Managing Diverse Interests: A Case for a Flexible Institution for European Space Collaboration

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Introduction

In December 2002 at Copenhagen, the European countries decided to enlarge geographical sphere of the Union. The long and difficult negotiations are finally over, and there will be ten new members to join with the Union. However, in my opinion, the most difficult part has just begun. The management of policies of the Union with 25 Member States would be obviously more complicated than the Union with 15. Thus, since the Treaty of Amsterdam, closer cooperation was introduced. Although there is a growing consensus that the introduction of the idea of flexibility is a necessary condition for enlarged Union, many scholars and practitioners argue that it may weaken the solidarity of the Union and its dilution may be inevitable. Indeed, the texts of Treaties of Amsterdam and Nice implied that the closer/enhanced cooperation should remain the "last resort" and it should not undermine the coherence of the Union. It is understandable that the Member States took cautious approach to the idea of enhanced cooperation. however, it remains to be seen whether the amendments made in the Treaty of Nice on enhanced cooperation will effectively improve the efficiency of the governance of the Union.

On the other hand, the Union has already introduced flexible measures for deepening the Union. The opt outs from Economic and Monetary Union, Schengen agreements and Social Charter are typical examples. Even though these cases were the outcome of compromises in the grand bargaining for Treaty amendments, there is no question that they were effectively implemented, and strengthening the management capacity of the Union (otherwise the Union would not be able to achieve the level of integration today).

This paper argues that flexible integration may even strengthen and promote the deepening of the Union. In so doing, it categorizes the theories of flexible integration and analyzes how current Treaty of the European Union deals with the issue

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of flexibility. Then, focusing on the case of institutional development for European space collaboration – a European institution outside of the EU – it discusses the successful implementation of flexible institutions. The main argument of this paper is that the institutions of European integration have to be able to accommodate different interests and objectives among Member States. Flexibility has to focus on the political will rather than the capacity of the members. Current Treaty arrangement for flexibility is not sufficient to accommodate the differences and, therefore, we shall learn from the lessons of European space collaboration.

Categorization of Flexibility

There has been a lot of discussion about how to conceptualize the idea of flexibility. Stubb (1997) has attempted to categorize various concepts of flexibility using three criteria; time, space and matters. Warleigh (2002) also made an analysis of the concepts of flexibility and concluded that the ideas can be summarized into three basic models; multi-speed, concentric circle, and *à la carte* models. These categorizations mainly focused on the questions relating to the problem of solidarity. Since the concept of flexibility was often associated with the weakening of coherence and solidarity, most of these scholars seemed also keen on finding out whether the slower-moving Member States may catch up or not.

Of course, the argument about flexibility centers on the question of whether the idea would divide the Union into "first- and second-class" Member States, particularly so when ten new members join the Union. However, there is also an important element with regard to the question of flexibility. That is the problem of political will. As we have witnessed in recent events on the division of opinion among European countries on Iraq issues. There are many policy domains where European countries do not share common interests and objectives, and it is very unlikely that these Member States will converge their policies in a short term. The policy domains where strengthened cooperation or further integration is needed are the domains where the Member States can show their political commitment. Education, youth vocation, culture, public health, tourism, energy, protection of civic rights, social policy were the few in the list for applying the enhanced cooperation (Philippart and Ho, 2000). In these policy domains, the capacity of Member States to carry out the common policy and to achieve common objective is not too much in doubt. Rather, it is the political sensitivity, domestic reactions, and political will which justify inclusion of these policy domains in the activities of the Union. Thus, it is crucially important to consider the

question of political will when we begin to develop a model for flexibility.

Types of Flexibility

If we take into account political will will as well as capacity of Member States to flexibly participate in the policy domains, we may categorize the models of flexible integration into five types. The first is multi-speed integration, introduced by Willy Brandt in November 1974 and followed up by Tindemans report in 1975. The concept distinguishes Member States by their capabilities to carry out the common policy, those who have capacity to forming a "core Europe" thereby initiating further integration. The slower-moving Member States shall make efforts to catch up advanced countries and the core Member States should help them (faster-moving members were called for providing "Marshall Plan" for slower members) (Wessels 1998).

The concept of multi-speed model stands on the normative understanding that the Union's action should be commonly implemented by *ALL* Member States, and flexibility should be temporarily introduced when there is a significant difference in capacity among Member States. The idea of multi-speed model implied the criteria for joining Economic and Monetary Union (Greek case).

The second model is called concentric circles or multi-tier model. The idea of concentric circles aims to deepen the level of integration at the expense of unity of the Union. Although this model shares a lot with multi-speed model, it has a distinguishing characteristic in that certain Member States would not be able to participate in further integrated policy domains . Lamers (1997) argues that the "core" Member States will be defined by their capacity and that "non-core" members can only join the policy domain when their capacity is improved. Wallace (1985) also argues that where those "non-core" members lack the capacity to implement policies, the application of regulations and Community law should be relaxed. Those who discuss the concentric circles model claim that multi-speed model is not realistic since core members would be able to accumulate political and economic expertise and capabilities, making much more difficult for non-core members to catch up. Thus, even when the flexibility model was intended to apply multi-speed model, it would therefore end up with concentric circles model (Warleigh, 2002). There have been strong objections from Greece in IGC 2000, for instance, against the proposal of enhanced cooperation because it would not guarantee that the slower-moving members would catch up.

The third model is called *geométrie variable* or swing-wing. This idea is very popular in France since it was proposed by the *Commissariat du Plan* (1980, 1983) and

was supported by Jacques Delors (1986) when he was the President of the Commission. Furthermore, Edouard Balladur emphasized this concept in 1994 by saying that the construction of Europe without violating the vital interest of states should be done by the alliance of willing Member States to move on the integration (*Le Figaro*, 30 Aug 1994). The center of the idea is collaboration in a particular policy domain. The concept of *geométrie variable* assumes that even in the single market, Member States would have different economic and industrial policy. Thus it is relevant to allow more freedom to set the goals of the Union based on the intentions of members, and to grant choices to them whether to participate or not. The prime examples of *geométrie variable* are EUREKA program, Airbus project, or Schengen Agreement. The advantage of this concept is to include most of policy domains where the Union does not have competence, but the problem is it does not promote "integration", but only collaboration. However, as seen in the case of EUREKA and Schengen, those policy domains can be included in the Union's *acquis*, and therefore it could be a realistic method to enhance the domains of integration.

The fourth model of flexible integration is called *à la carte* model. The idea behind this model, which has been strongly promoted by Ralf Dahrendorf, is the most controversial one in the debate of flexibility. According to Dahrendorf (1982), it is too ambitious to implement common policy onto all the Member States which are most likely different in their interests and objectives. Since the expansion of the policy domain would complicate the negotiation at the Council of Ministers and European Council level, the "top-down" approach such as enhancing the application of Qualified Majority Voting (QMV) would increase the dissatisfaction of certain Member States, and therefore it will be difficult to establish "firm" *acquis*. Based on the principle of subsidiarity, he argues that the governance of the Union has to be done at the level much closer to European citizens, and that it is important to grant more freedom for Member States to select the policy domains where they wish to join in. Also the concept of *à la carte* model would reduce the burden on certain Member States which may have difficulties to follow the common policy. This idea has been persistently attacked as inimical to the unity of the Union and its relevance has often been categorically denied in intergovernmental negotiations[2]. There are arguments emphasizing the excessive freedom which this model gives to the Member States (ex. Warleigh 2002), however, the central aspect of Dahrendorf's argument, the concept of *à la carte*, seems to be intended to resolve the question of distribution of power between the Union and the

[2] see the joint paper from Germany and Italy in IGC 2000; CONFER 4783/00

Member States. But the model can only be applied to the domains where policies could be carried out efficiently with willing Member States. Thus, the emphasis of this model is not allowing Member States to "pick and mix" anything they want but increasing the efficiency of the governance of the Union by including those willing Member States for deepening the integration.

The final type of flexible integration is called graduated integration. It was originally proposed by Ehlermann (1984) within the Commission and introduced in the Dooge Committee report (Ad hoc Committee on Institutional Affairs 1984)[3]. The points of graduated integration are (1) certain policies (Directives or Decisions) to be implemented later by those Member States which are not capable of complying at the moment; (2) to allow certain Member States not to implement certain policies (in other words, allowing opt-outs); (3) if a Member State is excluded from certain policy domains, it should only be done only on a voluntary basis. The concept was further developed in Germany (see Langheine and Weinstock 1985; Grabitz 1984). The concept of graduated integration combines the idea of multi-speed model by emphasizing the necessity for core Member States to support for improving the situation in slower-moving countries and the idea of *geométrie variable* by applying this model in the policy domains where the competence of the Union is not firmly established (cf. transport policy). The promoters of this concept (like that of *geométrie variable*) claim that the advantage of allowing willing Member States to form policy sub-groups would avoid the establishment of a firm division between "core" and "laggard" members. The Member States which are not in the sub-groups willingly withdraw from participating in the policy sector, and therefore, they will never be dissatisfied by being "outsider". Furthermore, if non-participating members becomes interested in joining the "club", it will be much easier because there will be no clear-cut distinction between core and laggard.

Table 1 Categorization of Flexibility

Determined by Capacity	Respecting Political Will
Multi-speed Concentric Circles	*geométrie variable* *à la carte* Graduated integration

[3] It was then called "differentiation" or "differentiated integration"

The Flexibility in the Treaty of the European Union

The concept of flexibility was discussed during the debate over the Amsterdam and Nice Treaty, but it was indeed introduced implicitly even in the Treaty of the European Union (TEU). We shall take a brief look at the flexible measures in the TEU.

(1) Flexible measures before Amsterdam

The measures to reconcile the diversity of the Member States and the unity of the Union have been under consideration well before the Amsterdam Treaty. Particularly at the time of enlargement in 1981 (Greece) and 1986 (Spain and Portugal), the Union employed the transitional periods measures to protect the internal market from cheap goods from new members and allowed them to adapt the *acquis*. This was typical case of multi-speed model since the new members had to comply with all the Community regulation when the transitional period ended.

After the Single European Act entered into force, diversity was conceded to the unity. The enhancement of the application of QMV on many policy domains relating to single market was a measure to ensure that the integration process would be carried on even though there was diversity among interests and objectives of the Member States. However, at the same time, there has been a lot of collaborative agreement signed outside of the Union such as EUREKA program and Schengen Agreement[4]. In other words, while the Community overcame the divergence among the Member States, they sought to find other schemes outside of the Community for extending the integration with more flexibility.

In Maastricht Treaty, two major systematic flexible measures were introduced. First, the Article K.7 allowed Member States to collaborate outside the TEU[5]. This is the first time that the Treaty explicitly mentioned any type of flexibility in the main text. Second, the measures of opt-out were applied for Social Charter, EMU and so forth. Although it was a defensive choice to protect the coherence of the Treaty and a compromise of the grand bargaining, it set a precedent case for *à la carte* model.

(2) Flexibility in Amsterdam Treaty

The measures of closer/enhanced cooperation were introduced in Amsterdam Treaty, but there were two other relevant measures. The first was the idea of "constructive

[4] Although Schengen Agreement formally entered into force in 1995, the Agreement was signed by Germany, France and Benelux countries in 1985.

[5] This article was deleted in Amsterdam Treaty when Schengen acquis was incorporated with the TEU.

abstention" (CA) in the second pillar (CFSP). CA is a measure that does not obligate abstained Member States to comply with the unanimous decision of the Council. Although decisions have to be made unanimously, the CA measure allows neutral Member States, such as Ireland, not to participate. The aim of such an approach is to ensure the coherence of the Union., and the underlying norm was clearly based on the idea of *à la carte* model. It is useful to note that in this way the TEU deliberately introduced *à la carte* model in order to accommodate the diversity among the members. The second point was so-called "communitarization" of Schengen Agreement. Although there were only 10 members of the Union[6], the decisions should be made in the framework of Community decision-making process. It meant that the decisions of the Community would not apply to two remaining members, UK and Ireland. Normatively, this measure is based on the idea of graduated integration.

Perhaps the measures introduced in CFSP and communitarization of Schengen Agreement were mostly defensive measures to protect the integrity of the TEU text from veto power of states which were in minority position such as Britain or Ireland, but the measures for closer/enhanced cooperation were more positive and progressive in strengthening the flexibility of the Union. However, as Stubb (2000a, 2002) clearly described, during the process of negotiation for the closer cooperation, Member States who thought the new measure was a threat that could leave them out in the second-class status fiercely opposed, and therefore, rendering the final framework for closer cooperation both ineffective and difficult to use.

The Article K.15 of Amsterdam Treaty emphasized that (a) closer cooperation is the last resort; and (b) it should be open to the member who does not participate. Although it is not clear whether this article was based on the idea of multi-speed model, there are reasons to believe that most Member States basically viewed it as such.

On the one hand, in the negotiation in the Reflection Group, the idea of *à la carte model* was categorically denied, and France and Germany (1995) jointly expressed that closer cooperation should be promoted by "Member States which have the will and the capacity". On the other hand, there were many Member States which expressed their concerns that the introduction of closer cooperation should be done with caution not to alleviate slower-moving member states behind (cf. see Belgium 1996). These two points suggest that closer cooperation assumes that the criteria of participation are based

[6] When the Amsterdam Treaty entered into force, Denmark, Sweden, Finland, United Kingdom and Ireland were not in Schengen Agreement. Among them, Denmark, Sweden and Finland expressed their intention to fully join the Agreement in 2001, the text assumed that there are 13 members in the Agreement. However, the UK and Ireland are still opted out from the Agreement.

on the capacity of Member States and that if the measures were implemented, there would be dissatisfied Member States who would threaten the cohesion of the Union.

The other important aspect in the Amsterdam Treaty is stated in the Article 5a (Art. 11 later on). This article affirms that the closer cooperation shall not affect the policies, actions and programs of the Community, and the application of the measures should remain in the policy domains where the Community has authority to conduct policies but not in the domains where there is an exclusive competence of the Community. In this regard, the article defines that the closer cooperation will only apply to the domains where there is no firm *acquis*. Thus, it can be concluded that Article 5a is based on the graduated integration model but firmly rejected the idea of *geométrie variable* which aims to extend the flexible collaboration outside the Community policy domain.

Furthermore, the activation of closer cooperation will be decided at the Council of Ministers by QMV, but if a Member State declares that is is affecting to the "important reasons of national policy", there will be no decision taken (so-called "emergency brake"). This is a *de facto* veto of engagement to closer cooperation.

In sum, the flexible measures in Amsterdam Treaty are based on various models of flexibility. On the one hand, the concept of closer cooperation is based on the multi-speed model whereas *geométrie variable* and *à la carte* models are the influential models in the second and third pillars. In addition, the measures of closer cooperation are destined to be ineffective since there was a *de facto* veto.

(3) Flexibility in Nice Treaty

The aim of the Nice Treaty was to reform decision-making institutions in order to accommodate the changes necessary for accessing new member states from former communist bloc and the Mediterranean. Thus, the text was amended to facilitate the implementation of flexible measures: reducing the number of Member States from majority to 8 members; and removing the *de facto* veto rights. In this regard, the most influential element in the negotiation of Nice Treaty was the joint statement by Germany and Italy. In the joint statement, they claimed that *à la carte* model should be categorically rejected and that the extension of extra-Union collaboration may undermine the coherence of the Union (CONFER 4783/00). Their intention was to strengthen the multi-speed model by defying *à la carte* or *geométrie variable* models. Thus, in the Nice Treaty, the normative base of "enhanced cooperation[7]" remained the same multi-speed model.

[7] The text has changed from "closer cooperation" to "enhanced cooperation".

However, Article 43 of the Treaty states that the enhanced cooperation is applied "within the limits of the powers of the Union or of the Community and does not concern the areas which fall within the exclusive competence of the Community". This change would enable the Union to implement the measures of enhanced cooperation in the policy domains of the second and third pillars where there are less established *acquis*. Nevertheless, it can be argued, new enhanced cooperation does not seem so different from that of Amsterdam Treaty.

(4) Problems of flexibility in the TEU

An analysis of the development of the concept of flexibility demonstrates that the current Member States of the Union are trying to design the measures of flexibility based on the current EU 15. The original objective of the introduction of flexible measures was to facilitate the decision-making process and deepening the Union after the enlargement. However, the results of the negotiation of IGCs in Amsterdam and Nice Treaties were only the consequences of grand bargaining.

Perhaps, one of the causes of such outcome was that the discussions on closer/enhanced cooperation excluded the possibility of introducing the models of flexibility based on political will. One reason why there were negative clauses and "emergency brake" to prevent the activation of flexible measures was that many Member States feared to be left out from the deepening process. Indeed, those new Member States who joined the Union in 2004 are the candidates to be left out from the process. Thus, if we consider the implications of enhanced cooperation in Nice Treaty after 2004, it would be unlikely that many Member States will be content with the implementation of these measures.

The question which arises is that why such models of flexibility respecting the political will were not made the normative base of the enhanced cooperation. The joint statement from Germany and Italy in IGC2000 claims that *geométrie variable* model would exclude many policy domains from the jurisdiction of European Court of Justice and European Parliament and therefore lack transparency and democratic control, since *à la carte* model would undermine not only the coherence of the Union but also the decision-making institutions based on QMV to implement common policy across the Member States (Philippart and Ho 2000). Furthermore, as seen in the case of communitarization of Schengen *acquis* and EUREKA program, the promotion of deepening by capable Member States would create a gravitational force which leads the Union in the achievement of its objectives thereby encouraging other members to follow the leaders.

Because the joint statement from Germany and Italy was so influential, the models for respecting political will were excluded from the discussion and the multi-speed model was promoted. However, one may wonder if such a rigid mechanism of flexibility would be functional in the Union with 25 Member States. Although the Nice Treaty relaxed the legal requirement for triggering the measures of enhanced cooperation, but politically it still seems very difficult to implement. On the other hand, there have been many passive but effective flexible measures (such as opt-out from EMU) taken to facilitate the smooth transition of the governing structure of the Union. These measures more or less focused on respect of diversity among the Member States. It seems that the Union may need to rely on these *ad hoc* measures of flexibility for promoting deepening of the integration unless the enhanced cooperation become more affordable and low risk option. If, as stated in the joint statement by Germany and Italy, the cooperation outside the Union is not desirable, the Union should enlarge its functional competence to wider policy domains and allow Member States to participate in those domains voluntarily. Such model of flexibility can serve as a model for satisfying non-participating members while leading to further integration. After all, as we witness today, those Member States which opted out from integrating policy domains, such as Britain from Social Charter and EMU, are expressing their interest in joining if it brings benefit for them.

Of course it is not ideal to apply the model of flexibility in every policy domain. There are policy sectors for which it is necessary to have a common policy for maintaining coherence, and perhaps in some cases, the capacity would be a question of distinguishing the participating members in certain domain (cf. transport infrastructure program). It is also important that the flexibility should not disturb the existing policy competence of the Union. The measures of flexibility are not intended for undermining the established foundation of the Union. Instead, they are to move forward and deepen the process of integration. Nevertheless, most policy domains which would be candidates for application of the flexibility measures are not immediately connected to the single market, but more politically sensitive issues such as professional training or education are. The Nice Treaty expanded the measures for enhanced cooperation into the second pillar which is also a politically sensitive policy domain. Given the long history of political cooperation, it is not difficult to understand the complexity of applying the flexibility measures based on multi-speed model.

Having said that, we also have to investigate the problems in applying models that are centered on political will. Many have argued that such models are not suitable because they would undermine the consensual politics; contribute to a 'club of the

selfish rich'; and lead to less transparency (Philippart and Ho 2000). Since there is no case in which enhanced cooperation has been used, it would be useful to shift our attention to "other" European frameworks outside the Union which have employed flexible institutions. The process of institutional development outside the Union was less constrained by the "Community-method" and therefore it was much easier to introduce flexible rules and decision-making procedures. The case we shall discuss below, the European space collaboration, is interesting in this regard, since it utilized unique institutional frameworks such as optional participation and the principle of *juste retour* for accommodating diverse interests and policy objectives. Although it is only limited to a single policy domain and considered to be the case of *geométrie variable*, it is worth taking a closer look because the process of institutional development for European space collaboration was initially similar to that of the Union, but it had a dynamic change when Member States faced difficulties in taking a common position. There might be lessons to be learned from such experiences since the center of collaboration, European Space Agency (ESA), is now strengthening its relationship with the Union for jointly making decisions on European space activities. There has also been a lot of discussion that the Union should take an initiative in this policy domain.

A Case for Flexible Institution: European Space Collaboration

There has been a discussion of the historical development of European space collaboration (Madders 1997, Suzuki forthcoming), and this section places the focus on how and why flexible institutions were introduced in the decision-making of European space policy. The space activities in Europe have been conducted under "two-Europe" (Madders and Thiebaut 1992) structures; intergovernmental cooperation under ESRO (European Space Research Organization)/ELDO (European Launcher Development Organization) or ESA on the one hand; and European Communities for telecommunications and industrial regulations on the other. However, it is misleading to claim that Member States preferred intergovernmental institutions over strategic sector like space for maintaining national control because the space development in Europe, satellite development in particular, originally started as a collaboration among scientists who were determined to integrate space capabilities of Europe in order to compete with the two superpowers.

(1) Choosing model of institutions for European space collaboration

When scientists gathered to formulate a framework for European space collaboration, it was the CERN (*Conseil Européen pour la Recherche Nucléaire*) model (intergovernmental model) which seemed to be the natural choice for European space collaboration since Edoardo Amaldi (Italy), Pierre Auger (France) and Sir Harrie Massey (UK), who were the 'founding fathers[8]' of European space collaboration, were all involved in the creation of CERN. First of all, most of them were involved, to a certain extent, in establishing CERN in 1952. CERN was relatively successful in assembling distinguished European scientists in atomic and nuclear physics, and maintaining world-class research activities in pure science which meant excluding application research for military purposes in particular. In brief, CERN was a typical intergovernmental research organization: each Member State had one vote in the governing body, the Council, approval of research projects, budget and appointment of the Director. Decisions were generally taken by a simple majority vote. For the 'founding fathers', the CERN model was the most suitable for European collaboration for big science, making it unnecessary to bother about finding other models to replace it.

However, there were some doubts about adopting the CERN model for European space science collaboration. First, space, more than nuclear research, was believed to be a more military-driven domain, as it relates particularly to the question of launchers. Space research could not be done without access to space, and the access cannot be guaranteed unless Europe had its own launcher. Unlike nuclear physics which would benefit military technology, space science was beneficiary to missile/launcher development, and vulnerable to foreign policy concerns (in the case of using the American launcher). In short, space depends more on government than atomic energy research does. The second question was the location: in the case of CERN, all that was needed was to set up one laboratory (outside Geneva) to concentrate research facilities to carry out experiments, but in the case of space research, the experiments should be carried out in outer space. Scientists could build instruments and sub-systems in their own laboratory while central institutions hold the responsibility for assembly and operation. British scientists were not willing to give up their autonomy over control of operations from their home laboratories, and also argued that

[8] Prof. Reimer Lüst, who was Chairman of the Scientific and Technical Committee of ESRO and later became Director-General of the European Space Agency, identified five individuals (Club of Five) who were most influential in the process of setting up European space collaboration: Edoardo Amaldi, Pierre Auger, Hendrik van de Hulst, Freddie Lines and Sir Harrie Massey (Lüst 1984).

heterogeneity of scientific and technological levels in Europe might degrade the quality of research (Massey and Robins 1986). Third, there were concerns that space science is, unlike any single discipline such as nuclear physics, a complex of many disciplines including atmospheric physics, astrophysics, and solar physics, and therefore it seemed to be irrelevant for the creation of a single organization to encompass such diverse disciplines. Finally, there was a question of industrial and commercial application. The French in particular were very keen to use space research for profitable applications in telecommunications, whereas the British were more science-oriented. CERN had not experienced such problems and difficulties of reconciling differences in interests and policy logics in the setting up of large-scale collaboration.

Alternatively, some people argued that space research should be conducted by a framework similar to the European Nuclear Energy Agency (ENEA) or the European Atomic Energy Community (Euratom). ENEA was created in 1957 as a specialized agency under the Organization for European Economic Cooperation (OEEC), which was later associated with Euratom in 1959. Amaldi and Auger — the 'founding fathers' of CERN — were also involved in establishing Euratom, and Auger recalled that they "considered ... affiliation [of space research] to the EEC" (Auger 1984, p.12). Although their involvement was not as enthusiastic as was the case with CERN, it can be assumed that they must have considered the Euratom model as well as the CERN model since they knew the strength and weaknesse of both organizations.

While the scientists were arguing about the form of space collaboration, politicians also became interested in the debate. David Price, Conservative MP and British representative to the Council of Europe, made a report to Consultative Assembly of the Council of Europe on European space research. In the report, he recommended that the ENEA/Euratom model would be preferable because "it could be largely independent in its day-to-day working but under the ultimate control of a body of responsible Ministers" (Council of Europe 1960, p.79). At the same time, a program called 'Euroluna'[9] was proposed within Euratom countries — Amaldi was again the central figure of this proposal — to catch up with American and Soviet space technology (De Maria 1993). It was originally designed to be an integral part of the Communities' activities, which meant the exclusion of the United Kingdom (Madders and Thiebaut 1992).

It is not difficult to assume that the reason why these proposals for the 'Community model' were not adopted was because British space technology — the most advanced in

[9] Euroluna was a proposal to develop an Apollo-type programme to send a probe to the moon.

Europe — was crucial to European collaboration. As we saw above, the enthusiastic support from Massey was very important in the early stage, and it was impossible to establish any kind of institution without British participation. Furthermore, the 'Community model' was, as Auger himself explained, "not an example to follow, since it was too subject to political contingencies" (quoted in Krige 1992, pp.7-8). At the end of the discussion, the CERN model which would be acceptable for British politicians and scientists and more independent from political intervention, was preferred to the Community model.

Finally, apart from the European context, NATO set up a Science Committee as a tool for transatlantic science and technological development in reaction to the launch of Sputnik. The Committee prioritized space cooperation as a priority agenda and proposed to establish a 'European NASA' as a counterpart of the American NASA (Massey and Robbins 1986; Sebesta 1994). Such a proposal was not acceptable to European space scientists and some politicians since it would induce deep commitment to military space activities and dependency on the United States.

Unlike what is suggested by the literature (cf. Collins 1990), the choice of the CERN model was made not only because the founding fathers were committed to CERN activities. For Amaldi and Auger, however, it was difficult to make a final decision because they were involved in all models. The decisive moment came in February 1960 when Massey "in sudden contrast to Amaldi's earlier 'Euroluna' scenario, swung the initiative towards Britain" (Madders 1997, p.31). There might have been a sense of urgency for Massey for if he had let Amaldi and Auger take initiatives, Britain might have lost the opportunity to join in European collaboration. At the end of the discussion, Massey's initiative was accepted by all participating scientists, including Amaldi and Auger. In this way, European collaboration for space development (except launcher development) began with intergovernmental model.

(2) Towards integration of European space effort

As discussed above, the original form of institutions for European space collaboration was designed under a strong influence of CERN model, nevertheless, it was not for protecting national decision-making authority but for accommodating scientific needs and government preferences. The fact that Euratom model was discussed among the scientists shows that the intention of the 'founding fathers' was to establish a European framework for integrated space policy. This intention can be seen in the organizational structure of European Space Research Organization (ESRO) which dealt with the development of satellite and research facilities.

The ESRO Convention entered into force on 20 March 1963. According to the Convention, its budget was drawn by proportional contribution from Member States according to the net national income of up to 25% to protect excessive contribution of the UK. Unlike CERN in which the budget was adopted by a simple majority, the ESRO Council required unanimity for a three-year budget ceiling, and the two-thirds majority for annual budget and for contribution questions, in response to the demand from governments for tighter financial control. But in contrast, simple majority rule was introduced for the decisions on the contents and plans for programs in order to respect autonomy of scientists. The authority to manage technological and scientific programs was largely granted to the ESRO secretariat. This division of power between national bureaucrats and scientists for financial and programmatic issues would eventually invite many difficult questions in the future, but at this time, it was intended to protect as much autonomy of scientists as possible from government intervention driven by financial concerns. It was thus clear that the institutions of ESRO, despite its intergovernmental appearance, was more "European" than "national", and the governments had less influence for making financial decisions.

There were two other important aspects of the institutional arrangement of the ESRO. First, concerning the CERN experience, the COPERS (preparatory committee for the ESRO) proposed establishing several European research laboratories that were independent from national organizations and operational centers as central focal points for knowledge and expertise. The ESRO was expected to take a so-called 'Bottom-to-Top' approach whereby the ESRO became the only source of ideas and concepts of missions, which operated with a view to transforming these ideas and concepts into reality by providing hardware, software, service, analysis and publication of results (Bonnet 1993). The structure of the ESRO was expected to be very centralized and concentrated so that the role of national organizations and scientists would become much smaller.

Second, influenced by the CERN model, no specific arrangement was made to 'balance' geographical contribution and distribution of industrial contracts in the ESRO Convention. Major contracts were subjected to competitive bidding and awarded to the most cost-effective offer. However, during the COPERS meeting, there were some demands from smaller countries and Germany to guarantee an industrial return from the ESRO programs (Fischer 1994, p.33). As a result, at the meeting in June 1962, the delegates agreed that "the Organization shall place orders for equipment and industrial contracts amongst Member States as equitably as possible, taking into account scientific, technological, economic and geographical considerations" (Krige 1993, p.43). This

agreement was adopted as a principle, but there was no detailed rule on how to distribute the contracts and in what proportion to the contribution.

The institutions of European space collaboration, though based on the CERN model, aimed for industrial and technological development by balancing financial burden and competitive tender. The final goal for the 'founding fathers' was to establish competitiveness at European level, not national. Viewed in this way, it is not difficult to imagine that the initial objectives and lack of flexibility in the institutions of ESRO were not so different from that of the Union today.

(3) Development of commercial opportunities and crisis at ESRO

Immediately after the establishment of the ESRO, the crisis of the management of space policy in Europe began. The success of telecommunication satellite in the United States made European countries realize the importance of space technology for commercial use. Establishment of Intelsat (International Telecommunications Satellite Consortium) which was under the strong influence of US government encouraged European countries to take quick action to develop their own application satellite technology. Particularly big Member States, such as Britain, France and Germany, were interested in developing their own competence in this technological area so as to dominate commercial market in Europe. Therefore, they put pressure on ESRO to involve not only in scientific research but also commercial and industrial technological development on the one hand. On the other hand, they mobilized their own national resources and agencies to engage in developing commercially important technologies.

There might be three reasons why these governments took this parallel approach. First, the governments of big countries wanted to develop commercially and militarily[10] potential technological expertise for their national agencies and companies in order to increase the international competitiveness as well as national autonomy in these areas. Second, they considered that it would not be productive to create another European organization for application satellites, nor to renegotiate the status of the ESRO which excluded those programs from its mandate. Third, they perceived that the revenue generated through utilization of the telecom technology would be enough to pay off the investment.

These institutional issues notwithstanding, the governments of big Member States put forward the question on whether to develop a European application satellite in

[10] Soon after the success of the first experiment satellite, the US government launched the Defence Satellite Communication Systems (DSCS) for military purpose in 1963.

November 1966. The meeting concluded that European countries should seek the commercial application technology, and the ESRO would be the most suitable framework for developing such a capability, despite the legal constraints on application programs and the problem of membership. The ESRO executives received the conclusion with mixed feelings. On the one hand, the scientists were concerned about the introduction of application programs that might jeopardize the original development plan which had been already badly damaged during the first three years of its exercise, and, therefore, vigorously opposed the decision (Lévy 1993). However, the majority of scientists, on the other hand, accepted the decision and encouraged the change of the ESRO's priority, because they expected that it would imply more efficient use of capital resources, more industrial contracts which would restore the balance of contract distribution among Member States, more attraction for competent engineers to work in the ESRO instead of national institutions, and more political attention to the ESRO's work. Furthermore, the scientists recognized that it was difficult to justify satellite development and expensive launching cost only for the purpose of scientific research.

The difficulty that European governments faced in moving on to the development of application satellite arose out of the institutional constraints and mismatch of policy objectives. The ESRO, strongly associated with scientific objectives, was regarded not an appropriate organization. But European governments could not find institutional alternatives. This institutional setting shaped the policy logics of Member States. The changes of national policy priorities were the forces for changing the institutional constraints of the ESRO, and the ESRO scientists began to realize that science alone was no longer appealing to decision-makers. Although there was resentment among some scientists, the majority of them recognized the need to form alliances with other policy logics for the survival of the logic of science, and they finally welcomed the decision. However, ESRO was not equipped with institutional flexibility to accommodate the growing diversity of policy objectives of the Member States.

(4) Introduction of the principle of *juste retour*

The increasing appeal of the commercial potential changed the perception of policy-makers toward the ESRO's activities. The smaller Member States in particular began to realize the technological gap between their industry and that of big Member States, and to become concerned about the imbalance of the distribution of industrial contracts involving commercially potential technologies. In the first two years, the ESRO management team preferred the rule of competitive tender, and took geographical balance into account when several bidders were competing in acceptable

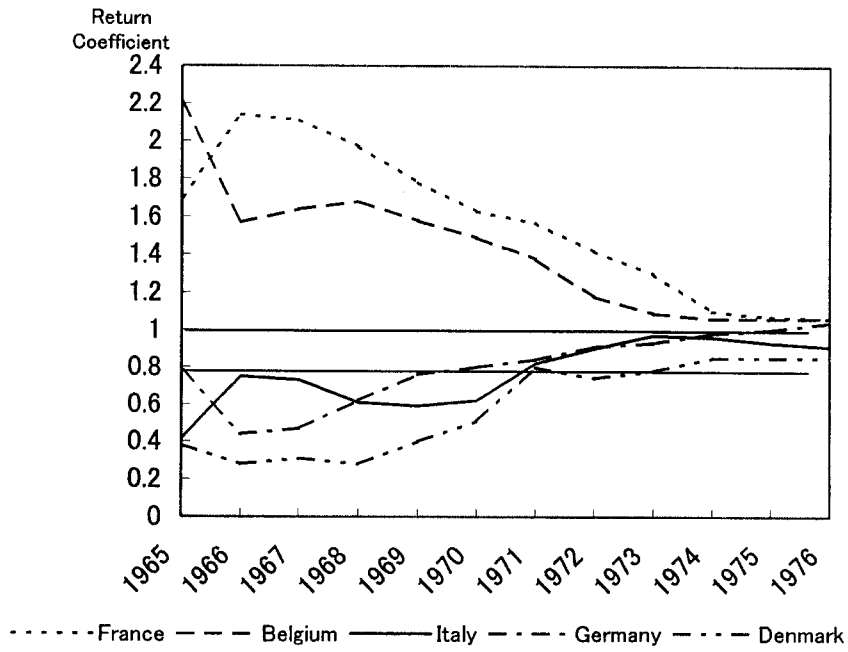
margins. However, the criticism from industrially ambitious countries, which had been unsuccessful in winning contracts, such as Spain and Italy, gave rise to dissatisfaction for this management rule, and a huge gap emerged in industrial returns as a result of it (see Chart 1 and 2).

Spain and Italy found that their industries were not benefiting from the membership of the ESRO in correspondence with their contributions, and they were frustrated that their contributions went to the benefit of strong and competitive companies in Britain and France (Bondi 1993). By the end of 1967, the Spanish delegate threatened to withdraw from the ESRO if some rules were not made to guarantee industrial return. As a response, the ESRO executives encouraged the European space industry to form consortia, such as MESH, STAR and COSMOS.[11] These Consortia were not the ideal way to solve the problem for several reasons. First, there were not enough companies in smaller Member States to join all three consortia. Second, the companies found it difficult to accumulate technological expertise if the contracts constantly provided the opportunity to develop certain technology. Third, there was a question of technological duplication. Although consortia encouraged technological transfer for avoiding duplication within the same consortium, there was almost no technological transfer between consortia. Finally, the major companies were not satisfied in receiving prime contractorship on a rotational basis. Although the formation of consortia helped to distribute contracts to smaller and weaker companies to a large extent, it did not satisfy everyone.

The governments that were not satisfied with the 'consortia solution' proposed an alternative solution; the principle of fair geographical return, or *juste retour*. The concept of *juste retour* was, in short, a guarantee that companies located in certain Member States would receive the contracts in the same proportion as Member State's contributions. If a Member State contributed 20% of the budget, the companies in the Member State would receive 20% of the contracts. The question of introducing the principle of *juste retour* was on the table of the ESRO Council since 1965, but large countries, particularly France and Britain, were vigorously against the idea. They argued that the principle of *juste retour* would undermine international competitiveness of European industry, and it was totally unacceptable to be 'penalized' for having competitive industry.

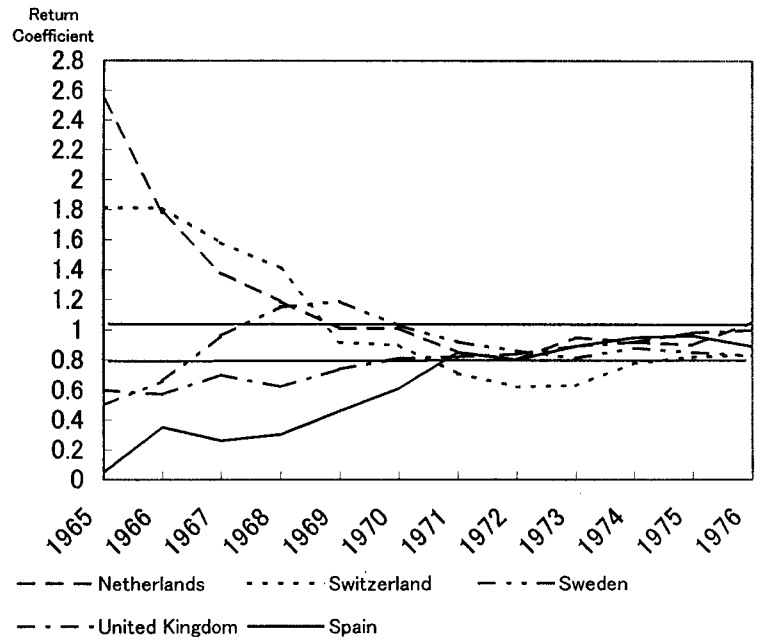
[11] The form of consortia were emerged as practical habit among European companies in mid-1960s, and finally settled down to three consortia with fixed partnership around 1970. These consortia loosely existed after the introduction of the principle of 'juste retour' and establishment of the ESA until beginning of 1980s.

Chart 1 Evolution of Coefficient 1965-1977 (Part 1)



Source: Palacios (1978, p.28).

Chart 2 Evolution of Coefficient 1965-1977 (Part 2)



Source: Palacios (1978, p.29).

The conflict between big and smaller countries became deeper in the mid-1960s, and the ESRO's new Director-General, Hermann Bondi took initiative to mediate the two sides. In November 1967, the ESRO Member States concluded an agreement which included the following points: (1) by 1971, each Member States should have at least return coefficient of 0.7 (70% of contribution); (2) ESRO had the right not to award contracts to a most competitive offer, if it was unfavorable for geographical return; but (3) the competitive criteria should be favored if it encouraged an association of companies; and (4) tender could only be accepted to improve geographical distribution if its price was not more than 10% higher than the most competitive bid (Krige 1993).

The Charts 1 and 2 above show the gradual convergence of coefficient in the beginning of the 1970s as an effect of Bondi initiative. Although some Member States which did not reach the coefficient of 1 continued to demand industrial and financial compensation, the principle of *juste retour* was indeed effective in satisfying those complaining Member States. The principle of *juste retour*, as a policy norm, settled well into the institutions of European space collaboration.

(5) Further crisis and introduction of optional participation

Although problems of financial distribution were solved by introducing the principle of *juste retour*, the crisis of European space policy was not over yet. Because of continuous failure of European launchers and American interference, there was an increase in the difference among European countries in their perspectives on how space development should be managed at the European level.

There were two aspects to the American interference. First, given that Europe did not have viable vehicle to launch commercially attractive satellites, they had to rely on American launcher which was far more advanced (Apollo program for example). However, the US government was not willing to provide launching services for the European application satellites as it sought to maintain its dominance in Intelsat. In July 1966, the US National Security Council made decision (NSAM 354) to provide the American launcher technology to the ELDO only if it was not used for (1) improving communication satellite capability; (2) nuclear missile delivery capability; and (3) transferring to the third countries (Sebesta 1994, p.24). Thus, even though European countries, particularly France and Germany through *Symphonie* program, were able to obtain technological capability for producing satellites for commercial use, they had to ground them because of the US decision.

Second, after the successful completion of the Apollo program, the United States (NASA) moved into a new direction of policy, post-Apollo programs. Unlike Apollo,

the US government offered opportunities to participate in these programs for European countries. Some countries, Germany and Italy in particular, were very interested in acquiring state-of-art manned-space technology from the United States, whereas other countries such as France were not content to allow American dominance and disturb European solidarity for developing international competitiveness of their own. Thus, the difference of objectives in space development became quite deep even among big Member States.

For saving European collaboration from falling apart, a report, known as the Puppi report, was submitted to provide an idea for breaking the deadlock in 1970. The report had two elements that attracted attention. First, the report recommended that Europe should invest not only in telecommunication satellites, but also other domains of applications (navigation and meteorology), and the Member States should be allowed to participate in the programs on a case-by-case basis, while the scientific and R&D programs should be mandatory. Secondly, Europe should adopt a set of organizational principles for a consolidated organization that would be based on the ESRO with a Council to make political decisions. Financial contribution for the single organization should be based on GNP, but the industrial contracts should be allocated under the principle of *juste retour*.

Indeed, the report produced a positive result in the ESRO Council in July 1971. France, Germany, Britain and Italy all agreed to begin studies for application programs for navigation and meteorology alongside telecommunications, and they decided to participate in all programs (in other words, they did not opt out from any of these programs), and agreed to pay contributions according to the proportion of GNP. Although some Member States, Denmark in particular, expressed its unwillingness to participate in any of these programs, such a unilateral position would have less repercussion in the negotiation since the ESRO could decide programs without the consent of Denmark due to the introduction of the *à la carte* model based on Puppi report. The ESRO Council in December 1971 finalized the arrangement for application programs: all Member States except Denmark would participate in Aerosat (air navigation satellite); Denmark and Spain opted out from Meteosat (meteorological satellite); and Denmark, Spain and the Netherlands decided not to participate in Orbital Testing Satellite (OTS), a modified version of CETS communication satellite program.

What was remarkable in this ESRO Council meeting was the first 'Europeanization' of national project. Since 1968, the French space agency, CNES, has been studying the possibility of satellite weather monitoring as a national program. However, Meteosat was not able to attract sufficient national funding in France, and some

scientists in CNES began to consider withdrawing from the ESRO in order to shift the budget for science programs to meteorology. The French delegation to ESRO was put in a very difficult situation: the delegation argued that if Meteosat was not 'Europeanized', France would not pay the ESRO contribution from 1972 in order to shift resources to the 'national' Meteosat program. Other Member States thought it was blackmail, and did not appreciate the idea of sharing the costs of a national program. They argued that if Meteosat was Europeanized, the work had to be done at ESTEC — one of the ESRO's technological centers — instead of the CNES Toulouse Center. The question of transferring facilities, technology, personnel and industrial contracts was the major issue in the negotiation, but François-Xavier Ortoli, French Minister for Research and Industry, was not easily convinced to shift the resources to Europe because the CNES labor union, which gained influence in the events of 1968 and 1970 wage dispute, was strongly against the transfer of the program completely to ESTEC (Lévy 1984, p.86). The decision was eventually made in the ESRO Council in March 1972 that Meteosat should be Europeanized: ESRO was given the responsibility of developing, launching and managing a first series of pre-operational satellite, and responsibility for operation was supported by both CNES and ESTEC. The primary reason for French space community to accept the "Europeanization" option was the conviction that France had to offer Meteosat to Europe in order to take initiative in launcher development, Ariane, however, there was also a growing consensus that the future of space had to be in European collaboration (Carlier and Gilli 1994).

The success of the reform of the ESRO in the early 1970s was largely due to the political innovation by Puppi report. The stress on 'optional participation' or the '*à la carte* system' liberated the ESRO from being hostage to a unilateral claim from a Member State. However, the introduction of *à la carte* model did not undermine the solidarity of European collaboration. On the contrary, Member States were encouraged to 'Europeanize' their national programs, and some Member States actually did so. This is largely because it was not only beneficial for those members who were not able to finance but also for using European framework to strengthen the position of Europe in international negotiation vis-à-vis the United States.

One conclusion that can be drawn from this is that the flexible institutions based on *à la carte* model do not push Europe into small pieces. Instead they constitute a useful method for facilitating the management of diversity, and indeed, European collaboration in space which proved successful once the crisis was settled by the introduction of flexible measures. Since 1970s, European space activities flourished in commercial market; the launcher dominates almost half of commercial launch market, and three

major satellite constructors, Astrium (France-Germany-Britain), Alcatel (France) and Alenia Spazio (Italy) acquired respectable market position. Furthermore, together with *juste retour*, optional participation gave more opportunities for smaller Member States. Spain in particular was a beneficiary of these flexible institutions because Spanish industry which was at very early stage of development was able to concentrate on particular technological aspects so as to gain international competitiveness. Although Spanish industry is still not able to perform as a prime contractor in major programs, optional participation enable it to continuously choose targeted technology with a guaranteed success in international market.

(6) Flexible institutions today

Although the principle of *juste retour* and optional participation helped to manage diversity among European countries, particularly the difference between big and small countries, this system was not free from problems. When space industry was at its infancy, these flexible institutions were very effective in allowing Member States to choose whichever program they want to participate in and they were able to receive specific contracts for their industry. However, once European industry became internationally competitive and mature, the flexible system began to show problems.

One of the major problems was the question of further competitiveness. The concept of 'world-wide competitiveness of European industry' was interpreted for a long time as "the creation of an independent European capability in space applications" (Lebeau 1976, p.3) to make sense of the principle of *juste retour*. However, since the capability of European industry had improved beyond just becoming independent, several Member States began to consider that the time had come for reconsidering the concept of *juste retour* and constructing a genuine European industrial policy in order to improve international competitiveness in a more commercialized international space market. However, assuming that an institution such as *juste retour* was deeply embedded in European space collaboration, it could easily be expected that the attempt to amend the principle of *juste retour* would face vigorous resistance.

In 1997, ESA[12] produced a working paper which focused on three issues: reform of the distribution of contracts for mandatory programs; distinctions in the rules for optional programs between preparatory and development programs; and protection of SMEs. The basis of ESA's proposal was that industrial contracts should be distributed

[12] In 1973, ESRO and ELDO (European Launcher Development Organization) were merged and became European Space Agency (ESA).

by competitive bidding wherever this could be applied, and Member States' contributions should be adjusted according to the results of contract distribution (the rule of 'fair contribution'), while guaranteeing a minimum return coefficient (ESA/C-WG-WP(97)).[13]

The British and German delegations stood against this proposal on the grounds that there was no justification for maintaining a minimum guaranteed return coefficient. They remained consistent in their view that science programs should be managed more efficiently and, therefore, the concept of *juste retour* should be abandoned. However, the majority of smaller Member States rejected this position on the grounds that it would jeopardize their industries, which expected constant industrial contracts from scientific programs. Thus, the meeting concluded with relaxing the rule by setting the coefficient at 0.9 instead of the ideal coefficient of 1, with deficits to be paid back following a review at the end of three years.

Though these rules were introduced in response to strong demands for ESA reform, the new rules were not an easy pill for the smaller Member States to swallow. Thus, the new measures agreed on in the Ministerial Council in Paris were introduced on a trial basis for three years, and were eventually extended to mid-2001. It is also important to note that the new rules were *not* designed to abandon the principle of *juste retour*. The essence of this reform was to clear up the past imbalances in industrial returns, and to introduce flexibility in their calculation. Thus, the ministers agreed that "improved performance-to-cost ratios should be sought through competitive bidding", but also "providing at the same time the flexibility required for organizing industrial competitions and the means of aiming for the ideal overall geographical return coefficient of 1" (ESA/C-M/CXXIX/Res.1 (final)). This outcome suggests that some Member States, particularly the smaller ones, were not ready to accept the shift of policy objectives to promote more commercialization. Without national agencies of their own, ESA had been the smaller countries' *own* space agency, and they were very reluctant to give up their control over the industrial arrangements made through ESA programs. Thus, a reform of the rules of *juste retour* was the last thing that they wanted to achieve in this meeting, even though they understood the importance of improving the competitiveness of European industry. In fact, there was one Member State — Spain — which voiced its complete dissatisfaction with this arrangement all the way from the beginning to the end of the meeting.

[13] Minimum coefficient meant that Member States would be guaranteed to receive a certain amount of industrial return much lower than 100% (coefficient of 1). The minimum coefficient was subject to negotiation.

At the Ministerial Council in Paris, the Spanish delegates claimed that the success of ESA depended on its role in building up European industrial capability, and the principle of *juste retour* had been "a key factor in the development of a competitive space industry". This industrial policy "remained a cornerstone of solidarity" for ESA, because it guaranteed access to all the Agency's programs for the companies of smaller countries, which delegated their sovereignty to ESA. The Spanish delegates argued that the ESA proposal to reform the rules of *juste retour* "tended to sanction the surrender of some of the Executive's power to prime contractors, while the guarantee of smaller Member States access to industrial development work was given only a vague mention" (ESA/C-M/MIN/129).

In desperation, the Spanish delegates threatened to use their veto, but the Chairman, Yvan Ylieff, Belgian Minister for Scientific Policy, stood firm on making a decision at this meeting even if a consensus could not be reached, in order to demonstrate the European position to the outside world. Thus, the Ministerial Council in Paris made decisions, for the first time in the history of European space collaboration, by majority vote, with one vote against (Spain) and one vote cast *ad referendum* (UK).

The entire process of redefining ESA's industrial policy was, retrospectively, a small step toward reforming the principle of *juste retour*. As the Spanish case demonstrates, resentment and resistance against reform were still strong, and even some pro-reform officials from Member States thought that it would be impossible to change the rules. The concept of *juste retour* was deeply embedded in the institutions of European space collaboration, and commercial and financial imperatives alone would not be able to change this fundamental 'cornerstone of European solidarity'. The fact that ESA Member States were unable to establish a new rule by the end of 1999 and had decided to extend the transitional period until mid-2001 shows the lack of consensus and the determination among Member States to change the principle of *juste retour*.

Conclusion

The aim of this paper was to review the concept of flexible integration and outline the lessons that can be learned from the experience in European space collaboration. From the perspective of this paper, it seems that the flexible measures expressed in current Treaty of European Union are not sufficient to activate a deepening of the process of integration because they are stuck with multi-speed model which does not allow freedom to Member States to choose or not to choose to participate in integrating policy domain. Although there are several different models for respecting political will that

may be applicable and effective in the European Union with 25 Member States, but they have been categorically rejected in the negotiation of flexibility in Amsterdam and Nice.

However, as indicated above, the experience in European space collaboration shows that flexible measures which allow Member States optional participation are not necessarily a threat to solidarity in the organization. Instead, as Spain argued in ESA Ministerial Council in 1997, these flexible measures are regarded as the cornerstone of European solidarity. This is so because *à la carte* model of participation and the principle of *juste retour* make slower-moving states to focus on whatever they were aiming for, and therefore, thereby satisfying their respective needs.

Of course, we cannot assume that the experience in space collaboration can be applied to the activities of the Union immediately. However, since the possible candidate policy areas for further integration can be education, professional training, youth, culture, public health, tourism, civil protection, industry, research and technological development and so on (Philippart and Ho 2000), there are good reasons to expect that policy management can be improved with *à la carte* model with some sort of return system such as *juste retour*. In particular, for politically sensitive policy areas such as the second pillar concerning European Rapid Reaction Force, the flexible measures taken in the European space collaboration would not be irrelevant at all.

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