use the OMC to put a “foot in the door” to prepare the ground for Community legislation in policy areas that are not “communitarized” yet (European Parliament 2001; Héritier 2001b), while parliamentary control over the OMC is underdeveloped. Moreover, there is no systemic involvement of regional and local authorities, since the OMC rests on evaluating the position of the member states. That may result in difficulties especially in countries with a highly decentralized structure, where regions have genuine legislative and budgetary powers.

Second, since the development of this method in its different stages is open to the participation of the various actors of civil society as well as to the participation of public actors of all territorial levels, the non-hierarchical character of the European multi-level governance system will be strengthened. Thus, it can be expected that it will become easier for regional and local actors to “by-pass” their national administrations.

Third, it can be assumed that the principle of consensual decision-making may be softened. Normally, in a multi-level governance system, hierarchical command mechanisms or majoritarian decision-making would contribute to a lack of legitimacy of decisions and to high costs for their implementation. Since the OMC is characterized by non-binding instruments, low costs are expected for political decision-making (cf. Héritier 2001b, p. 9). Additionally, due to the non-binding nature of the OMC, member states do not have to present and enforce established territorial interests in any case, which likely favors majoritarian decision-making.

However, while some authors already call the open method of coordination a “flagship” in a new era of “federalism without Brussels’ supranational institutions” (Nicolaidis 2001, p. 465) or a credible solution to enhance legitimacy of the European Union and to reduce its democratic deficit (Eberlein and Kerwer 2002)(7), we sought to show that there are good reasons to claim that a successful application of the OMC in a system of multi-level governance depends on several preconditions, especially in policy areas where authority is territorially dispersed and where regional governments own distinct legislative and budgetary powers. In the next section we provide some empirical evidence for our argument, taking the proposed European Research Area as a case study.

3 The European Research Area: EU efforts and national diversities

3.1 Towards a European Research Area

Since the early 1980s, the EU has significantly widened the scope of its activities for research and technological development (RTD) as it has increased its related investments. Starting with sectoral technology programs, such as ESPRIT, RACE or BRIDGE, which financed collaborative research projects in areas like information and communication technologies or biotechnology, the European Community has subsequently expanded its engagement after the Single European Act gave the EC the explicit competence to develop its own RTD-policy. As the main instrument of this policy, the European Commission proposes multiannual framework programs on which the European Parliament and the Council have to decide by majority voting. Since the mid-1990s, the EU has refocused its RTD-policy both towards a regional dimension as well as towards additional actions to foster European innovativeness. "Regional Innovation Strategies" (RIS) as well as "Regional Innovation and Technology Transfer Strategies" (RITTS) were implemented first in 1994 under the European Regional Development Fund and the fourth community RTD framework program, respectively. A European innovation policy emerged only as a consequence of the 1995 Green Paper on innovation and the subsequent implementation of the first action plan for innovation in 1996.

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However, in comparison to RTD-related measures taken by the member states, the EU's engagement is still limited. On the one hand, the EU's budget for RTD is only about five percent of the total EU-wide public investment in research and development (Banchoff 2002, p. 2), while over 80 per cent of public sector research is conducted under national or regional R&D programmes (European Commission 2001d). On the other hand, European RTD measures are still suffering from a lack of coordination both horizontally across various policy areas as well as vertically in view of the RTD-policies of the member states and their subnational entities (Peterson and Sharp 1998; Grande 2001). In order to cope with these coordination deficits, the European Commission proposed the establishment of a "European Research Area" (ERA) in which policy coordination – primarily on the basis of the OMC – will be the main instrument of integration (European Commission 2000a). The rationale behind the applications of the OMC is that public policy actors at the European, the national, the regional and even the local level should become more involved to ensure that measures taken at the different levels will be mutually consistent. Under this premise, innovation policies implemented at various levels in Europe are expected to become considerably more integrated in a multi-level governance structure.

The ERA concept breaks with traditional approaches of the present European RTD-policy at least in two points. First, instead of financing and managing a large number of research projects at the micro-level, measures will now be focused on networking existing centres of excellence and financing integrated projects in scientific areas that have been considered to be of strategic importance, such as biotechnology, information and communications technologies or nanotechnology. Second, instead of supplementing national and regional RTD programmes, European funds will now be available to co-finance networked national programmes. In order to achieve this, the Lisbon Council proposed to develop an appropriate mechanism aimed at "networking national and joint research programmes on a voluntary basis around freely chosen objectives" (European Commission 2001d). Moreover, the European RTD-policy will be incorporated in a much broader context of benchmarking national (as well as regional and local) research, technology and innovation policies in order to set up consistent innovation strategies that are supported by Community policies (European Commission 2001c). This strategy, however, deviates significantly from the present situation in which regional and national innovation policies are defined and implemented under a considerable amount of autonomy (European Commission 2001c). Therefore, the application of the open method of coordination for the ERA concept seems to be appropriate especially for three reasons: first, because of the existence of innovation policies at different territorial levels; second, because of the structural diversity of

member states' innovation systems and third, because of the variations in the performance of member states' innovation systems(8).

3.2 Innovation policies at different territorial levels

The member states of the European Union differ significantly not only in terms of innovation and RTD-policies conducted at the central state level, even more variations can be identified in view of the existence of respective subnational or regional programs. A detailed index measuring regional governance in Europe, drawn up by Hooghe and Marks (2001), indicates that many EU member states have decentralized authority since the 1980s. This trend certainly holds true for innovation policies. As Braczyk et al. (1998), Cooke (1992; 2001) and Cooke et al. (1997; 2000) showed there is today a significant amount of autonomy in innovation policy at the regional level, even though the degree to which regional actors are able to pursue their own policies varies considerably among member states.

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The German federal states (Länder), for example, have initiated their own innovation policy programmes since the mid-1970s in reaction to economic recession and structural change (cf. Scherzinger 1998). In doing so, they invested considerable amounts of money raised either from privatization of state-owned enterprises or redeployment of regional budgets.(9) Apart from that, the Länder are considerably involved in various joint policy coordination processes with the federal level. Coordination exists especially in research and education policies where several permanent commissions, such as the *Science Council* or the *Planning Committee on Higher Education Building*, were established. Furthermore, innovation policy coordination is supplemented by federal-states co-financing arrangements that concern all major German research organizations as well as the university infrastructure. Because of its federal constitution and the complexity of the research system, Germany certainly has the most differentiated structure in innovation policies within the EU. Within this structure, the Länder have not only increased their expenditures for innovation in recent years, they also have concentrated on areas in which they are least encumbered by the constraints of joint policy-making. As a result, regional innovation policies gained importance as an instrument of competition and differentiation among the states, while the federal level has focused its activities either on cross-cutting infrastructural programmes or specialised priority programs funding technologies at a pre-competitive stage (Wilson and Souitaris 2002, p. 1132).(10)

However, a federal state structure does not necessarily indicate the existence of autonomous regional innovation policies. In Austria, for example, the key player in this area certainly is the federal government which has increasingly initiated regionalized innovation programs, i.e. programs that emphasize the role of the regional economic structure (Kaiser and Prange 2001; European Commission 2001b). In Belgium, however, innovation policies are pursued, even more than in Germany, under the responsibility of the subnational level. Subsequent to the constitutional reforms between 1970 und 1993, the Belgium communities and regions initiated a number of innovation policy measures as they provide the by-far largest share of public investments in research and development (cf. Cooke et al. 2000, pp. 120ff). The competencies of the central government in innovation policies are restricted to federal research organizations and Belgium's engagement in international research programs (Dresner 2001, p. 110).

Even in considerably more centralized EU member states, such as the Netherlands, regional innovation and technology policies emerged in the 1990s, partly motivated by the EU's regional innovation measures RIS and RITTS. Additionally, the Dutch Provinces intensified horizontal policy coordination at the subnational level as they called on the central state government to provide for more regional competencies in innovation policies (Prange 2002, pp. 17ff). Contrary to the example

of the Netherlands, a regional dimension in innovation policies can hardly be recognized in other centralized or unitary countries such as France or Portugal. In France, for example, a decentralization of national institutions (e.g. regional boards of the Ministries of Research, of Industry etc.) has taken place in recent years. However, regional initiatives in innovation policies mainly exist through the establishment of regional technology transfer centres under the authority of Regional Councils (European Commission 2000c, p. FR-7). In the case of Portugal, not only administrative structures are considerably centralized, but also capabilities for research and development. About two thirds of the country's financial and human R&D resources are located in the Lisbon area (European Commission 2000d, p. PT-16).

3.3 The structural diversity of member states' innovation systems [↑]

Innovation systems can be defined as “the set of organizations, institutions, and linkages for the generation, diffusion and application of scientific and technology knowledge operating” in a specific country, region or sector (cf. Galli and Teubal 1997, p. 345). As an analytical concept, innovation system approaches are primarily concerned with differences in innovativeness between countries, regions or sectors which can be related to variations of the institutional environment in which innovative organizations (esp. firms and public or private research laboratories) are embedded. This institutional environment is determined by various factors such as public policies, the financial system or the research and education systems. In view of the proposed European Research Area the most important factor certainly is the structural diversity of member states' research systems. Those structural diversities can be observed in terms of various indicators, such as the technological orientation of private and public research organizations in different countries. Patent analyses have shown that at least the larger EU member states (France, Germany, Italy and the UK) differ considerably in their technological specialization. Moreover, those patterns of specialization are not only remarkable persistent, they also influence the research activities pursued abroad by European firms as well as of foreign firms acting in different EU member states (cf. Patel and Pavitt 1997; Patel and Vega 1999).

As for research and development activities of the private sector industry, the dominant actors in R&D vary considerably among EU member states. In France, Germany and Sweden, for example, firms with more than 500 employees pursue the clear majority of R&D activities, whereas in Portugal roughly 60 percent of private sector research and development is conducted in small and medium-sized companies (OECD 2001, p. 27). Accordingly, the share of small and medium-sized companies in publicly-funded R&D programs is comparatively low in countries like Sweden, Italy, France, Germany and the UK, but extraordinary high in Ireland, Greece and Portugal (European Commission 2001e, p. 28). However, this does not necessarily indicate that the innovative performance of small and medium-sized companies is higher in countries where fewer large or even multi-national enterprises exist. On the contrary, the sales share of innovative products by small and medium-sized companies is highest in Germany followed by Ireland, Austria, Sweden and the UK (European Commission 2000e, p. 12).

Significant variations among EU member states also exist in view of the publicly-funded research systems. Germany, for example, possesses a highly differentiated and decentralized public research infrastructure with various universities, technical universities and polytechnics on the one side and specialized non-university research organizations on the other side. The university infrastructure is complemented in view of basic research by the institutes of the Max-Planck-Society, in terms of applied research by institutes of the Fraunhofer Society. Apart from that, institutes of the Helmholtz Society and the so-called Blue-List institutes are specialized either on large-scale research or on priority research areas considered to be of national importance (cf. Beise and Stahl 1999). In contrast

to Germany where a large proportion of public R&D is pursued outside the universities, publicly-funded research in Sweden and Austria is concentrated within universities, since both countries possess only a small number of non-university research organizations (European Commission 2001b). Additionally, in countries like France, Ireland, Spain and the UK specialized institutes for applied research hardly exist. The French public research infrastructure is heavily based on its national research institutes which are functionally organized around relative few sectors and technologies like space, defence, railways and nuclear technology (European Commission 2001f). Especially in France and Italy research efforts were focused on “national champions”, i.e. on highly prestigious projects. In terms of coordinating public science, France traditionally owned a system of central control over the general strategy defined by five-yearly plans until 1981 (Senker 1999).

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Recent developments indicate that the diversity of European public research systems tends to increase rather than decrease, e.g. regarding funding. France, for example, used pollution-based taxes as a new source to finance research projects on AIDS, the environment, or gene therapy (Senker 1999). In Germany, financial resources that have been gained from the auction of third generation mobile communications licenses (UMTS) are used to invest about \approx 900 million in research and education between 2001 and 2003. Besides that, public RTD funds have been more and more delegated towards strategic research areas such as biotechnology. The German Research Council, for example, managed to shift its own funds away from several long-established areas towards medical and biological research. Since 1997, total expenditures for both areas have surged by more than 25 percent to \approx 431 million in the year 2000 (Deutsche Forschungsgemeinschaft 2001, p. 56). Today, out of its 278 collaborative research centres a total of 110 are dedicated to those fields. Moreover, member states like Denmark, Portugal and Sweden have separated administrations or funds for basic and applied research, whereas Norway and Iceland, which both are associated to the EU (and the ERA) through the Agreement on the European Economic Area, have done the opposite by centralizing responsibilities for these two types of research.

3.4 The variation in member states' innovative performance

Given the structural diversity of EU member states' innovation systems, it comes not as a surprise that the countries also vary in view of their innovative performance. Those variations can be assessed both at the national (cf. Annex table 1) and the regional level (cf. Annex table 2). Such an assessment can be based on data provided on a regular basis by the European Commission which measures innovativeness as part of its European Research Area initiative(11).

With regard to the output performance of EU member states, one general trend concerns the scientific and innovative strength at the national level. Whereas Belgium, Denmark, the Netherlands, Sweden, Finland, France, Germany and the UK perform above the EU average, there are weaknesses especially in cohesion countries. This trend correlates with data on input performance, such as employment in high-technology industries, public R&D expenditures, and venture capital investments. The total number of researchers within national R&D systems is highest in Finland, Sweden and Denmark and lowest in Italy, Portugal and Greece. The highest R&D expenditures are invested in Sweden, Finland and Germany, whereas Spain, Portugal and Greece rank lowest. However, at least Ireland and Portugal have reached the highest annual growth rates in R&D expenditures since the mid-1990s. The availability of venture capital is highest in Sweden, the Netherlands and Belgium, and lowest in Italy, Portugal and Austria. However, Austria has achieved the highest annual growth rate in venture capital since 1995 (European Commission 2000b).

In terms of innovation potential at the regional level, variations are even more significant. A composite indicator of science and technology reveals that especially German regions, some

Scandinavian regions and the metropolitan area of Paris have resources at their disposal that are far above EU average. Other member states' regions reveal certain strengths only in view of individual indicators such as R&D personnel, employment in high-technology sectors, innovation products or number of patents. These data indicate that the existence of subnational innovation policies supports a well-balanced provision of R&D resources at the regional level. Moreover, given the fact that Europe's most innovative regions perform significantly above EU average, it becomes evident that variations in innovative performance can be traced back primarily to different innovation potentials at the regional level. This holds especially true for Germany where R&D resources are much more decentralized than in other member states. Nevertheless, regions like Oberbayern, Stuttgart und Braunschweig perform best in view of all indicators showing that considerable regional disparities exist not only between member states, but also within best performing countries.

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Based on these findings on the European Research Area, the following section draws the main conclusions regarding the application of the OMC to the ERA. The final section attempts to generalize the implications in view of identifying the conditions under which the open method of coordination may indeed constitute an innovative concept of deepening integration.

4 Applying the OMC to the European Research Area

The varying importance of regions in innovation policies and the variation of innovation systems and performances among EU member states and regions certainly has consequences for the application of open coordination within a European Research Area. In order to assess these consequences, we differentiate between three dimensions: actors, arenas and scope of measures taken within the framework of open coordination.

Concerning actors, we showed that autonomous regional innovation policies exist in Germany and Belgium, while other member states have at least decentralized authority in this area. This raises the question how regional actors will become involved in the coordination processes. Although the European Commission has already acknowledged the importance of regions for the ERA concept, they have only been assigned a role in implementation of Community policies. Moreover, in order to fulfil the central aim of open coordination, which is greater coherence in RTD policies at the different territorial levels, autonomous regional measures will have to be designed in accordance with guidelines or reference indicators agreed upon at the European level. Even though policy results of open coordination are not binding on regional actors, European guidelines and reference indicators *per se* reduce the scope of autonomy of regional parliaments and governments, especially if benchmarking of innovative performance creates political pressure on them. Thus, it is possible that open coordination will not reduce but increase the trade-off between efficiency and legitimacy within the European political system. A detailed prescription of indicators and targets by the European Council, as occurred with regard to the member states' education systems at the Lisbon Summit (Presidency Conclusions 2000, point 26), does not compensate for the involvement of regional actors in innovation policies since it neither increases legitimacy nor does it provide space for decentralized policies that are aimed at specific circumstances existing in a regional innovation system. Moreover, a top-down definition of European guidelines and reference indicators reduces the potential of innovative policy approaches and policy-learning as it neglects the fact that innovative regions compete with each other for globalized resources, such as R&D-investments, researchers, and knowledge.⁽¹²⁾ In order to make use of the potential benefits of both the OMC and the ERA, the regional level has to be considerably more involved in the definition of guidelines and indicators. There is, however, a need for differentiation among regional actors, which has already been acknowledged by a Commission working group on multi-level governance. Based on a classification of types of incorporation of the regional level in EU member states,⁽¹³⁾ the group concluded that

new forms of policy coordination over various territorial levels – in the case of implementation of Community policies – should take into account differentiated approaches for the different groups of states (European Commission Working Group 4c 2001, pp. 37ff).

Such differentiation would also develop a retroactive effect on arenas within the multi-level governance system. This is certainly the case for federal EU member states in which not only the central state level is involved in coordinating national positions in European affairs. In Austria, Belgium and Germany rules were established for the engagement of regional representatives in the Council⁽¹⁴⁾, for the participation in committees of the Commission, and for the delegation of representatives to the Committee of the Regions. Given the heterogeneity of its members, its sole advisory function in decision-making processes and the complexity of the ERA concept, it seems to be unlikely that regional actors in federal or decentralized countries will consider the Committee of the Regions an appropriate institution for policy coordination.⁽¹⁵⁾ As far as coordination of national policies is concerned, the Council is the appropriate arena for the decision on guidelines and reference indicators. Article 203 of the EC Treaty already provides for the delegation of regional representatives to the Council, thus allowing participation of the regions if guaranteed by national law. In contrast to purely intergovernmental policies, the Commission is expected to play a central role in developing proposals for guidelines and indicators. In addition, the Commission would have to ensure that all concerned public and private actors are involved. Unanimous decision-making on guidelines and indicators in the Council increases the possibility that all relevant actors feel obliged to design appropriate policies. Majority voting on sensitive issues such as research and innovation policies, where distinct regional specificities and legislative powers exist, could raise serious problems due to the lack of legitimacy (see Scharpf 2001, p. 6). Parliamentary control on measures that coordinate national policies can be provided best by national or regional parliaments. This holds especially true if regional or national actors have to decide on whether or not their policies should be designed in accordance with those indicators developed at the European level. Moreover, the participation of the various groups of civil society in the process of open coordination does not qualify for enhancing legitimacy, since their members are not elected and thus cannot be dismissed by the people.⁽¹⁶⁾

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Finally, we conclude that the scope of measures which are appropriate for coordination under the open method depend both on the nature of the legislative powers at the European level as well as on the costs of coordination. In the first case, one has to distinguish between policy areas where shared competences exist and policy areas where complementary competences exist. Regarding complementary competence such as research and education, the OMC can only be successful if the European Union renounces harmonization, because regional actors would oppose any OMC participation as a result of their fears of centralization. This finding is consistent with current discussions in the European Convention on the delimitation of competence between the EU and its member states (European Convention 2002a). In the field of shared competence such as regional policy, consumer protection or competition, the OMC may be used for the implementation of EU legislation at the national or regional levels. Nevertheless, European legislation in these areas must remain restricted by the principle of subsidiarity⁽¹⁷⁾, and even if the EU is competent to regulate a matter, it should apply framework directives which reduce the intensity of regulation. Such a strategy would create more freedom of action for implementation, especially at the regional level, and it would take into account regional peculiarities. In the area of shared competences, democratic legitimacy would increase through stronger cooperation between the European Parliament and the national as well as the regional parliaments.⁽¹⁸⁾ Since multi-level policy arrangements tend to strengthen governments at the expense of regional or national parliaments, implementation of European framework directives should require parliamentary consent at the member states' level⁽¹⁹⁾.

Concerning the second case, it can be assumed that coordination costs increase with each additional territorial level participating in negotiations. This holds especially true if negotiations take place in a non-hierarchical and non-majoritarian context and if the actors concerned are free to engage. However, within the European Research Area, coordination costs will decrease if the Commission focuses on networking existing centres of excellence or on financing integrated projects. This is because most coordination efforts have to be taken by the organizations pursuing innovation themselves, while the Commission becomes less engaged as the number of micro-level R&D projects diminishes. Networked research centres and integrated projects are also suited for the generation of economies of scale in areas which are either strategically important for Europe's competitiveness or which require considerable amounts of infrastructure investments. Nevertheless, coordination costs can be expected to be considerably higher in areas that lie outside R&D funding. Open coordination of innovation policies across territorial levels would extensively expand the number of jurisdictions as well as the number of issues areas. In a situation in which policy coordination takes place without a "shadow of hierarchy" (Scharpf 1997) efficient solutions are likely only, if the scope of measures remains limited and if implementation is not obligatory.

5 Conclusions: the OMC as a contribution to deepen European integration [↑]

We have argued that for reasons of efficiency and legitimacy in an expanding Union, the OMC seems to be an appropriate procedure only in policy areas characterized by a high degree of decision-making powers and a significant amount of financial resources at different territorial levels, considerable differences in societal subsystems (such as the research or education system) between member states as well as in the performance of these subsystems. We have challenged the claim that the OMC can be interpreted as a first step towards a genuine Community dimension even in sensitive policy areas which are difficult to integrate because of fragmented and diffused competences.

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We have explored our argument by analyzing the possible effects of the OMC with regard to actors, arenas, and the scope of measures in a multi-level governance system. We found that the OMC raises certain problems concerning the involvement of regional actors in the coordination process but also regarding the implementation of measures decided upon at the EU level. Thus, coordination on implementation has to be extended to participation in policy formulation, at least for regions with legislative powers. Consequently, involvement of regional actors would be differentiated according to their constitutional role and their institutional capacities. The effects on arenas touch upon the place and mode of decision-making, parliamentary control, and the notion of legitimacy. In this case we argue that the Council is the appropriate arena for decision-making, since Article 203 of the EC Treaty already provides for the delegation of regional representatives to the Council. Additionally, we favour unanimous decision-making, as majority voting on sensitive issues, where distinct regional specificities and legislative powers exist, could raise serious problems due to the lack of legitimacy. Obviously, parliamentary control on measures that coordinate national policies is best suited at national or regional parliaments, while the participation of the civil society does not qualify for enhancing legitimacy, since their members are not elected and thus cannot be dismissed by the people. Finally, it is important to notice that the scope of measures coordinated under the OMC depends on the nature of the legislative powers at the European level. While, in general, the OMC seems to be an appropriate integration mechanism in policy areas where complementary competences exist as well as in policy areas where shared competences exist, both kinds of policies call for different European strategies: in the first case the EU has to "renounce harmonization", in the second case it has to "pay attention to the principle of subsidiarity".

In sum, there are certain boundaries that exist for the application of the open method of coordination if it should guarantee greater coherence of national or regional policies without causing fears of centralization and illegitimacy. However, there is also a 'minimum requirement' assuring that OMC is able to foster European integration. In the field of innovation policies, open coordination has to go beyond benchmarking activities and the development of guidelines which has already been done for years now by the OECD. There certainly is a need for a European dimension in innovation policies, which not necessarily require legislative action at the EU level (cf. Wallace 2000, p. 32f).

We conclude that the OMC could, under those conditions we have explained, constitute an important contribution to deepen European integration for the following reasons: First, it would help avoid an "overstretch" of the European Union in areas where the EU is the dominant legislator. Second, it would involve all relevant actors and strengthen the system of multi-level governance in areas where important legislative powers and financial resources are distributed across several levels. Third, it would reconcile the strategic European goal "to become the most competitive and dynamic knowledge-based economy in the world" (Presidency Conclusions 2000, point 5) with the member states' national and regional characteristics and patterns of economic specialization.

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Endnotes

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(1) These three cases have been identified by one of the Commission's Interdepartmental Working Groups preparing the Governance White Paper.

(2) So-called "grey areas" of the Treaties.

(3) This is not to say, that there may be no implications for member states with a more unitaristic state structure. Notably, the Council of European Municipalities and Regions (CEMR) demands a stronger involvement of all local and regional governments, even if they have no constitutional competences (CEMR 2001, p. 20).

(4) On state-centric views see e.g. Hoffman (1982), Moravcsik (1993; 1998), Milward (1992).

(5) However, there is some disagreement whether multi-level governance is a general feature of the EU or a phenomenon confined to particular sectors and/or levels (see Jordan 2001).

(6) The specificities of those two types of governance are elaborated in detail by Hooghe and Marks (2001b).

(7) For a more sceptical view on aspects of democracy see Höreth (2001) and Scharpf (2001).

(8) The analytical concept of innovation systems refers to differentiations in institutional, infrastructural or cultural conditions for innovation, which exist among countries, regions or sectors. Systemic innovation studies consider innovation policies as part of the institutional environment within an innovation systems. However, at this point we analyze innovation policies separately in order to emphasize the high degree of differentiation and the multi-level characteristic of innovation policies in Europe.

(9) The state of Baden-Württemberg was the first in Germany to start a regional innovation program in 1976. The state of Bavaria launched the so-called "Future Initiative Bavaria" in 1994 which is funded primarily by revenues originating from privatisation of the utility company VIAG AG. Since then, Bavaria has invested more than \approx 4.2 billion in its high-technology infrastructure.

(10) The prototype of this new division of labor between the states and the federal level certainly was the federal *BioRegio* program. This program actually was designed as a contest aimed at stimulating the creation of regional biotechnology clusters. A total number of 17 German regions entered the contest and had to demonstrate that they were able to set up a working and interacting infrastructure for the commercialization of biotechnology.

(11) The European Commission applies indicators that were specified in a working document on "Development of an open method of coordination for benchmarking national research policies: Objectives, methodology and indicators". Twenty indicators were defined around four themes: human resources in RTD, public and private investment in RTD, scientific and technological productivity, and impact of RTD on economic competitiveness and employment.

(12) This holds especially true for science-based industries (e.g. biotechnology), which tend to develop within local clusters. This means, that not only regional peculiarities, but even more local conditions determine the success of those industries.

- (13) This classification differentiates between federal states (Austria, Belgium, Germany), regionalized unitary states (United Kingdom, Italy, Spain), decentralized unitary states (France, Finland, Netherlands, Sweden, Denmark) and unitary states (Greece, Ireland, Luxembourg, Portugal), cf. European Commission Working Group 4c 2001, p. 7.
- (14) In the case of Germany, participation of representatives from the Länder is constitutionally granted by Art. 23 of the Basic Law. Their involvement, however, takes place through the Bundesrat which is by definition a federal organ.
- (15) However, the European Parliament claimed to make the Committee of the Regions the core agent of regional and local authorities (European Parliament 2001, p. 11), whereas the Commission would be interested in the possibility “to consult a specific sub-group of the Committee of the Regions representing regions with legislative powers” (European Commission Working Group 3b, p. 31) in the process of EU policy-shaping.
- (16) The European Parliament proposed to acknowledge the Economic and Social Committee as the only “legitimate” agent of civil society (European Parliament 2001, p. 9).
- (17) In order to ensure that the principle of subsidiarity will be applied more efficiently, the European Convention is discussing the establishment of a new specialised body for the review of the application of the principle in an early phase of EU legislation. According to a recent proposal, the regions with legislative powers might become entitled to appeal to this body if they consider a proposed measure inconsistent with the principle of subsidiarity (European Convention 2002b, p. 5ff).
- (18) A coordination mechanism could be implemented through an “interinstitutional agreement” among the parliaments of the different territorial levels. However, such an agreement has, yet, only been proposed by the European Parliament for consultation among the Community institutions (European Parliament 2001, p. 10).
- (19) In comparison to the involvement of the various executive branches in European affairs, multi-level parliamentary interaction is clearly underdeveloped. Even within the national sphere, parliaments are involved quite differently. The “Protocol on the role of National Parliaments in the European Union” of the Amsterdam Treaty merely requires that member states’ governments provide information on legislative activities at the European level. However, rules that bind member states’ governments on decisions of their parliaments only exist in Austria, Denmark, Finland, Germany and the Netherlands (cf. Maurer 2002).