



DANGEROUS GOODS PANEL (DGP)

TWENTIETH MEETING

Montréal, 24 October to 4 November 2005

Agenda Item 5: Resolution, where possible, of the non-recurrent work items identified by the Commission or the panel

OPTIONS TO FACILITATE GLOBAL HARMONIZATION OF TRANSPORT OF DANGEROUS GOODS REGULATIONS WITH THE UN MODEL REGULATIONS

(Presented by the Secretary)

1. INTRODUCTION

1.1 At the twenty-seventh session of the UN Sub-Committee of Experts on the Transport of Dangerous Goods (4 to 8 July 2005), a working paper (ST/SG/AC.10/C.3/2005/20 - see Appendix A) on options to facilitate global harmonization of transport of dangerous goods regulations was discussed. The report of the informal discussion is presented in Appendix B.

2. ACTION BY THE DGP

2.1 In paragraph 102 of the report, international organizations are invited to explore possibilities of improving global harmonization for the international transport of dangerous goods. Panel members are encouraged to consider any possible amendments which would facilitate this harmonization; for example, using UN special provision numbering for those special provisions which are completely in alignment with the equivalent UN special provision and/or identifying other special provisions which have been modified or are unique for air transport.

2.2 It is proposed an information paper on the outcome of this discussion should be submitted to the November UNSCOE meeting.

APPENDIX A

OPTIONS TO FACILITATE GLOBAL HARMONIZATION OF TRANSPORT OF DANGEROUS GOODS REGULATIONS WITH THE UN MODEL REGULATIONS

World convention

Transmitted by the experts from Canada and the United Kingdom

Background

1. The experts from the United Kingdom and Canada believe that the expert from Italy, in ST/SG/AC.10/C.3/2004/32, has provided the Sub-Committee with an excellent opportunity to discuss important issues that the Sub-Committee does not usually have time to discuss but that impact greatly on the work that the Sub-Committee undertakes every biennium.
2. Consequently, the attached paper was developed on a personal basis by the experts from the United Kingdom and Canada with a view to promoting and encouraging discussion of the issues outlined in the paper. The authors have tried to maintain an objective view in developing the issues for discussion. However, any discussion need not be limited to the issues in the paper and, indeed, the Sub-Committee might wish to suggest which of the issues need not be discussed and which issues that are not in the paper should be added.
3. It is important to note that the paper does not represent the views of the Government of the United Kingdom or the Government of Canada. As well, the paper does not necessarily represent the personal views of the authors.

Introduction

1. There are a number of issues outlined in the attached paper along with possible options for discussion.
2. The paper attempts to focus on key philosophical points:
 - . the mandate of the Sub-Committee;
 - . the core requirements in the Model Regulations that should be adopted globally such as classification and the dangerous goods list, packaging, documentation, and marks, labels and placards;
 - . how the Sub-Committee could include compliance issues in its deliberations, including cross-country enforcement;
 - . improving the text of the Model Regulations to make it readily adoptable as an enforceable legal instrument;

- . training and assistance for countries in transition such as the way in which IAEA has experts who provide such advice;
- . the way in which the Sub-Committee works; and
- . the Sub-Committee's relationship with other UN and regional bodies.

3. The authors hope that the above summary and the attached paper will facilitate discussions during the biennium. The authors also hope that the discussions will result in the Sub-Committee coming to terms with some of the issues and, perhaps, deciding that action on some of them can be taken outside of the scope of a possible world convention.

Annex**FUTURE HARMONIZATION AND DEVELOPMENT OF THE UN MODEL REGULATIONS
ON THE TRANSPORT OF DANGEROUS GOODS****INTRODUCTION**

1. In response to paper ST/SG/AC.10/C.3/2004/32 presented by the Expert from Italy, the Sub-Committee of Experts decided, at its meeting in December 2004,

“that the issue of further harmonization with the Model Regulations should be discussed in greater depth during the forthcoming biennium with the development of a world convention being one possible solution.” (ST/SG/AC.10/C.3/52 paragraph 122).

The Secretariat was instructed to prepare documents for the possible drafting of a Convention, but *“at the same time, the Sub-Committee should study alternatives to a convention in order to improve internationally the assurance of the simultaneous harmonization of legislation applicable to the international transport of dangerous goods in all countries by all modes of transport.”*

2. This paper is offered on a personal basis by the authors to initiate and to facilitate discussion on what is a difficult and complex issue. This paper does not necessarily represent the views of the countries of the authors, nor does it necessarily represent the personal views of the authors. It is simply intended to offer a framework for discussion.

BACKGROUND

1. Presumably, those who have called for the adoption of a world convention do so because they are dissatisfied with the current situation whereby the Model Regulations are intended to be the basis of *international*, modal and national legislation on the transport of dangerous goods. It is true that huge strides have been made in recent years towards harmonization. Some parts of the UN Model Regulations are reproduced without change in various legislative instruments. However, it is equally true that most parts of the UN Model Regulations are not generally transposed directly into legislation. There may be a number of reasons for this and the following text is an attempt to articulate some of those reasons.

(a) The UN Model Regulations are deficient in a number of areas of drafting.

The Model Regulations have been developed over many years but they are not legal texts in themselves. As a result, there are many examples of inconsistencies of language, lack of *adequate* definitions and failure to determine clearly the responsibilities of those involved in the transport chain, e.g., consignors, carriers, consignees. This, in itself, prevents regulators from simply making mandatory the Model Regulations as an existing document. It also leads to modal and national differences.

(b) The Model Regulations are not complete.

The Model Regulations do not address mode specific issues, which have traditionally been left to various global or regional bodies, some pre-dating the UN Sub-Committee of Experts. However, there are instances where the Model Regulations do address clearly *mode* specific

matters. For example, road vehicle construction requirements are not addressed (dealt with UNECE Working Party 15 in Europe in the context of the ADR Agreement) nor are general fire precaution provisions of the type that appear in the IMDG Code. In a number of instances certain substances are required to be transported in closed transport units (including vehicles). The Model Regulations also preclude certain provisions from being applied in sea or air transport.

(c) The Model Regulations are complex, detailed and voluminous.

The complexity, the detail and the size of the Model Regulations makes it difficult for many jurisdictions to understand the nature of what is being proposed. In many cases, parts of the Model Regulations are used only occasionally and then usually by a small and highly specialized audience. They are not essential for the purposes of consignors and carriers on a daily basis. This reality is already recognized, in some part, by the Model Regulations being supported by the Manual of Tests and Criteria that includes test methods for classifying substances as dangerous goods.

(d) Some of those delegations who negotiate amendments to the Model Regulations do not, since the Regulations are not mandatory, feel constrained to support their application either in regional, modal provisions or in their own national legislation.

In a number of cases, compromise is achieved by using terms such as ‘adequate measures’ or ‘significant risk’ that then allows regional bodies or national regulators to interpret the requirements in ways that suit their own particular situations. But this leads to a lack of harmonization. A current example of where this is happening is the adoption of provisions on environmentally hazardous substances. It is probably worth noting that most of the active countries in each of the modal bodies and the UN Sub-Committee are actually the same and the representative may, indeed, be the same person.

(e) There still seems to be a lack of trust between the UN Sub-Committee of Experts and a number of other bodies.

This may, in part, be a reflection of the limited nature of participation in decision-making in the Sub-Committee. Whilst meetings are open to all UN countries, UN Specialized Agencies, inter-governmental organizations and trade and other organizations having consultative status within the UN, the decision-making process is limited to those 27 countries having voting rights. Thus, for example, those countries without voting rights feel no compunction in changing or overturning decisions made by the Sub-Committee when those decisions are presented in regional bodies for adoption. Whilst the UN Sub-Committee is generally recognized as the expert body in, for example, packaging matters, other legislative bodies still cannot resist the temptation to make minor changes that subvert the global, multi-modal principle of the Model Regulations. Examples can be found in plastics compatibility requirements.

(f) The modal bodies (ICAO, IMO, UNECE RID/ADR Joint Meeting) do not always perceive the UN Sub-Committee as being a truly multi-modal decision making body.

It is sometimes felt that an issue is driven by a particular mode’s needs and insufficient account is taken of other modes’ concerns. Unfortunately, this seems to be the case even with some Sub-Committee members. Recognizing that modal or regional bodies may not accept the views of the Sub-Committee, attempts have been made when dealing with

particularly difficult issues of harmonization (such as the recent limited quantity debates), to call formally for consultation between the UN Sub-Committee and the modal bodies. Such a consultative process is more difficult when all those involved work on a biennial cycle during which plenary meeting timetables may not conveniently coincide.

- (g) **There are trade/operator/carrier organizations that will apply restrictions over and above those set by the UN Sub-Committee, sometimes for ‘safety’ reasons and sometimes for commercial reasons.**

Examples are operator variations listed in the ICAO Technical Instructions. These, at least, are published, but some marine shipping lines apply further restrictions that are not well, or centrally, publicized or make mandatory provisions in the Model Regulations that are clearly identified as non-mandatory e.g., the "example" of a shipping document. Consignors are faced with situations where they can not move products universally, despite an adequate safety regime being in place. A current example of such problems is the increasing non-acceptance of Class 7 consignments for transport, made more difficult for industry by simultaneous application of additional airport authority or local authority requirements.

- (h) **Class 7 and the IAEA.**

There is still a problem in cooperative participation for those responsible for similar Model Regulations addressing the transport of Class 7 materials, a small but significant element of dangerous goods transported (notably sources for medical use having a short half life). The IAEA tends only to report on, or receive reports of, work being undertaken separately by each body. Genuine mutually participative work is rare.

- (i) **There is a genuine problem in trying to develop a universal system of transport operations that apply equally to both international and national transport.**

This appears to be less of a problem for air and sea transport, where the distribution and operational systems are little different whatever the length or nature of the journey. However, ‘local distribution’ in land transport, particularly road transport, is rather different from cross-continental journeys. Can the same product be moved in the same way, for example, in national transport in Australia from Perth to Sydney (3279 kms) as it is in an international journey of 50 km transversing Belgium, the Netherlands and Luxembourg?

- (j) **Is the Sub-Committee, or indeed ECOSOC, clear on what its remit is today?**

Is that remit the same today as it was when the then Committee of Experts was first established? Is the Sub-Committee interested only in ensuring (so far as is practicable) the safe transport of those dangerous goods that we all recognize as essential to modern life, or are we also to address the facilitation of global trade in such goods? Certainly, industry would support the latter view as evidenced by UNSCETD/25/INF.26 presented to the Sub-Committee in July 2005. Their greatest concern appears to be the difficulties currently experienced in the modal interfaces for a multi-national and global operation. This is important if we are to determine exactly what ‘harmonization’ means to the Sub-Committee. Should we be striving towards a truly multi-modal set of provisions or simply concentrate on obvious areas of commonality, such as chemical classification, leaving the modes to determine operational provisions?

- (k) The question of translation into the official UN languages should also not be underestimated.**

Translations are expensive and although Chinese and English are the languages spoken by more people than any other language this does not mean that everyone speaks Chinese and English. More importantly, national legal systems require any enforceable legislation to be in the national language. The Expert from Austria recently explained that because the ICAO Technical Instructions had not been translated into German, it was very difficult to enforce the rules in Austria. By placing some parts of the Regulations into the Manual of Tests and Criteria and cross-referring the Manual into modal rules, translation costs could be significantly reduced.

- (l) Increasingly, transport of dangerous goods is multimodal even within national territories.**

This includes a consignor sending dangerous goods from, say, Munich to Hamburg by one of the express parcel carriers who has no idea which mode will be used. Equally, the driver collecting the dangerous goods will not know what other modes will be used and it is quite possible at the time of the pick up that the express parcel carrier will not know until the consignments have been consolidated and assessed at the end of the day. Thus, a package correctly offered for transport in accordance with ADR is then put on an aircraft and is not in compliance. Consolidating and standardizing the rules can eliminate inadvertent breaches of the regulations.

POSSIBLE OPTIONS FOR THE FUTURE

The following are a number of possible issues to consider, based largely on a series of questions for consideration on how they might be taken forward. They are not mutually exclusive and could be taken forward in parallel.

Renewing the mandate

1. Perhaps the Sub-Committee should re-consider its role in regulating the transport of dangerous goods. Should it identify those matters clearly multi-modal in nature? Some may consider that this is unnecessary, as it is obvious that all current Parts of the Model Regulations are multi-modal. But if that is the case, why do some modal bodies believe that changes are needed e.g., air transport's differing views on packaging infectious substances, sea transport's need to identify marine pollutants or land transport's non-requirement for documentation for goods in limited quantities?
2. Is the Sub-Committee clear that it should address equally both issues of safety and the facilitation of trade? Simply because there is a large demand for spirits or perfumes is that justification to exempt them from some of the provisions that would apply to other flammable liquids in the same quantities? And is the Sub-Committee clear that it should address both international and national transport issues? Recently, the Sub-Committee adopted provisions on the transport of infectious animal carcasses, although many felt that this was a national issue, but rejected provisions for gas cylinders used for hot air ballooning which it did not consider relevant for international transport.
3. If 'harmonization' is the principal role of the Model Regulations, what do we mean by this? There have been endless Resolutions and calls on UN Specialized Agencies to harmonize, so far as

possible, with the Model Regulations. But what is meant by ‘so far as possible’ and what sanction might there be if this call is not heeded?

4. Perhaps the Sub-Committee should consider drafting, during the current biennium, a new Resolution for ECOSOC that clarifies and renews the mandate for the Sub-Committee and its work in the light of these discussions.

Reviewing the work practices of the Sub-Committee

1. Is it the way that the Model Regulations are developed that is leading to dissatisfaction with the end product? Should all countries be entitled to attend as voting members? Should all countries have a single un-weighted vote? Should decisions be taken on a simple majority basis or should a certain threshold of votes be required for adoption? Should other organizations or trade associations be part of the decision making process – for example IATA and IFALPA are entitled to vote in the ICAO decision-making process?
2. Is there a problem with the current schedule of amendment to the Model Regulations? Is the two-year biennium too short, as some argue, about right or too long as others contend? Should the periodicity of review be looked at in light of the amendment process in the modal bodies? Does the current cycle sit comfortably with the existing national legal processes of implementation? Is the cycle of change an impediment to developing regions or countries adopting the Model Regulations? And should the Sub-Committee do more to set out harmonized transitional periods for new provisions to ensure global consistency? Indeed, could the Sub-Committee help to harmonize current modal transitional periods by introducing, say, a 6 month transitional period (IMDG has a 12-month transition, RID/ADR has 6 months and ICAO TIs have no transitional period at all!)?
3. Should the Sub-Committee be more rigorous in the way it deals with proposals for amendment? Should there be a requirement for substantive comments on proposals to be submitted in writing within a certain timeframe. Should we be more circumspect in the use of INF papers? Are we asking too much of the Secretariat and officers of the Sub-Committee in policing our own failings? Would it be better to split meetings between various formal sub-groups for recommendation to plenary?

Relations with other dangerous goods regulatory bodies

1. Do we need to clarify the roles of modal or regional bodies vis-à-vis the Model regulations? Could the consultative process be improved? Perhaps these bodies might be asked to present substantive papers more regularly on key issues or be notified of proposed changes after each Sub-Committee meeting and asked to provide their views. If no immediate comments or objections were forthcoming, it would be incumbent on those bodies to adopt the UN text without alteration (or even debate?).
2. Should the officers (rather than the Secretariat) of the modal or regional bodies be ‘required’ to attend Sub-Committee meetings and give an initial view on all proposals, utilizing written consultation processes with their constituents to feed into the UN Sub-Committee debate following the UN timetable?
3. Could the modal or regional bodies be ‘required’ not to adopt deviations from UN text until any proposed deviation has been submitted to the Sub-Committee for review or comment? Could there be a ‘ruling’ body in the event of continued disagreement?

Promoting wider adoption of the Model Regulations

1. Is it simply a matter of improving knowledge and understanding of the Model regulations that would lead to widening of adoption without deviation? Should the Sub-Committee officers and/or Secretariat embark on a formal programme of seminars/visits to achieve this? If so, how would it be financed? Does ECOSOC have an equivalent of IMO's Technical Cooperation Committee that offers funding to countries in transition to prepare legislation and to fulfill competent authority functions?
2. Can industry play a more active role in promoting UN provisions? Industry pleads for harmonization but seems to be unwilling or unable at times to contribute to the process. Conversely, the Sub-Committee does not always seem willing to encourage industry to participate in debates and to listen to their expertise and experience.

Reviewing the Model Regulations as a legal text

1. It seems clear that the Model Regulations would benefit from an editorial review to ensure, if nothing else, consistency of language. More recently the Sub-Committee has benefited from the 'Canadian effect' i.e., the use of clear and unambiguous language. It would be a useful editorial exercise to review the whole text in this "clear" way. This might also incorporate a review on the way the Regulations are formatted. In addition, is the UN 'house' numbering system the most appropriate for a legal text and the easiest to deal with especially for those who do not use the Model Regulations on a daily basis?
2. As a legal instrument, the Model Regulations should clearly define duties and responsibilities for applying the various provisions. Comparison with modal legal instruments and major national regulations could lead to re-writing the Model Regulations appropriately. If this were done, it might increase the possibility for the modal bodies to simply reference various Parts of the Model Regulations. This would reduce the scope for error in transposition and help reduce time and costs in publishing modal provisions.
3. It has also been suggested that a single multi-modal Dangerous Goods List (perhaps more correctly the List of Proper Shipping Names) would be beneficial to users. Could it be possible to combine the various modal dangerous goods lists together into a single UN list with additional 'modal difference' columns? There does appear to be an inconsistency with the ICAO TIs retaining its alphabetical, rather than numerical, dangerous goods list.
4. It may be appropriate to review the content of the Model Regulations to determine to whom the various requirements are addressed. Where there is a specialist player in the transport chain, the relevant text might be moved into the Manual of Tests and Criteria. For example, UN package design and testing requirements in Part 6 are addressed to package designers and these sections are not subject to fundamental change. Some parts of this text are addressed primarily to competent authorities and to test houses but not to users of packagings and carriers. Transferring the text to the Manual might have several advantages: it would reduce the content of the Model Regulations (thereby easing transposition and translation problems); and the modes and regional and national legislation have no difficulty now in simply referencing the Manual of Tests and Criteria without qualms about 'losing sovereignty'.

Mandatory application through existing legal instruments

1. If many of the measures set out above could be accomplished, the differences between UN and modal regional text should be much reduced. It might be possible then for each of the modes to have their own two-part texts. Part One would be common with UN and would simply be a cross-referencing to the relevant parts of the UN Model regulations without full reproduction. Part Two would be the truly necessary modal differences - road vehicle construction, segregation at sea, exclusions for air transport (e.g. no IBCs permitted).
2. The modal and regional bodies would thus retain their sovereignty, provided all could 'sign-up' to recognising UN 'precedence' for the common text, and there would be no need to transform the Model Regulations into a mandatory instrument.

A NEW MULTI-MODAL WORLD CONVENTION

1. It is not the intention of this paper to discuss the detail of producing a new mandatory, global world convention for the Transport of Dangerous Goods. It is anticipated that there will be a Secretariat paper on the possible drafting of such a Convention.
2. It is worth noting, however, that this is not a new idea. As the expert from Italy pointed out in his paper ST/SG/AC.10/C.3/2004/32, ECOSOC Resolution 1973 (LIX) instructed the Committee of Experts on the Transport of Dangerous Goods to explore just that possibility. On that occasion, there was strong support from a number of countries for the proposal from the USSR to adopt such an approach. The papers produced then for consideration by the Group of Rapporteurs make interesting reading and seem just as valid now as they did then [*the expert from the UK has copies if anyone wants to see them*].

At that time a Convention was not adopted because it was felt necessary to give priority to harmonization of existing provisions with UN. That now seems to have been achieved to the extent that it can be under current arrangements. A subsequent discussion on the same topic held in 1992 concluded that the timing was not opportune (given forthcoming re-formatting), that ICAO and IMO should be consulted and that the Committee should continue to work in a flexible way.

3. It is clear that the Model Regulations and the Manual of Tests and Criteria should form the technical annexes to a World Convention rather than, as was thought in the 1970's, form the basis of a Convention itself. This would enable the continued refinement and amendment of the technical provisions in the same way that it is done now. However, a decision would have to be made as to whether, as now, the Model Regulations would address only multi-modal provisions or whether it wished to move to a truly multi-modal text by adding, for example, a new Part 8 – Road Transport provisions; Part 9 - Rail Transport provisions; Part 10 – Inland Waterway provisions; Part 11 – Sea transport provisions; and Part 12 – Air transport provisions.
4. The question would then arise as to the status of the existing modal Conventions. If the Model Regulations addressed all the modal requirements, there seems little justification for their continuation unless there was a mechanism for each modal body to produce the modal Parts of the Model Regulations, which were then just referenced in the UN text. More likely, the modal

Conventions could be retained and would reference the UN Model Regulations and then add their short mode specific Part 8 as appropriate.

CONCLUSION

1. Despite the failure to adopt the principle of developing a world convention on two previous occasions, recent frustrations with continuing modal and industry/operator differences does seem to have produced the climate to give the concept of a world convention further consideration at this time.
2. Equally, it is clear that there are various steps necessary before such action could be taken. Alternatively, a number of these could usefully be taken forward whilst falling short of adoption of a World Convention.

This paper raises a great number of questions to be considered over the current biennium. It seems to the authors that during the July, and perhaps December, 2005 sessions of the Sub-Committee the most productive means of progressing debate would be to hold an informal discussion session outside of the Sub-Committee plenary. Given that the agenda of the first July session of the biennium is traditionally lightly loaded, the authors suggest that one day of that session (perhaps Thursday, 7 July?) is set aside for informal debate on this paper to identify those options and ideas that would be worth elucidating further for subsequent, more detailed, discussion in December 2005.

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APPENDIX B

REPORT ON THE SUB-COMMITTEE OF EXPERTS ON ITS TWENTY-SEVENTH SESSION

Document: ST/SG/AC.10/C.3/2005/20 (Canada and United Kingdom)

96. The experts from the United Kingdom and Canada underlined that the annex to their document had been prepared in order to stimulate the discussion on the various options to facilitate global harmonization, but that it did not represent their own views or those of their respective Governments.

97. The Sub-Committee agreed that the questions raised in this document should be discussed informally.

98. Experts felt that it was necessary first to determine the problems to be solved. Fifty years of cooperation between the Sub-Committee, IMO, ICAO, UNECE and IAEA had resulted in a very good level of harmonization of the various international legal instruments regulating the international transport of dangerous goods but there are still problems in international transport. These are due to the fact that there are still some differences between the international modal legal instruments, although it was recognized that a number of these differences are often justified and legitimate. One problem seemed to be the lack of harmonization between national inland transport regulations which impede international transport when there is no international legal instrument superseding national regulations, such as ADR and RID. National regulations, even when based on the Model Regulations, are not always fully in line with the Model Regulations, or are not updated and brought in line simultaneously worldwide. As a result, consignors and transport operators must check on a case-by-case basis the regulations applicable in each country concerned by the transport operation, and this entails problems of compliance.

99. Other problems mentioned were the difficulty in many countries to update national regulations every two years, the fact that new UN provisions have to be translated in all national languages, the poor capacity for implementation and enforcement in many countries, insufficient training, capacity-building and technical cooperation activities at the international level despite the active involvement of organizations such as IMO, ICAO and IATA for maritime and air transport and technical support provided by certain countries on a bilateral basis.

100. It was mentioned that developing a widely supported world convention on the international transport of dangerous goods, although difficult, might solve these problems in the long term, but it would have to take account of the existing international legal instruments in force. Such a convention could exclude from its scope maritime and air transport which are already covered by the IMDG Code and ICAO Technical Instructions. Alternatively, it could include common provisions for all modes of transport which, however, would not prevent the modal organizations from addressing, in addition, the purely mode-related and operational provisions in separate instruments.

101. For questions relating to the mandate of the Sub-Committee, a member of the Secretariat said that the rules of procedure applicable to the Sub-Committee are specified in the Rules of Procedures of the Economic and Social Council, and that they cannot be changed as long as the Sub-Committee is a subsidiary body of the Council. Its terms of reference are decided, and updated every two years, by the Council itself. He felt that, in the event of a convention, its terms of reference would not be likely to change, at least immediately. It could continue to function as presently, i.e. making recommendations on the transport of dangerous goods, which would still be addressed to Governments for their national

provisions and international organizations for international or regional modal legal instruments, but also to the Contracting Parties of this world convention or its administrative body.

102. Experts of the Sub-Committee and international organizations were invited to discuss all these issues formally or informally at national level or within their constituencies so as to further explore the possibilities of improving global harmonization for international transport of dangerous goods. Document ST/SG/AC.10/C.3/2005/20 was carried forward to the next session for possible further consideration.

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