

Multilateral Cooperation
in International
Telecommunications:
Sources and Prospects

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Summary

The international telecommunications system is among the most successful instances of multilateral cooperation. The standards, rules and regulations elaborated by the ITU and its sub-bodies have been widely respected by telecommunications common carriers; and the institutions themselves have avoided the crisis of legitimacy which has more generally affected the United Nations and its specialised agencies.

This paper seeks to identify the structural factors which underpin the resilience of international cooperation in this field and to assess the extent to which they are affected by changes now under way in the telecommunications regulatory environment.

The paper begins by outlining a "structural realist" theory of multilateral cooperation. In this theory, the extent of multilateral cooperation reflects (a) the demand for such cooperation -- that is, the extent of the gains such cooperation can achieve relative to purely bilateral approaches; and (b) the supply of such cooperation -- that is, the ease with which the mechanisms for such cooperation can be put in place. The demand for international cooperation is presumed to reflect the saving in transactions costs of negotiating agreements multilaterally rather than bilaterally; these will depend on the degree to which the activity involved is inherently multilateral, the specificity of the assets which must be dedicated to it and the nature of the contracts on which it rests. Equally, the supply of international cooperation is presumed to involve both first-mover and public

summary continued

good problems; the ease with which these are resolved is expected to reflect the capability of a single country or "club" of countries to internalise the benefits from cooperation, the extent to which negotiators share a common outlook and objectives and the stability or instability of the technological and economic context.

Application of this model to telecommunications is straightforward. To begin with, international telecommunications is characterised by factors which have acted to make the demand for multilateral cooperation particularly strong; these include: the fact that given a domestic monopoly at each end, international service could not be provided by a single carrier on an end-to-end basis but had to be provided jointly; for such joint provision to occur, detailed agreement had to be reached between suppliers; the costs of negotiating such agreements can be minimised by standardising some features of these agreements on a multilateral basis. At the same time, the supply of multilateral cooperation has been enhanced by the small numbers of participants and the high degree of control each of these exercises over its environment; by the predominance of an engineering/public service culture; and by a technological context of evolutionary change.

These features, which have underpinned the stability of the international telecommunications regime, now appear in question. The liberalisation of entry into domestic telecommunications markets makes end-to-end service feasible, at least for the largest customers; together

summary continued

with technological developments, this reduces the need for joint-supply agreements. At the same time, the increasingly competitive nature of the industry's environment and the rapid pace of technological change undermine the gradual, cooperative approach to multilateral negotiation which has characterised international telecommunications.

The paper argues that these changes are already affecting the functioning of multilateral cooperation in telecommunications. This is most evident in the growing difficulties of the standardisation process and in the tendency towards bilateralism in the handling of disputes. Adapting the international institutions to these changes is the major challenge ahead.

1. Seen over the longer period, telecommunications has been an outstanding success story of international cooperation. Compared to areas such as trade, finance or development assistance, international cooperation in telecommunications has been distinguished by the resilience of the institutional mechanisms on which it is based, the widespread acceptance and observance of multilateral rules and regulations and a relative lack of conflict between the technical function of solving immediate problems and the claims of contrasting ideologies and interests.

2. Can this distinctive performance survive the major changes now affecting telecommunications world-wide? Does domestic de-regulation -- and the varieties of approaches to it -- threaten the international telecommunications regime? These questions are at the centre of this paper. To answer them, it is important first to identify the general factors which may contribute to stable and effective international cooperation in particular areas; this is done in Part I. On this basis, Part II examines the extent to which these factors have been at work in the context of telecommunications; while Part III assesses whether these factors are now operating less fully, and draws some implications for the likely course of the international telecommunications regime.

3. A word of warning is appropriate at the outset. The discussion in this paper is primarily directed at the ITU and its sub-bodies, since they are the principal locus of multilateral cooperation in telecommunications; but the conclusions apply, perhaps with even greater force, to INTELSAT and the CEPT.

I. International cooperation: an explanatory framework

4. "International cooperation" covers an enormous multitude of phenomena, varying both in the nature of the obligations they create and in the degree and form of institutionalisation of these obligations. Yet this diversity does not detract from a common core: sovereign states entering into "agreements" which in one way or another inform their domestic policy-making. Within the spectrum of such "agreements", a particular variant are those which set out on a multilateral basis rules, regulations and procedures governing a specific functional area of interaction between states -- for example, international trade, the international monetary system or the exploitation of marine resources. These "agreements" generally have an ongoing (and hence institutionalised) character, are reasonably detailed, at least in prohibiting certain types of action, and establish mechanisms for resolving disputes. It is these characteristics which are usually taken to define an "international regime".

5. Why would governments enter into such regimes? And why has it proved easier to establish and maintain multilateral arrangements in some areas of policy than in others?

6. It is useful to approach these questions in terms of a demand for, and supply of, international regimes. The "demand" side refers to the factors which affect the return states can obtain from multilateral arrangements; and the "supply" side to the factors which make it easier or more difficult for these arrangements to evolve.

(i) The demand for international regimes

7. The advantages which can be secured from multilateral arrangements fall into two types. A first consists of making possible and attractive domestic output and investment decisions which would not be taken without assurances about how policy and the behaviour of agents in other countries will evolve; and the second of reducing the costs of actually obtaining these assurances.

8. The first of these advantages will depend on the extent to which the decisions made domestically are vulnerable to changes in policy in other countries. Thus, if a good or service can only be provided in cooperation with a foreign supplier; and if the return the domestic agent secures from an investment in providing that service depends on the behaviour of the foreign supplier; then the domestic agent will have a significant interest in obtaining assurances about the future behaviour of the foreign supplier. More generally, domestic agents' interest in controlling the behaviour of foreign suppliers will be greater the greater:

(a) the degree of jointness in the supply decisions of domestic and foreign agents; and

(b) the larger the sunk costs these decisions involve -- and consequently, the larger the domestic supplier's exposure to opportunitistic behaviour overseas.

9. Ensuring that the gains obtainable from joint supply are realised, and the risks of opportunism kept to a minimum, requires a framework setting down

rules of cooperation, not only between the agents directly involved in the decision but also between the states which can interfere in their action. In principle, such a framework could be established solely through bilateral arrangements between states; but multilateral arrangements are likely to prove an effective complement to, or (more rarely) substitute for, purely bilateral relations when three conditions are met:

- (a) The decisions involved have an inherently multilateral character, in the sense that the benefits country A secures from agreement with country B will at least partly depend on each country's relations with C, D, E and so on;
- (b) The arrangements themselves are both relatively technical and require fairly frequent revision; and
- (c) Surveillance and enforcement of agreement requires information and approval not only from the parties directly involved in a transaction but also from others.

10. Under these circumstances, multilateral arrangements will reduce transactions costs relative to purely bilateral negotiations in three respects:

- (a) They make it easier for participants in the arrangements to discover complex packages of trade-offs and compensation, allowing each country to secure a better outcome than could be had were compensation only to be provided on a bilateral basis;

- (b) They allow standardisation of the agreements between countries, and provide a forum for reviewing these agreements in parallel -- clearly a saving compared to the cost of trying to revise a large number of bilateral agreements one by one; and
- (c) They can provide for cost-effective enforcement, by encouraging the pooling of information, increasing the visibility associated with non-compliance, and permitting "smaller" agents to coalesce for the purpose of sanctioning "larger" ones.

(ii) The supply of international regimes

11. The fact that multilateral arrangements provide benefits to participants is not sufficient, however, to ensure that such arrangements will emerge or survive. The problems are two-fold:

- (a) In practice, such arrangements are likely to resemble clubs in requiring an initial (largely sunk) investment which it may prove difficult for the investor to recoup;
- (b) Multilateral arrangements may have a quasi-public-good character, such that non-participants cannot be fully excluded from obtaining some share of the benefits they provide.

12. It is a matter of some controversy under what conditions these difficulties are most likely to be overcome. Two broad views can be distinguished.

13. First, some writers have emphasised the role of a "hegemonic" power in initiating multilateral arrangements -- a role frequently ascribed, at least in the early post-war period, to the United States. Underlying this emphasis is the argument that the hegemonic power is best placed to "internalise" the benefits arising from the provision of international cooperation as a public good; and that its position of political dominance helps it convince other countries to participate fully in the arrangement being set up. Other writers, however, have pointed out that the statistical relation between the existence of a hegemonic power in the world system and the establishment of multilateral arrangements is, at best, a weak one; and that it would be dangerous to treat the special circumstances of the late 1940s and early 1950s as a paradigmatic case of successful multilateralism.

14. A second approach draws on Mancur Olson's theory of collective action. In this view, quasi public goods will be made available when the supply of these goods can be "bundled" with the supply of a private good (that is, a good with standard excludability conditions) -- for example, a listener-funded radio station (clearly a local public good) which also runs a social club (a private good). While this approach is appealing, it has not proved of wide applicability in explaining multilateral arrangements.

15. These differences of approach notwithstanding, three conditions seem particularly important for the stability (if not initiation) of multilateral arrangements.

16. First, the parties to the arrangement must be in a position to make commitments about the behaviour of the agents who will actually be involved in the transactions. This may be based on a negotiating mandate received from these agents, or on a statutory power of regulation, but must in either case be sufficient to make the negotiation credible.

17. Second, arrangements are most likely to be reached and maintained when they are buttressed by a shared perception of the world. The more the negotiators agree about the way the world works, the greater the similarity in the language they use to describe it, and the closer their objectives, the higher the probability of a successful outcome.

18. Finally, arrangements are not likely to survive if parties are frequently placed in zero-sum situations. As became painfully obvious in discussions about the law of the sea, recurring conflicts over common-access resources (that is, resources the property rights on which are not vested in individual owners) are particularly damaging in a multilateral context; for participants will have few incentives to correctly signal their preferences, mechanisms for arranging compensation are likely to be rudimentary, and the prospects for enforcement will generally be poor.

19. In short, multilateral regimes are most likely to evolve when the following conditions are met:

- (a) Decisions involve a high degree of jointness between domestic and foreign agents;

- (b) The sunk costs involved in these decisions are high, so that domestic agents may be vulnerable to opportunistic behaviour by foreign suppliers;

- (c) The agreements needed to control such behaviour entail high transaction costs because:
 - the extent of the costs and benefits arising from any bilateral link also depend on circumstances on other links,

 - the agreements themselves need to be fairly detailed in technical terms and may need frequent revision,

 - surveillance and enforcement requires a broad range of information and effective disciplinary action in a number of bilateral relations;

- (d) Countries can find some way of allocating the fixed costs setting up such an effective multilateral approach involves; and they can make such an approach stable because:
 - they have an effective mandate to negotiate on behalf of domestic agents and/or the power to regulate their behaviour,

 - negotiators share a common approach to the world and common objectives,

-- zero-sum negotiating situations are minimised.

II. An application to telecommunications

20. These conditions have for many years well characterised international telecommunications. Indeed, international telecommunications has been marked by features which strengthened the demand for multilateral cooperation, while at the same time making such cooperation easier to achieve.

(i) The demand for multilateral cooperation

21. Unlike most other goods and services, international telecommunications have virtually always been provided on a joint basis by a domestic and a foreign supplier. This first and foremost reflects the monopoly status of each service provider (telecommunications common carrier) in its domestic market; for given this monopoly, a foreign firm could not provide end-to-end service into the domestic market, but had to rely on the monopoly provider in that market for the connecting link.

22. This jointness of supply also has a multilateral dimension. The most obvious instance is when geography imposes that traffic between two points must transit through a third country; but it also arises because network costs can be minimised by concentrating traffic from thin onto thick routes and by using multiple routing possibilities to handle traffic peaks and minimise network vulnerability. At the same time, for radio transmission media (which until the 1950s were the backbone of long distance

communications), effective use could not be made of frequencies without arrangements for minimising interference between transmission sources. Since such interference can occur over a wide geographical area (and indeed for short-wave radio occurs virtually world-wide), efficient use of the radio spectrum requires multilateral procedures for allocating frequencies to uses and users.

23. Multilateral supply arrangements not only reduce costs but also increase the value of the network to each user. This is a straightforward result of network externalities -- of the fact that the value of a network to a user depends on how many termination points (subscribers) can be reached through that network. Given that all supply arrangements must be joint (because the existence of domestic monopolies rules out end-to-end provision), the value of international service to a subscriber will depend on the number of joint supply arrangements concluded by its national common carrier.

24. Together these features increase the importance for each common carrier of securing a broad range of joint supply arrangements. At the same time, the features of these arrangements have been significantly affected by the investment characteristics of telecommunications networks.

25. In particular, telecommunications investment was for many years largely irreversible in character. Reliance on physical connections, notably cables, for high-quality international transmission, and the relatively limited flexibility of micro-wave bearers, meant that networks once in place could not be readily reconfigured. Equally, the hard-wiring of signalling and similar characteristics into exchange equipment meant that formats and protocols were

very costly to alter after the early stages of equipment design. These features naturally meant that joint supply arrangements had to be negotiated well before service could start; and they created scope for opportunistic behaviour once the investments had actually been made.

26. A further implication of these technical characteristics was that, to be effective, agreements to jointly provide service had to specify a considerable amount of detail. From a purely technological point of view, this detail included the physical nature of the connections to be used and their electric and signalling properties. But arrangements also had to be made for the collection and division of revenues, for liability in the event of outages and so on.

27. In short, international telecommunications services could not efficiently be provided without a large number of joint supply agreements; each of these agreements had to specify both detailed technical features of interconnection and provide pricing and accounting guidance; and the agreements had to be reviewed in line with changing technology and demand patterns.

28. These features created clear scope for multilateral cooperation. To begin with, multilateral control of radio spectrum use was essential if radio technology was to be used effectively, both domestically and internationally. And at the same time, multilateralism could standardise key features of joint supply arrangements and thus reduce the transactions costs involved in establishing international service.

(ii) The supply of multilateral cooperation

29. But though necessary conditions for successful multilateralism, these demand side features cannot be considered sufficient. In particular, it remains to be explained how the mechanisms for cooperation could be put in place and why these mechanisms succeeded in meeting their perceived objectives.

30. It is conventional, in this context, to separate the question of regime formation from that of regime stability. The first of these concentrates on the question of how the public good aspects of "supplying" international cooperation are overcome; that is, on why participants cooperate rather than adopting free-rider strategies. Hegemonic explanations do not appear to be particularly relevant to the ITU or its sub-bodies; indeed, over the longer term, these bodies have been distinguished by a relative equality of power among the major (mostly European) participants. Rather, a more plausible approach could draw on Olsen's Logic of Collective Action, that is, a link between the public goods supplied by multilateral cooperation in this field and more classical private goods. Two such private goods are of particular importance:

- First, the rules set down by the ITU and its sub-bodies may have reinforced the entry barriers confronting potential rivals to the monopoly common carriers; and
- Second, the main benefits of the technical standardisation process may have been appropriable by the direct participants in that process.

But important though these factors may be, they have been buttressed by others which made the system once established particularly stable and effective.

31. To begin with, the participants in the negotiating process were uniquely well-placed to enter into credible commitments. The ITU and its sub-bodies are organisations grouping the telecommunications common carriers; and these carriers are vested with the authority which comes from their status as utilities operating in the public interest, and with the power which comes from their monopoly status. Even in the case of the United States, with its multiple international carriers, the dominance of AT&T and the 1934 Communication Act's delegation of responsibility for international negotiations to the Department of State provided an element of centralisation.

32. Moreover, the negotiating process has clearly not been zero-sum in character. The carriers involved have almost never been in direct competition; rather, the activity's regulatory structure has kept them out of each other's markets. Even in the area of spectrum allocation, where interests have more frequently clashed, the over-riding need to minimise interference has kept conflict within fairly tight bounds.

33. Finally, the participants have shared a common culture and outlook to a highly unusual degree. The telecommunications industry has generally been heavily dominated by engineers, with a broadly similar training and a strong emphasis on "network integrity" (that is, the central role of the common carrier network in providing service to users) and on an ideology of public service. As a result, the international negotiating teams have been

relatively insulated both from considerations of commercial rivalry between countries and from the trend to the politicisation of the negotiating process.

34. These features can be viewed as largely structural; but their effects have been bolstered by two factors more conjunctural in nature.

35. To begin with, for many years the development of telecommunications technology was sufficiently evolutionary for change to be accommodated within a gradual process of international negotiation. The fact that a lag in the pace at which new technologies were introduced did not threaten carriers' competitive position made the delays needed for standard-setting all the more acceptable.

36. Secondly, and perhaps most importantly, over the long course of their history, the ITU and its sub-bodies have proved highly able in avoiding conflict. This is to some extent a question of history. Partly because of the unique institutional features of telecommunications regulation in the United States (the multiplicity of international carriers and the division of responsibility between competing agencies of government) the ITU was never dominated by the United States; and it consequently averted the crises arising from the United States' changing role in the world economy. The specific financial provisions for the ITU (whereby contributions are self-assessed rather than levied) reinforced this effect, by limiting the institution's dependence on United States funding. But it is also because the international regime has matched regulatory instruments to the features of specific issue areas.

37. In particular, little reliance has been placed on supra-national authority, and the scope for discretionary decision-making at an international level has been minimised. Even in the area of the radio regulations, which do have a binding character on participants, the use of priority rules and of generic principles such as "common use of common frequencies" have substantially curtailed the discretionary power of the International Frequency Registration Board. And excepting in the areas (such as frequency allotment) where common observance was essential to the process' success, decisions have not been formally binding on participants, though in practice they have generally been treated as such.

38. In short, the stability of the international telecommunications regime can be traced to specific features affecting the demand for and supply of multilateral cooperation in this industry. In particular:

- (a) the jointness of supply arising from the monopoly status of each carrier in its home market creates a need for international agreements;
- (b) the effective provision of international service requires that such agreements be reached with a large number of suppliers;
- (c) together with the fairly technical nature of these agreements, and the need to revise them in line with changing technologies, this creates scope for significant transactions costs savings from multilateral as against purely bilateral approaches;

(d) it has proved possible to organise such multilateral cooperation effectively because:

- monopoly status confers significant credibility to participants in the bargaining process,
- participants have shared a common culture and broadly similar objectives,
- the relatively slow pace of technological change has permitted gradual, negotiated adaptation (notably through standard setting), and
- the ITU and its sub-bodies have achieved an unusually close fit between regulatory mechanisms and the features of individual issue-areas.

III. Pressures for change

39. These forces for stability now appear threatened by changes in domestic and international regulatory arrangements. The changes centre on the liberalisation of entry into the provision of common carriage services; but their effect has been compounded by rapid technological advance.

(i) Changes in the demand for multilateral cooperation

40. Two fundamental changes appear likely, over the longer term, to affect the demand for multilateral cooperation.

41. The first of these arises from the growing prospect of carriers offering direct end-to-end service, or in other ways minimising their need for interconnection. As entry into domestic markets is liberalised, foreign carriers may seek to interconnect into the domestic network at the local level, rather than at a designated international gateway. Indeed, for the largest corporate clients, end-to-end service may be provided, for example through satellite or digital micro-wave links.

42. New technologies are of obvious relevance in this respect. To begin with, satellite and digital micro-wave technologies appear to reduce the sunk costs a carrier must incur to provide end-to-end service into a foreign market. They consequently increase the "contestability" of telecommunications service both domestically and internationally, further reducing the scope for exclusive joint supply arrangements.

43. At the same time, the enhanced information- and signal-processing capabilities of digital switching and of PCM transmission, increase the telecommunications network's flexibility in coping with differing and/or changing formats and protocols. The availability of "black boxes" for protocol and code conversion reduces the need for interface standards to be specified in considerable detail and makes it possible to implement a common service in diverse network contexts.

44. The strength of these forces should not be exaggerated. Despite market liberalisation and the availability of new technologies, end-to-end international service is likely to be a fairly limited phenomenon, primarily of relevance to the very largest users (though of broader significance in the VAN context). Moreover, inexpensive protocol conversion does not eliminate the advantages of standardisation, particularly for smaller uses of advanced services. In short, joint supply arrangements are likely to remain the central pattern, but they will be more in the nature of commercial joint ventures than of the cooperative structure which was dominant in previous years.

(ii) Changes in the supply of multilateral cooperation

45. The factors altering the demand for multilateral cooperation are also acting on the supply side of the equation. But here their impact appears to be more drastic and immediate. Three trends, each of which makes it increasingly difficult to secure international agreement, stand out.

46. First, liberalisation erodes the bargaining mandate of participants in international negotiations. As the number of common carriers increases, and as the interests of those carriers come to diverge, the definition and implementation of a national bargaining position becomes more problematic. Moreover, the growing divide between government representatives in the multilateral process on the one hand, and the (increasingly frequently private) carriers on the other, increases the likelihood that the "soft law" of the ITU will be respected less fully than it once was. Trends in these directions are already evident in the United States, the United Kingdom and (less clearly) Japan.

47. Secondly, the rapid pace and changing character of technical advance also complicates the negotiation process. The clearest instances are in the area of technical standardisation. As technical advance accelerates and comes to depend on technological and scientific bases outside of telecommunications, it becomes more difficult to identify a particular standard as "optimal" in terms of user needs and current and prospective changes in technology. Exacerbating the resulting difficulties is the fact that standardising micro-electronics-based products requires a finer level of definition (for example, in terms of electrical structure) than was needed for electro-mechanical or analogue technologies. It has therefore become more difficult both to identify the direction technological change will take (which is indispensable if standards are to be set in a dynamic context) and to specify the standards themselves.

48. These technical difficulties are also compounded by the growing number of actors involved in the standardisation process and the conflicting nature of their interests. This is partly a natural consequence of the intersection of the technologies of computers and of communications, which has brought a broad range of suppliers of electronics-based equipment into contact with the making of telecommunications policy. But it is also a result of the telecommunications equipment industry's response to the regulatory changes of recent years -- a response which involves greater independence from the common carriers and an increased reluctance to passively accept the standards these carriers set.

49. But third and last, it is the change in the carriers themselves which may prove most significant over the longer run. As liberalisation proceeds,

the engineering confraternity, and the ideology of public service, give way to a more commercial emphasis. Shared technical objectives become of less concern relative to the competing objectives of the market-place -- a trend the increased scope for end-to-end service can only accentuate. At the same time, the ideological divide between the countries liberalising their telecommunications markets and those which are not inevitably affects the context for multilateral negotiation.

(iii) The overall outcome

50. Overall, therefore, the factors weakening the bases for multilateralism in telecommunications can be summarised as follows:

- (a) The prospects for end-to-end service will alter the nature and significance of joint supply arrangements;
- (b) The greater flexibility of digital technologies reduces the need for detailed multilateral agreements about interfaces and network characteristics;
- (c) The increasing number of entities involved in telecommunications common carriage (including of value added services) and their more arm's-length relation to governments, erodes the negotiating mandate of participants in multilateral bargaining;
- (d) The more rapid pace of technological change and the digitalisation of telecommunications technologies make it more difficult to set and specify standards; and, finally,

- (e) The increasingly competitive nature of the telecommunications industry is altering its cultural context from an emphasis on shared engineering goals to one on more commercial values.

51. The effects of these trends are, of course, far from immediate. They are more in the nature of gradual and rather uneven shifts than of cataclysmic break-downs. And the differing national approaches to liberalisation make the process both more complex and more drawn-out. Nonetheless, the signs of change are already evident.

52. Technical standardisation is perhaps the most relevant area in this respect. The changing technological context, the expanding number of participants and the growing diversity of their interests have interacted to vastly complicate the standardisation process. It would be inaccurate to say that fewer standards are being set; rather:

- (a) Standards are increasingly lagging product development -- to the point where some standards set at great cost were virtually obsolete by the time they were released (Teletext being a case in point).

- (b) Even when set, standards are formulated in a manner which is increasingly loose, with a proliferation of options which undermine interconnectability: X25 set the pace in this respect, but similar outcomes appear likely in the definition of the intermediate stages of OSI.

- (c) As a result of (a) and (b), standards are having a more limited impact on product development than they had in the past -- for example, in the evolution of electronic mail.

This is far from meaning that international standards are becoming irrelevant; on the contrary, the emerging OSI standards, and even those for 2B+D ISDN, may have a far-reaching impact on carriers and on equipment manufacturers. But standardisation is no longer "the only game in town"; and new corporate strategies of leap-frogging the standard-setting process are likely to gain in importance.

53. A second area where the multilateral institutions are under increasing pressure is that of disputes and settlements. Bilateral disputes in international communications have been rare; and most conflicts have involved differing interpretations of CCITT/CCIR regulations, rather than a substantial rejection of those regulations. (Indeed, in one famous instance, the senior Secretariat official of CCITT wrote to the Chairman of the FCC to remind him of how a CCITT regulation -- which merely had the status of a recommendation -- was to be interpreted.) But more recently the (however hesitant) liberalisation of the use and resale of international leased circuits and the licensing of competitive international carriers have created new sources of conflict: for example, in charges of traffic diversion, of discrimination in the granting of licences, or of "whip-sawing" with respect to new entrants. These conflicts have not been dealt with through multilateral procedures; rather, they have resulted either in bilateral consultations (as in the current conflicts between the United Kingdom and Japan and between the United States and Germany), or through ad-hoc multilateral discussions with limited numbers of participants.

54. These instances -- of standard-setting and disputes settlement -- highlight the growing gap between the traditional practice of multilateralism in telecommunications and the changes under way in the industry structure. It will be a major challenge for WATTC 1988 to adapt multilateral institutions to these trends; for though multilateral cooperation in telecommunications is both inevitable and desirable, the process will be far less smooth than in the days when the ITU was a "monopolies' club".