NATO INDUSTRIAL ADVISORY GROUP

A GUIDANCE MANUAL FOR NIAG PREFEASIBILITY STUDIES

MAY 1988

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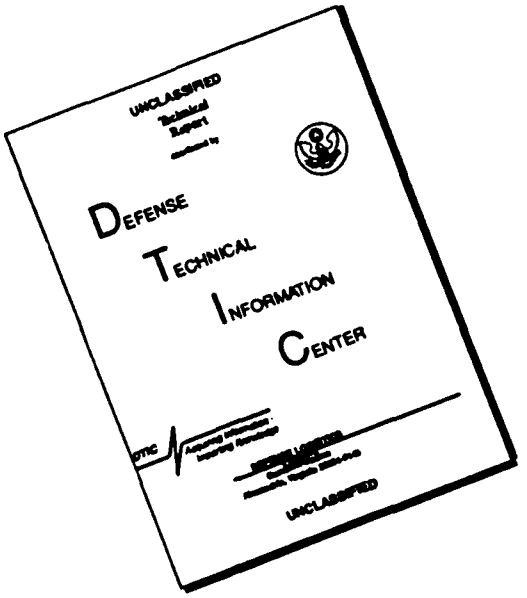

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1. INTRODUCTION - NIAG's ROLE AND GUIDELINES FOR ITS ACTIVITIES

At its first meeting in February 1967, when reviewing various possible forms of equipment co-operation the Conference of National Armaments Directors (CNAD) recognised that the national armaments industries would be an important source of advice and guidance for the promotion of NATO wide armaments co-operation in research, development and production. As a result of this perception the NATO Industrial Advisory Group was established in 1968 and assigned to CNAD as an advisory body.

The NATO Industrial Advisory Group is a high level consultative and advisory body of senior industrialists of NATO member countries. The objectives of this group are to:

(a) provide a forum for free exchange of views on the various industrial aspects of NATO armaments questions;

(b) foster a deeper feeling of international involvement in research, development and production, and seek closer co-operation amongst the industries of member countries;

(c) encourage the timely and efficient exchange of information between governments and defence industries of the various member countries.

In pursuance of these objectives, the NIAG undertakes tasks either as a result of requests by the CNAD or its Main Armaments Groups or on its own initiative. Whilst the broader dialogue between the NIAG and the CNAD and its Armaments Groups is conducted as part of the main business of the NIAG Plenary group, specific tasks covering technical economic, organizational, management and other relevant aspects are usually entrusted to Sub-Groups.

Since its creation therefore, NIAG has provided suggestions and recommendations in relation to legal, management, economic and technical problems. A major activity of NIAG, however, at the request of CNAD and its Armament Groups is the conduct of Prefeasibility Studies. For this purpose NIAG organizes Sub-Groups composed of technical experts from Industry. The possibility of conflicting interests arising when representatives of different industrial groups were brought together in a prefeasibility study was immediately recognised and in 1969 the NIAG agreed and adopted a Moral Code for the guidance of members of NIAG Sub-Groups. This Moral Code remains as relevant to current NIAG Sub-Groups as it was in 1969 and is attached as Annex A to this Guidance Manual.

NIAG members are expected to contribute relevant expertise to serve NATO in working out solutions to the tasks entrusted to NIAG. For the analysis of specific problems NIAG may set up Sub-Groups or Ad Hoc Groups and arrange for experts from NATO Industries to participate in these Groups.

In order to provide a free exchange of views and to seek closer co-operation amongst the NATO industries, contributions from competent experts are to be encouraged on all occasions.

To ensure that the advice which NIAG offers to NATO is comprehensive and unbiassed, it is necessary that no competent effort from Industry is excluded, and that all contributors are bound by the Moral Code which NIAG has adopted. (Annex A)

Furthermore, members of Sub-Groups must agree to serve as representatives of their national industries as a whole.
The NIAG is responsible for the distribution of funds approved by NATO for each Study. However, in view of the limitation in funding, it is necessary that funds should be used as economically and efficiently as possible, that work statements for each study should be precise, and that the number of experts be kept to a reasonable figure. Nevertheless, it must be guaranteed that the expertise available throughout NATO will be utilised to the utmost.

The early Sub-Groups constituted a sort of apprenticeship. Gradually more appropriate and therefore recurrent forms of organization emerged. Nevertheless the impression persisted that the formation of Sub-Groups should be more systematic in order to improve the relation between the investment of experts and time and the outcome of the studies. Therefore in June 1983 NIAG finally adopted "Guidelines for the Establishment of NIAG Sub-Groups" Document NIAG-D(83)4(Revised) in order to set out the procedures for the establishment of NIAG Sub-Groups.

However, even CNAD and its Main Armament Groups were confronted with problems. They resulted especially from the number of requests for the execution of a prefeasibility study and the availability of funds. Due to the multitude of requests it was necessary:

(a) to balance the number of studies requested and the available funds;

(b) to submit requests for studies only if needs are identified for which solutions neither nationally nor in other CNAD Groups are to be found and for which as many Member States as possible have shown a stated interest and/or for which an industrial effort under NIAG provides an optimal approach.

As a result of a study of these problems by the National Armament Directors' Representatives (NADREPS), the CNAD in September 1986 approved procedures for initiating and conducting NIAG Prefeasibility Studies. The NATO Council endorsed the procedures in November 1986 and tasked the CNAD to implement and update them as appropriate. These procedures are set out in Document AC/259-D/1183 "Management and Funding of NATO Industrial Advisory Group (NIAG) Prefeasibility Studies" which is attached as Annex B to this Manual.

Since the issue of the "Guidelines for the Establishment of NIAG Sub-Groups" in June 1983, experience has shown that the procedures have been modified and are subject to differing interpretations, so that some further clarification is necessary. In particular, the CNAD procedures defined in AC/259-D/1183 (Annex B to this Manual) include early involvement of a NIAG Specialist Group with the Project Group prior to the finalisation of the Outline NATO Staff Target and before the formation of a NIAG Exploratory Group.

The NIAG Planning Committee therefore instructed the Ad Hoc Group on the Armaments Co-operation Improvement Strategy on 21st January 1987 to revise the "Guidelines for the Establishment of NIAG Sub Groups" by further implementing instructions and advice.

This Guidance Manual therefore replaces the "Guidelines for the Establishment of NIAG Sub-Groups" - Document NIAG-D(83)4 - by a revised set of procedures which are consistent with those of the CNAD defined in Document AC/259-D/1183.

Chapter 2 of this Manual defines the procedures for the Establishment and Work of a NIAG Specialist Group. Annex C is a Checklist for a Specialist Group which should be considered and incorporated into its report to NIAG.

Chapter 3 defines the procedures for the Establishment and Work of a NIAG Exploratory Group together with advice on their implementation. Annex D is a checklist for an Exploratory Group which should be considered and incorporated into its report to NIAG.

Chapter 4 defines the procedures for the Establishment of a NIAG Sub-Group.

Many practical problems which occur during the work of a Sub-Group are common to all Studies irrespective of their subject matter. In order to help future Sub-Group Members without previous experience of NIAG Studies, practical advice on the conduct of studies has also been prepared and is included in this Manual in Chapter 5.

The results of a study executed by a NIAG Sub-Group are consolidated into a final report which NIAG submits to CNAD and the Project Group concerned. It will be stated in the covering letter that NIAG is awaiting a written communication on the subsequent development of the programme and information about relevant decisions.

2. THE ESTABLISHMENT AND WORK OF A NIAG SPECIALIST GROUP

2.1 General Remarks

The major tasks of a NIAG Specialist Group are:

(a) to assist the Project Group to determine whether a NIAG Prefeasibility Study is the best possible way to proceed from an Outline NATO Staff Target (ONST) to a NATO Staff Target (NST); and

(b) in the event that a Prefeasibility Study is recommended the Specialist Group must establish whether the basic data (Threat, ECM environment etc.) is adequate for a Prefeasibility Study to be carried out.

In order to arrive at these decisions the tasks of a Specialist Group will generally consist of:

(i) assisting a Project Group in the final stages of the elaboration of an Outline NATO Staff Target (ONST);

(ii) identifying practical alternatives other than a NIAG Prefeasibility Study to satisfy the requirements of an ONST;

(iii) indicating ways and methods to arrive at the NATO Staff Target.

The expenses incurred by the co-operating industrial experts in the Specialist Group have to be borne by their respective companies.

The tasks will be performed in conjunction with the relevant Project Group. Both Groups will execute them by taking fully into account the stipulations of Document AC/259-D/1183 dated 17th November 1986, which is attached as Annex B to this manual. However, it must be noted that the response to Paras III c) and d) in AC/259-D/1183 regarding the magnitude of the study, estimated schedule, man-years of effort and commencement/duration must be regarded as a preliminary estimate since they will be considered in more detail by a NIAG Exploratory Group which will be responsible for preparing the Proposed Programme of Work, Organizational Structure, Time Schedule and Man-month Estimate for the Study.

2.2 Formation of a NIAG Specialist Group

2.2.1 NIAG

(a) ensures that the ONST and/or an unclassified summary of the ONST has been distributed to the Heads of National NIAG Delegations;

(b) designates one of its members, usually its Chairman or Vice Chairman, as Chairman of the Specialist Group;

(c) determines the number of experts for the Specialist Group, solicits names from the Heads of National NIAG Delegations and establishes the time and place for the first meeting. The experts should, as far as possible, be selected primarily on the basis of their technical expertise;

(d) invites the Group to submit a report on its findings together with the completed checklist (Annex C to this manual) and recommendations for further actions.

2.2.2 The Chairman of the Specialist Group

(a) sends out invitations for the inaugural meeting of the Specialist Group and for its meeting(s) with the Project Group, taking into account the nominations made by the heads of the national NIAG Delegations involved;

(b) will ensure that only nominated experts are admitted to the meetings;

(c) will ensure that the provisions of Document AC/259-D/1183 (attached as Appendix B to this manual) are fully considered at the meetings;

(d) will inform NIAG whenever an expert fails to participate in a regular way and does not attend meetings without written explanation, with the request to inform the Head of the respective national NIAG Delegation to release the expert and to appoint a substitute;

(e) will regularly brief NIAG about all major developments and events especially those involving the risk that the task of the Group is extended or changed or that the Group is prevented from performing it;

(f) will submit to NIAG a report on the findings of the Specialist Group including the completed checklist (Annex C) with recommendations for further actions.

2.2.3 NIAG

After having examined the report of the Specialist Group will decide whether a Prefeasibility Study is justified. If so, then the Specialist Group may be used as the nucleus of an Exploratory Group.

If it is decided not to proceed into a Prefeasibility Study, then the Specialist Group will be disbanded.

3. THE ESTABLISHMENT AND WORK OF A NIAG EXPLORATORY GROUP

3.1 Procedures

In the event that NIAG, after having examined the report of the Specialist Group, decides to carry out a Prefeasibility Study, the following procedures will be implemented:

(a) NIAG establishes an Exploratory Group and invites the Head of each National NIAG Delegation interested in participating in the study to delegate a reasonable number of experts, of whom one shall be spokesman, as members of the Group.

(b) NIAG designates one of its members - usually its Chairman or Vice-Chairman - to act as Chairman of the Exploratory Group.

(c) The task of this Group is to draw up a programme of work with a timetable, a cost estimate (where applicable), and an organizational structure outlining the total number of man-months required, and approximately how many each nation is to perform reflecting the contribution to the study they are each expected to make.

The resulting proposals will be submitted to NIAG for approval and onward transmission to CNAD, for consideration and acceptance.

After the proposals have been approved by the CNAD, NIAG will establish a Sub-Group.

3.2 Advice and Instructions on How to Apply the Procedures

3.2.1 Establishment of an Exploratory Group

Para 3.1 (a) above states:

'NIAG establishes an Exploratory Group and invites the Head of each National Delegation interested in participating in the study to delegate a reasonable number of experts, of whom one shall be spokesman, as members of the group'.

Advice

(i) Consideration should be given to the fact that the costs incurred during the Exploratory Phase are not reimbursed by NATO. However, in order to improve the efficiency of the Study itself, it is essential that the planning done by the Exploratory Group is adequate, bearing in mind the practical problems and advice included in Chapter 4 of this manual.

(ii) The total number of experts to be delegated should exclusively depend on the task involved. The number and expertise of the resulting group should be such that the group is in a position to carry out the task as defined in paragraph 3.1 (c) above without asking for additional assistance from industry.

(iii) Based on the agreed total number of experts required, NIAG should invite the Heads of National delegations whose industries might have the appropriate technology to nominate a determined number of experts. The experts should, as far as possible, be selected primarily on the basis of their technical expertise. Previous experience of NIAG Prefeasibility Studies together with a full appreciation of the practical problems (see Chapter 5) will be beneficial to the work of the Exploratory Group.

(iv) The Heads of Delegations should nominate their experts in writing. The corresponding communication should be addressed to NIAG's Chairman and to the Chairman of the Exploratory Group (see the following sub-paragraph 3.2.2 (ii)).

3.2.2 The Chairman of the Exploratory Group

Para. 3.1 (b) above states:

'NIAG designates one of its members - usually its Chairman or Vice-Chairman - to act as Chairman of the Exploratory Group'.

Advice

(i) It might be more appropriate in specific cases for NIAG to appoint one of its members associated with the industrial sector/branch of industry concerned as Chairman.

(ii) The Chairman of the Exploratory Group:

(a) sends out invitations for the inaugural meeting of the Exploratory Group, taking into account the nominations made by the Heads of the National NIAG Delegations involved;

(b) will ensure that only nominated experts are admitted to the meetings of the Exploratory Group;

(c) will inform NIAG, whenever an expert fails to participate in a regular way and does not attend meetings without written explanation, with the request to inform the Head of the respective National NIAG Delegation to release the expert and to appoint a substitute;

(d) will ensure that the advice in this Guidance Manual is considered by the Members of the Exploratory Group;

(e) will regularly brief NIAG about all major developments and events especially those involving the risk that the task of the Exploratory Group is extended or changed or that the group is prevented from performing it.

3.2.3 The Work of the Exploratory Group

Para. 3.1 (c): aboves states:

'The task of this Group is to draw up a programme of work with a timetable, a cost estimate (where applicable), and an organizational structure outlining the total number of man-months required, and approximately how many each nation is to perform reflecting the contribution to the study they are each expected to make'.

3.2.3.1 Advice Concerning a Programme of Work with a Timetable

The elaboration of a programme of work with a timetable requires a well defined ONST and/or any other document on which the Sub-Group will have to rely.

(a) The first task of an Exploratory Group should be to examine if the documents on which the programme of work has to be based correspond to the postulate of clarity and completeness and if the required work stays within the precompetitive area.

If the work to be carried out during Prefeasibility Study will be affected by assumptions about the Threat, ECM Environment, Target Characteristics etc. it is essential that the Exploratory Group determines whether the information available is adequate for the Study to proceed. If not, the Exploratory Group must recommend any special action required to remedy the situation.

(b) The programme of work derived from the basic documentation should also include a definition of the tasks of the various sections or study teams.

(c) The timetable should be drafted in accordance with the presumed progress of the study. Communication and the flow of information between Technical Teams, System Teams, Assessment Teams and the Programme Management Group has been identified as a major practical problem of NIAG Studies.

It is essential that the differences between parallel and sequential activities are recognised together with the delays in communicating information between Teams.

In the case of parallel inter-related activities it is advisable that the appropriate Teams meet simultaneously to avoid additional delays and to ensure that the total information required for the next sequential activity is generated together.

In the case of sequential activities, careful attention to the time delays in communication between teams is necessary to ensure that information from some teams is available for other teams to start or develop their activities.

3.2.3.2 Advice Concerning the Organizational Structure Outlining the Total Number of Man-Months Required

3.2.3.2.1 Organizational Structure

The organizational principles for NIAG Sub-Groups are laid down in Chapter 4 of this Manual. Accordingly, a Sub-Group normally consists of a Steering Committee and various sections or Study Teams. The Steering Committee - including its Chairman, Deputy Chairman and Rapporteur - is appointed by NIAG on the proposal of the Exploratory Group. It is generally composed of the above-mentioned members and one representative per participating country who will act as a National Focal Point.

Its decisions should be taken by persuasion and consensus with minority views recorded.

The number and composition of each Study Team or Section should depend on the tasks as derived from the ONST and the Study and Tasking Request.

The Leader, Deputy Leader and Rapporteur of each Team should be agreed by the members of the team concerned at their inaugural meeting.

However, it has been found useful that the Exploratory Group recommends to NIAG the nationality of the Leader and Deputy Leader for each team.

It is also suggested that the Team Leaders should attend meetings of the Steering Committee in an advisory capacity.

3.2.3.2.2 The Total Number of Man-Months Required

The number of experts required for the Study will be derived from the total effort required (usually expressed in man-months) to carry out the Programme of Work in the timescale as defined in the Study and Tasking Request, consideration of the number of participating Countries and the utilisation of the full technical potential of NATO Industry.

Each year is considered to consist of 11 months because of holiday periods and each month to provide 20 working days.

Example:

With the optimum expertise available it may be estimated that 100 man-months are required to carry out the necessary work. If the time available is 1 year, then the number of experts required would be 100 man-months/11 months (1 year) = 9.09 experts. Thus if the appropriate expertise is available on a full time basis, about 9 experts would be required in order to implement the Study in 1 year.

However, Companies are unlikely to be able to release experts to participate on a full time basis and thus from experience the number of experts required in the above example would be increased by a factor of about three. In addition, there are a number of factors which must also be taken into account, which increase further the number of experts involved. These are:

(i) The exact expertise required may not be available.

(ii) A larger number of companies of various nations may have to be involved so that the full technical potential which is available within the NATO Nations can be exploited.

(iii) Every nation which possesses the required technical potential should be represented in as many teams as possible.

3.2.3.3 Advice Concerning the Approximate Number of Man-Months each Nation has to Perform

As indicated earlier, the total number of experts participating in the study has to make some allowance for the number of participating Nations and for the need to utilise the full NATO Industrial potential. However, at the start of the work of the Exploratory Group, the allowance which needs to be made is unknown, as is the division of effort between the participating Nations. Since these factors will vary from one Study to another it is impossible to lay down rules to be applied to all Studies.

It is recommended therefore that the following procedure be adopted to determine the approximate number of man-months that each Nation has to perform.

The Exploratory Group estimates the approximate number of experts required as in Section 3.2.3.2.2 assuming that experts will only be available for 30% of their time and allowing some factor for adequate technical National representation.

After the Exploratory Group has agreed the Programme of Work, the Organization for the Study, the Terms of Reference of the Study Teams and the qualifications of the experts required in each Team, Heads of National NIAG Delegations concerned are requested by the Chairman of the Exploratory Group to provide lists of the experts who can be supplied for each Team.

A compilation by the Exploratory Group of the effort offered by each Nation for each Team will immediately show up any major imbalances between Nations and also between the effort which is offered compared with that required for the Study.

The Exploratory Group will then request National Focal Points to consider:

(a) increasing or decreasing the effort offered by their National Industry; and/or

(b) redistributing the effort between Teams.

At the following meeting of the Exploratory Group the results of this reconsideration will be discussed and consolidated into a plan showing the number of experts and man-months of effort that each Nation will supply.

3.2.3.4 Advice Concerning the Cost Estimate for the Study

NATO pays experts on the basis of a fixed rate per day of work contributed to a NIAG study including travelling time.

The following is a general guide to the effort reclaimable by each expert and therefore to the cost estimate for the Study.

Total effort reclaimable by each expert is, on average, equal to the number of days at international meetings plus an equivalent number of days of homework plus one day for intra-continental travel or two days for inter-continental travel.

Thus for a Team meeting of 4 days (Monday lunch time to Friday lunch time) each expert may claim, on average, 9 or 10 days of effort depending on whether the meeting is in his own continent or requires travel across the Atlantic Ocean.

No other expenses are claimable.

The submission and validation of man-day claims are dealt with in Section 5.7.

It must be noted that the man-day rate paid by NATO represents about one third of the actual cost of experts' contribution to the Study. The balance is regarded as Industry's contribution to the promotion of co-operation within NATO.

In view of this situation however, it is recommended that the number of meetings is limited to what is absolutely necessary by objective standards.

In any event, the number of useful meetings which can be arranged in a calendar year is constrained to an absolute maximum of 7 or 8 by the time which each expert can devote to the study and the time necessary between meetings to allow exchange of information between teams.

It must also be noted that because of attendance at Programme Management Group Meetings and Steering Committee Meetings, the load on the Leaders of Teams or Sections may be double the contribution of experts who are simply members of Teams or Sections.

3.2.4 Further Action

The Exploratory Group will then submit to NIAG the "Programme of Work, Organizational Structure, Time Schedule and Man-month Estimate" together with the completed Checklist which is included as Annex D for approval and onward transmission to CNAD for consideration and acceptance.

If the NIAG approves the proposals of the Exploratory Group, the NIAG Chairman will request the Heads of each National NIAG Delegation to nominate the agreed number of experts for the future NIAG Sub-Group.

The complete list of members will be sent to the agreed Chairman of the Sub-Group and to the National Focal Points so that the security clearance procedure can be initiated.

Following the final approval by the NADREPs, the proposed NIAG Sub-Group can commence the Prefeasibility Study to the agreed plan.

4. ESTABLISHMENT OF A NIAG SUB-GROUP

4.1 Procedures

4.1.1 A NIAG Sub-Group shall be set up in accordance with the following principles.

(a) The size of the Sub-Group in terms of man-months required and the national allocation of key positions as in sub-para (d) below, are determined by the Exploratory Group as indicated in the proposals approved by NIAG. Its members are nominated by the Heads of the national NIAG delegations.

(b) In general, the organization of the Sub-Group consists of a Steering Committee and various sections or study teams.

(c) Candidates for the positions of Chairman, Vice-Chairman and Secretary/Rapporteur of the Steering Committee are proposed by the Exploratory Group to NIAG for consideration and election.

(d) Holders of key positions in the various teams or sections of the Sub-Group shall be selected by those teams or sections and approved by the Steering Committee in such a way as to achieve a balance between the participating nations.

4.1.2 The Chairman of NIAG:

(a) Convenes the first meeting of the Sub-Group.

(b) Introduces the Chairman, the Vice-Chairman and Secretary/ Rapporteur at that meeting.

(c) Explains the provisions of the Moral Code to the Sub-Group and seeks an undertaking that its members will not use the information and knowledge acquired as a result of their membership to obtain unfair advantages over their respective companies' competitors.

(d) Relinquishes the chair to the Chairman of the Sub-Group.

4.1.3 All members of the Sub-Group are bound to inform the leader of their relevant national NIAG delegation in good time should a conflict of interest become apparent. In such a case, the national NIAG delegation concerned is entitled to relieve the member of his duties in the Sub-Group and to appoint a substitute.

4.2 Commencement of a Sub-Group's Activity

4.2.1 The approved task of the Sub-Group commences after:

(a) approval by NATO; and

(b) completion of the formalities set out in Chapters 2 and 3 above.

4.2.2 The Chairman of the Sub-Group will be responsible to NIAG for the overall execution of the task. Where problems arise, for which agreed solutions cannot be reached, he will refer the matter to NIAG. Similarly, where agreement cannot be reached in teams or sections, their chairmen will refer the problems upwards.

4.2.3 Where applicable, the funds allocated by NATO for the activity are to be distributed among the various participating nations in proportion to the man-months which they perform in accordance with Section 3.2.3.3 above. Subsequent adjustments, approved by NIAG, may be made as required, during the course of the study itself, should the work exceed the forecast.

5. PRACTICAL ADVICE ON THE CONDUCT OF A NIAG STUDY

5.1 The Objective of a NIAG Study

NIAG Sub-Groups are set up to Study a wide range of problems and therefore the detailed objectives will vary from one Sub-Group to another. However, there are certain common features of the majority of studies which need to be accepted and understood. Each Study is requested by one of the Main Armament Groups of NATO. It must be emphasised that the Studies are Prefeasibility Studies and their primary purpose is to provide a consensus of Industrial advice which will assist Governments in their decisions on whether to proceed into further phases of a programme (usually Feasibility Study) or not.

This advice therefore must generally contain three elements:

(i) a review of the technical options for the way ahead;

(ii) a broad evaluation of technical options to indicate their performance and cost effectiveness when judged against the military requirements as defined in the Outline NATO Staff Target (ONST);

(iii) an indication of the likely costs and durations of future phases of the programme bearing in mind the effects of international collaboration.

There is a natural tendency for the requesting authority to ask for much more. In some cases detailed estimates of reliability, life cycle costs, effects on logistic support systems etc. have been requested.

It is essential that the NIAG Sub-Group restricts itself to those questions which are appropriate to a Prefeasibility Phase.

Requests for work which is more appropriate to later phases of a programme should be rejected by the Exploratory Group when considering the Programme of Work to be carried out during the Study.

It is also important to note that during the conduct of the Study, interaction with the NATO Group requesting the Study may suggest additional items of work for inclusion in the Study Programme.

Particular care should be taken to consider the effect of such suggestions on the cost and timescale of the study before they are accepted.

In the event that additional work is essential, then the NIAG Plenary Committee should be informed in order that appropriate changes to the budget for the Study can be negotiated.

5.2 The Nature of a NIAG Study

By its very nature a NIAG Prefeasibility Study is a gathering of specialists by mutual consent and organized by colleagues who are selected to occupy the positions of responsibility. Their Companies are contributing at least two thirds of the actual costs of participating in the Study.

The assumption must always be that all members are aware of the NIAG Moral Code, are honourable, have integrity, are knowledgeable and supportive.

In such a forum rigid procedures are not appropriate. Decisions will only be agreed and implemented when they are manifestly sound and reasonable.

In particular the suppression of minority views is not admissible. This demands a great deal of skill on the part of a Chairman or Team leader to proceed by persuasion while ensuring that any views which are supported by reasoned arguments are fully reported.

In the end a NIAG Study is not expected to arrive at a single fully optimised option but to explore a range of possible options in order to be able to give the advice which is defined in the preceding section on The Objective of a NIAG Study.

5.3 The Operating Organization for a NIAG Study

The problem of communication within a NIAG Study has been found from experience to be extremely difficult. This is dealt with further in Section 5.4.2. The problem is so severe in practice that it is worth considering every means of simplifying it right from the basic consideration of the study organization.

Complex organizations tend to demand complex and rapid communications and therefore every attempt should be made to keep the organization as simple as possible. For this reason a "tree" organizational structure rather than a "matrix" structure is to be preferred.

In general a tree structure with no more than three levels - Steering Committee, Programme/Systems Management Group, Technical Teams has been found to be most satisfactory.

The Steering Committee is responsible for the overall policy and direction of the Study. It will usually consist of a Chairman, Deputy Chairman, Rapporteur, a National Representative or Focal Point for each of the participating Nations, the Leaders of the Programme Management Group and the Leaders of the Study Teams acting in an ex officio capacity.

The detailed work of the Study is carried out by a Programme Management Group composed of a Leader, Deputy Leader and Rapporteur together with the Leaders of the Study Teams. In some Studies this has been called a Systems Management Group, but it is essential that its first priority is regarded as the total Management of the Study Programme.

Maintaining adequate monitoring of progress, ensuring that milestones are met, checking that there is adequate communication between teams, are just as essential to the successful completion of the study as the technical and system work.

This implies a heavy responsibility for the Team Leaders whose workload in running a team, participating in the work of the Programme Management Group and attending some meetings of the Steering Committee may be two or three times as heavy as that of a Team Member.

In order to avoid the possibility of the Study becoming biased, it is advisable to ensure that there are no vertical lines through a tree organization which could allow the development of such biases.

Thus in accordance with paragraph 3.2.3.2.1 above, the nationalities of the Leaders and Deputy Leaders of Teams are to be selected in such a way as to achieve a balance between the participating Nations. Once the Nationalities have been decided the Teams should agree their own Officers at their inaugural meetings bearing in mind the recommended Nationalities.

A Team having agreed its own leader (albeit under direction as to preferred Nationality) is responsible for that agreement and is therefore more likely to give the leader the support he will most certainly need.

It is important to recognise that a Leader is an equal among equals. He chairs by consent and needs the willing support of his team.

5.4 Outstanding Difficulties

5.4.1 Introduction

During the course of NIAG Prefeasibility Studies a number of problems have been identified which have caused trouble irrespective of the subject of each study. Many of these difficulties are not easy to anticipate without previous experience.

This section therefore draws attention to some of these problems so that participants in new studies will be aware of difficulties which may occur.

5.4.2 Communication

Communication between teams and both upwards and downwards through the Study Organization has been found to be a severe recurring problem in NIAG Studies.

The difficulties may be separated into two classes - semantic problems and security problems.

In an international study team, time is needed to overcome the semantic problems which exist.

Team members whose native tongue is English should be eternally grateful that the language for team meetings is usually English and should continually ask themselves how much they would really understand if meetings were conducted in another language.

Another feature of the semantics problem is that new concepts are discussed in NIAG Studies and the method of thinking about them is different in each country. There is also the need therefore for some understanding of the way in which thinking, procedures and practices differ from one country to another.

The final result is that to overcome the semantic problems requires time especially in working meetings to allow understanding to be achieved. Although this may extend a working meeting to require a week's duration rather than two or three days, this is preferable to having to repeat work at a subsequent meeting because of inadequate understanding.

The other aspect of communication concerns the transmission of classified documents. Inevitably much of the work of a NIAG Sub-Group produces documents which must be classified. For the efficient progress of the study it is necessary for the output from each team to be communicated to other teams.

Regrettably, the use of the diplomatic channels for transmission of classified documents between Nations has proved to be extremely uncertain as to whether documents arrive at their intended destinations in time for them to be of any use. An average delay of six weeks has been experienced which has extended to many months in some instances.

Hand carriage of classified documents is permitted by some Nations who will issue "Courier Certificates" but not by others.

Clearly within a NIAG Study no member should be put in a position whereby a breach of his Country's Security Regulations may occur. This coupled with the uncertainty and delays of the Official channels presents a dilemma which requires careful planning to surmount.

Maximum use must be made of those members who can act as official couriers, but care must be taken to ensure that they are officially authorized and that arrangements are made for receipt and distribution of classified documents in the country of destination.

5.4.3 Security Clearances

The time necessary to obtain visit clearance for classified meetings must be taken into account in planning meetings.

In addition it must be noted that some Nations are refusing to process individual visit clearances for attendance at NIAG Sub-Group meetings but are operating a "Block clearance procedure".

The block clearance procedure requires that the venues and times for all meetings together with the full details of participants are available to each National Security Organization in time for the full list to be sent through the Official channel to each Nation and Company hosting a meeting.

Even then it is essential for a check to be made with each host Company to ensure that clearance has been received. This should be done in sufficient time for special action to be taken if the block clearance procedure should have failed.

5.4.4 Classification Guidelines

NIAG Studies almost invariably generate classified information.

Generally in all countries the final responsibility for classification lies with the author but this in itself may cause problems because the standard of classification may vary from one country to another.

Classification Guidelines produced by the Sub-Group itself have no authority unless they are endorsed by the appropriate NATO Armament Group.

It is prudent therefore that early in the Study, the Exploratory Group or the Chairman of the Sub-Group obtains Classification Guidelines from the appropriate NATO Armament Group.

It must be noted that in some countries the "NATO Restricted" classification has to be handled in the same way as "NATO Confidential". The use of "NATO Restricted" should therefore be avoided if possible.

5.4.5 Modelling and Evaluation

In the majority of NIAG Studies, some evaluation of future concepts with regard to performance, effectiveness and cost-effectiveness is requested in the Study and Tasking Request or implied in the ONST.

It is natural for enthusiastic experts collaborating in a NIAG Study to assume the use of sophisticated computer models and programmes available in their own Nations. However, the use of such models in NIAG Studies presents many hidden difficulties.

At present, within the terms of the NATO Study Order which is placed on each participating Company, there is no provision for payment other than for the man-days of effort contributed to the Study. Thus the costs of modelling and simulation cannot be recovered by the Companies.

A more significant problem however lies in the fact that many models available in individual countries contain information which is not releaseable to other countries.

When the results from such models agree with one another then no problem is created. If however the results are different then they will create arguments within the Sub-Group which are impossible to resolve.

The use of subjective evaluation methods is also only acceptable if the methodology, input data and results can be agreed unanimously by all relevant study group members.

The situation may become disastrous if the results are used to "rank" a number of proposed concepts or systems, especially if the concepts are specific so that strong feelings of paternity or ownership are involved. In such a case, all of the time, effort and money expended in the modelling will have been wasted and will have done nothing but create argument and dissension which discredits the work of the Sub-Group.

It is prudent therefore to consider carefully at the start of each study what methods will be used for evaluation and assessment and to restrict the use of modelling and simulation to objective models which are generally available, can be fully agreed before they are used, and which produce parametric results which can be used to guide the improvement of generic concepts.

5.4.6 Final Reports

The Final Report from a Team in a NIAG Study is a unique document representing the consensus of expertise which has been brought to bear.

During the course of the Study, each Team's report will have been modified by interaction with other Teams.

At the end of the Study the report will reflect the total work of the Team and the conclusions which have been reached including discussion of alternatives which have not been resolved during the Study.

As such it should be agreed in total by the full membership of the Team.

Regrettably there have been occasions when Team Leaders or final editors have altered team reports after they have been agreed by the full team and without the knowledge of the team members.

This practice is inexcusable since it only discredits the work of the Team and the conclusions of the study. It invariably comes to light at some stage during or after publication of the report.

It has to be accepted that during a Prefeasibility Study there can be honest differences of opinion which can only be resolved during feasibility study or later phases of a programme. Such differences should be discussed openly in the report rather than attempt to suppress individual opinions or alter the final report without the full agreement of the Team.

Similarly, the conclusions of a Programme Management Group may indicate that from a system point of view conclusions may be different from those of an individual sub-system team. In such a case the reasons for the PMG Conclusions should be fully discussed in the PMG Report rather than seek to change a finalised report from a technical team.

A similar methodology should be adopted for the Executive Summary prepared by the Steering Committee. Bearing in mind the limited time-scale of a NIAG Study and the administrative load which is involved at the end of the study in the preparation of a fully agreed camera-clean copy for reproduction and distribution by NATO, it is essential that the Final Report is written as the study proceeds and not left to the end.

The NAIO Guidance for Typing NIAG Prefeasibility Study Reports is attached as Annex E.

5.4.7 Administration of Meetings

The administration of each meeting during the Study represents a significant responsibility which should be appreciated by each Company offering to host meetings.

This section outlines the basic facilities which are essential for a meeting of a NIAG Study Team.

(a) Meetings are normally classified and therefore the venue for the meeting must be cleared to the appropriate Security Classification.

(b) Team meetings are invariably working meetings to prepare, discuss, copy and distribute classified documents. The host for the meeting must therefore be able to provide facilities for handling classified documents used during the meeting. These facilities will include:

(i) Provision of secure overnight storage of classified documents brought to the meeting by members of the Team and which will be taken home by members at the end of the meeting.

(ii) Preparation, copying and distribution of classified documents to all authorized team members for use during the meeting.

(iii) Issue of classified documents at the end of the meeting to those team members who are authorized to carry them away. The authorization is usually a "Courier Certificate" issued by the Government of the individual team member.

(iv) Destruction of classified working material which may be generated during the meeting but which is discarded either during or at the end of the meeting.

(c) The administrative load is particularly heavy for the final meetings of a team during which the Team Report is finalised, agreed by all Team Members and prepared for delivery to NATO as a camera-clean master for duplication and distribution by NATO.

Although there is a NATO Agreement on Security which covers the procedures and conduct of NIAG Prefeasibility Studies, it must be noted that in practice the implementation of security procedures in each of the countries of the NATO Alliance may be widely different.

It is a waste of time and money for members of a study team to arrive at a NIAG Team Meeting only to find that the necessary facilities for handling classified documents are not available.

It may also present those members who are officially carrying classified documents with an almost impossible problem of safeguarding them during the duration of the meeting.

5.5 Official Documentation

5.5.1 Outline NATO Staff Target (ONST)

The ONST is the basic document prepared by the appropriate committee of the NATO Armament Group requesting the study which defines the operational needs for which the prefeasibility study should suggest solutions.

The ONST is usually classified, but is available to all members of the study cleared to the appropriate level.

The ONST or its unclassified summary should be available to the NIAG Specialist Group. Part of the work of the NIAG Specialist Group is to clarify the ONST with the appropriate committee of the NATO Armament Group in order to determine whether a NIAG Prefeasibility Study is necessary.

The ONST is a statement of the military need and will require interpretation by the NIAG Specialist Group and the NIAG Exploratory Group in order to provide a broad requirement specification for the NIAG Study.

During the conduct of the study further clarification may become necessary. For this reason, a Quick Reaction Group from the committee of the NATO Armament Group requesting the study has been found to be extremely helpful in order to provide timely answers to the NIAG Sub-Group's questions.

5.5.2 Study and Tasking Request (S & TR)

This is the formal Request to the NIAG for a NIAG Prefeasibility Study which is prepared by the appropriate committee for the NATO Main Armament Group after consultation with the NIAG Specialist Group.

It will refer to the ONST to define the military requirements but in addition will state particular aspects (such as programme costs, programme timescales, cost-effectiveness trade-offs) which the NIAG Sub-Group is specifically requested to address.

The S & TR is formally responded to by the NIAG Exploratory Group preparing a "Proposed Programme of Work, Organizational Structure, Time Schedule and Man-Month Estimate" for endorsement by the NIAG.

It should be noted that in some cases the S & TR will specify aspects such as effects on logistic support, life cycle costs etc which go beyond the scope of a prefeasibility study. These aspects should be removed by the Exploratory Group.

When the S & TR is finally agreed, all members of the NIAG Sub-Group should be aware of exactly what work the S & TR is asking to be carried out.

5.5.3 Threat Documents

The ONST will normally reference documents which define the military Threat to be assumed for the purpose of the Study.

It must be noted however that the Threat Documents usually describe the Threat in military terms without sufficient technical detail for the purpose of a NIAG Prefeasibility Study. This is especially true of the vulnerability characteristics of targets to attack by different warhead types, ECM conditions, target signatures etc.

In addition the ONST and Threat Documents may cover a very wide range of scenarios for the military usage of the equipment to be studied.

Target signatures and characteristics, detailed effectiveness of warheads and detailed ECM conditions represent particular problems for NIAG Sub-Groups since while adequate data may exist within individual nations, it may not be releasable for NIAG Studies.

The wide range of scenarios also presents a problem since within the timescale and effort limitations of a NIAG Study it will not be possible to explore all of the scenarios.

Thus an adequate allowance of time and effort within the NIAG Study must be incorporated for interpretation of the threat, selection of representative scenarios and agreement of both with the Main Armament Group requesting the Study.

The time and effort required to do this should have been built in to the study programme and estimate prepared by the Exploratory Group, but it is also necessary for the Members of the NIAG Sub-Group to be aware of the problems in this area.

5.6 Study Documentation

5.6.1 Introduction

Experience from a number of NIAG Prefeasibility Studies has suggested that some standard types of documentation are helpful. These are a Basic Reference Document (BRD), a Key Parameters List (KP), Report Contents List (RCL), Question and Answer Document (Q & A) and the Final Report.

With the exception of the Basic Reference Document and the Final Report, none of these documents is mandatory, and each study can decide whether to use them or not. Nevertheless bearing in mind the communication problems which have been referred to in Section 5.4.2, some form of study documentation is necessary and the documents described in this section have stood the test of time and proved their value in a large number of NIAG Sub-Group Studies.

5.6.2 The Basic Reference Document (BRD)

At the start of a NIAG Study, the Exploratory Group is tasked to prepare a Proposed Programme of Work, Organizational Structure, Time Schedule and Man-Month Estimate for the proposed study in response to the Study and Tasking Request.

In preparing this response the Exploratory Group must consider:

- The Work Content of the Study
- The Organizational Structure for the Study
- The Terms of Reference for each team
- The Officers for each team
- The number of members of each team
- The cost estimate for the Study.

This document will have been submitted to the NIAG for endorsement and submission to the NADREPS in order to receive approval that the estimate is acceptable and authority for Study to proceed.

It is essential when the Study commences that all members of the Sub Group are aware of the commitment which has been made.

This is most easily achieved by incorporating all of the above data into a Basic Reference Document (BRD) for the Study.

As soon as possible, the BRD can then be expanded to include a fully detailed schedule of meetings including the venues together with full details (names, titles, addresses, telephone, telex and fax numbers, position in the study organization) of all members of the study.

It is the responsibility of the Steering Committee Rapporteur with the assistance of the Team Rapporteurs to prepare, distribute and update the BRD as necessary.

Full lists of meeting venues and details of team members are essential in order to facilitate security clearances.

Classification guidelines should be published in the BRD as soon as they can be agreed with the committee of the Main Armament Group requesting the study, (if they have not already been established by the Exploratory Group).

The BRD is normally an unclassified document.

5.6.3 Key Parameters (KP)

It is essential that all members of the NIAG Sub-Group use the same basic technical parameters as soon as they are determined by the appropriate team.

A convenient way of ensuring this is the preparation, regular updating and prompt distribution of a Key Parameters Document.

Care must be taken to keep the KP Document under control. Provided that it is restricted to essential Key Parameters which are amended and updated as each Team Meeting clarifies the work of the Study, it can be an extremely useful document. Allowed to get out of hand by the inclusion of non-essential data it can become a burden on the Study.

It must be noted that the KP Document will normally be a classified document and the level of classification may increase as the study proceeds. At the end of the study it will probably be as highly classified as any part of the Final Report.

However the KP document is a working document which is not usually published as part of the final report.

5.6.4 Question and Answer Document (Q & A)

During the progress of the Study there will be many questions between Teams, with the Programme Management Group and with the Quick Reaction Group.

It is essential that all teams are aware of the answers which are given since this will be a great help in maintaining consistency in the Study and preventing different teams from making different assumptions.

It has been found extremely helpful to record the Questions and Answers in a single document which can be expanded as the study proceeds.

While the maintenance and regular distribution of such a document represents a significant administrative task on the Rapporteurs, many studies have found it to be essential in order that all Teams can proceed on the same assumptions.

Once again the Q & A document is a working document which is not published as such at the end of the Study.

5.6.5 Report Contents List (RCL)

Bearing in mind the time available for a NIAG Study, it is essential that the Final Report is written as the study proceeds and not left to the end.

In order to do this, a Report Contents List (RCL) from each Team, prepared in outline (chapter headings only) at the beginning of the Study has been found extremely useful.

The RCL can be expanded or amended as the Study proceeds but should be finalised as early as possible in the study.

Milestones for the completion of the text for each RCL heading should also be fixed at the beginning of the study so that progress of the study can be monitored as the milestones are reached.

Distribution of the RCL from each Team to all other Teams, the Programme Management Group and to the Steering Committee together with amendments as the study proceeds has been found to be extremely helpful in ensuring that the Final Report as a whole is complete, compatible, and that all important aspects of the Outline NATO Staff Target and the Study and Tasking Request are adequately addressed. The Report Contents List is a working document. There is usually no

need for it to be classified or to be published at the end of the Study.

5.7 Submission and Validation of Claims for Payment

The Company of each expert participating in a Sub-Group will be required to sign a NATO Study Order for the effort to be supplied to the Study.

The Study Order provides for payment at a maximum rate in Belgian francs per man-month of effort supplied. A man-month of effort is equivalent to 20 man-days.

Companies who are willing to participate in the Study but to forego payment are still required to sign the Study Order and inform NATO in writing of their decision not to claim for payment.

Companies who do not return the signed Study Order to NATO cannot be paid for participation in a Study.

NATO procedures require that claims for payment of effort supplied to a NIAG Sub-Group must be settled within six months of the end of the study.

The standard form for claiming is attached as Annex F. It will be seen that this form requires a statement by each Sub-Group member of the number of man-days of effort which have been supplied (see also section 3.2.3.4).

The claim is made at the standard rate (Belgian francs per man-day of effort) as stated in the Study Order.

The claim must be certified by an authorized representative of the expert's Company.

The claims should be collated for each team by the team's Rapporteur and validated by the Leader or Chairman of the team.

The claim forms from each Nation involved in the Study should then be sent to the National Focal Point of that Nation.

Finally the claims are collated by the Rapporteur of the Steering Committee and submitted by the Sub-Group Chairman to NATO.

In the event that the total of the claims submitted exceeds the budget available for the Study, the Steering Committee should consider what action to take to reduce the total claim. In general, the fairest method is to reduce the claim from each member of the Sub-Group pro rata.

If the total of claims for the Study is less than the budget, the standard rate per man-day cannot be increased.

Following receipt of the certified and validated claim forms, NATO will request Companies to submit invoices for payment of the agreed amounts.

ANNEX A to
NIAG-D(88)15

NATO INDUSTRIAL ADVISORY GROUP

MORAL CODE

At its plenary meeting on 29th April 1969 the NIAG accepted the principle of a "Moral Code" as described in a paper presented by its first Chairman (Dr. Tromp) in document NIAG(69)D/9. The provisions of this Moral Code are as outlined below:

2. Members of NIAG are either representatives of industrial groups or even have direct interests in industrial enterprises themselves. This implies that "conflicting interests" might arise when they participate in the practical work of NIAG, particularly in connection with NIAG Prefeasibility Studies.

3. It is vitally important for the proper functioning of NIAG that all members should take the position that confidential information provided at NIAG meetings or in connection with NIAG activities should not be used to obtain unfair advantages over competitors, and that information provided on the activities of certain industries in particular member countries should be treated in the strictest confidence.

4. It is, of course, clear that no-one can be expected to forget what he has seen or heard, but what one can expect is that all NIAG members, without exception adopt a very strict moral attitude and do not take advantage of the privileged position in which they find themselves.

ANNEX B to
NIAG-D(88)15

AC/259-D/1183

CONFERENCE OF NATIONAL ARMAMENTS DIRECTORS

MANAGEMENT AND FUNDING OF NATO INDUSTRIAL ADVISORY GROUP (NIAG) PREFEASIBILITY STUDIES (PFS)

I. INTRODUCTION

The NATO Industrial Advisory Group (NIAG) is a consultative and advisory body of senior industrialists of NATO member countries that provide a forum for free exchange of views on various industrial aspects of NATO armaments co-operation to foster a deeper feeling of international involvement in research, development, and production and closer co-operation among the industries of member countries and to encourage exchange of information between governments and defence industries.

2. The NIAG responsibility is to provide industrial advice to the Conference of National Armaments Directors (CNAD). The NIAG primary contribution to the NATO process of armaments co-operation is by means of studies to determine whether or not the outline NATO staff target (ONST) merits a deeper feasibility study. These PFS (Annex I), whether done by NIAG or by other means, are an important initial step in the process of armaments co-operation as they provide the basis for the national decision process by making a broad assessment of the practical attainable alternatives.

3. The NIAG has agreed to perform these studies requested by CNAD and to assume the major portion (approximately two thirds) of their cost as the NIAG contribution for the promotion of industrial co-operation within NATO and for the harmonization of weapon systems and their logistical support. The NIAG effort is limited only by the value nations place on the studies and their resultant potential for further armaments co-operation and the finite NATO funding available.

4. This document sets forth obligatory management procedures for use by all elements of CNAD in the management of NIAG studies. These procedures are designed to make optimum use of NIAG resources in contributing to armaments co-operative goals.

5. The process commences with a determination, by the applicable project group working with the NIAG, of the best way to proceed to the NATO staff target (NST) milestone. If it is decided that a NIAG PFS is the best way to proceed, the project group will formally request NIAG help to define the study, its aim, and the effort required.

6. The National Armaments Directors' Representatives (NADREPs), tasked by the CNAD, will, on a fixed annual cycle, receive all requests for NIAG studies, their relative priority, and a 5 year projection for future studies from the CNAD subordinate bodies. The NADREPs will select those high

priority studies able to be accomplished within the NIAG annual operating budget (civil) and submit the annual programme to the Council via the Civil Budget Committee for final approval.

7. PFS's requested by the main groups and recommended to be performed by NIAG but not able to be funded within the annual NIAG budget, will be identified for CNAD action. The CNAD may choose to postpone these studies to later timeframe, seek national support and increased funds for the civil budget to perform the studies, cancel the study requirements, or direct that they be accomplished by other means.

II. DETERMINATION OF STUDY METHODOLOGY

8. Early interaction between the project group developing the ONST and a NIAG specialist group will facilitate the identification of practical alternatives to satisfy the ONST requirements and the most efficient method to arrive at the NST. The project group chairman should request, via the respective main group, that NIAG form a specialist group to work with the project group. This request should take place during the final stages of ONST development and NIAG advice should be sought prior to finalization of the ONST.

9. To ensure NATO industry is fully informed of the ongoing work in the CNAD committees, the project groups will prepare an unclassified document outlining the ONST requirements. To be of maximum value to industry, this unclassified summary should be prepared as early in the PAPS process as possible, but not later than final ONST approval.

10. The PAPS manual provides guidance on suggested ways to identify possible equipment/system solutions to meet the ONST requirements and to develop the NST. This guidance and additional suggestions (Annex II) provides for a NIAG PFS as only one of several possibilities.

11. In determining the optimum method of study, the project group, in conjunction with the NIAG specialist group, should consider all the alternatives (Annex II) plus performing the Annex III considerations on using NIAG to conduct the PFS.

III. NIAG PREFEASIBILITY STUDY PLANNING

12. If the project group, in conjunction with the specialist group, determines that a NIAG study is required, the project group, again in conjunction with the NIAG specialist group, will prepare a study request and submit it to their main armaments group. The study request should provide the following:

(a) type of study to be performed by NIAG; i.e. full-scale PFS or lesser effort;

(b) parameters and task of the study;

(c) magnitude of the study, including estimated schedule, man-years of effort, etc;

(d) study commencement date/duration;

(e) any other information needed by industry to perform the study.

13. It is the responsibility of the project group, working in conjunction with NIAG, to ensure the proposed study effort is consistent with the task required. The project group should be aware of the overall funding and resource constraints facing NIAG, using the most recent 5-year forecast, and ensure the study effort is sized accordingly.

IV. ESTABLISHING AND PRIORITIZING THE NIAG WORK PROGRAMME

14. Given the authority to manage the NIAG study programme, the NADREPs have the responsibility to ensure that the most appropriate studies are conducted within the current and foreseeable NIAG budget allocations (cash credits and contract authority). These studies should have national support and a likelihood of adoption.

15. On a yearly basis, in January, to satisfy the annual civil budget cycle, the main groups will consolidate their studies scheduled to commence the following year and submit this listing, details of the studies as provided by the project groups, and a 4-year study projection to the NADREPs. The main groups will prioritize all studies desired to commence the following budget year, along with their prioritization rationale. They should also be prepared to offer alternatives to a full-scale NIAG PFS.

16. The International Staff will consolidate these study requests and promote an iterative process between the International Staff, the main armaments/project groups, and the NIAG to attempt to accommodate as many requests for NIAG assistance as possible within the budget year's available funds. They will consolidate all main armaments groups' candidates and prepare a proposed work programme for NADREPs' approval, including a recommended ranking list of all studies to be funded.

17. This iterative process may involve:

(a) a rescope (reduction) of the NIAG proposed level of efforts;

(b) a delay in commencement of certain studies;

(c) suggestions that the project/main group consider alternative methods of conducting certain studies.

18. The NADREPs will review the International Staff input and select, based on Annex IV criteria and direction from capitals, those high priority studies able to be funded within the NIAG yearly budget.

19. The NADREPs will advise the CNAD of all unfunded studies, along with a recommendation on whether to request additional funding, to delay initiation of the NIAG study, or to accomplish the study by other means.

V. PFS INITIATION

20. Upon NADREP approval of the studies scheduled to commence the following year, the applicable project groups will prepare tasking requests that formally request NIAG to undertake the studies. The tasking request will expand on the earlier submitted study request and, along with the ONST, will provide all the information required for NIAG to conduct the study.

21. To assist the completion of the tasking request, the project group will formally request NIAG to form an exploratory group to work with the project group in preparing the tasking request. The exploratory group will then develop its proposed organization, management plan, and study timetable.

22. Studies will be initiated following Council approval of the civil budget in December of each year. However, on studies to be performed on high priority projects, NADREPs can authorize NIAG to commence if they are ensured that the costs of such projects will fall within the established budget and the contract authority approved by the Civil Budget Committee is sufficient.

VI. RESOURCES

23. The NADREPs will ensure that fiscal responsibility is observed by requiring that industry is reimbursed in full for its work within six months of the submission of the study final report. Interim payments may also be made.

24. NIAG PFS will be funded based on a fixed man-day rate, to be determined by NADREPs. Consistent with available resources, funding will also be provided for other types of studies conducted by NIAG.

VII. ANNUAL PROCEDURES

25. CNAD activities in the process of the establishment of study methodology and in the execution of NIAG PFS are set forth in Annex V.

26. Approval of the NIAG work programme will be on a yearly planning cycle as outlined in Annex VI. The CNAD schedule is based on the December Council approval of the NATO civil budget.

ANNEX I to
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PREFEASIBILITY STUDIES

1. The PAPS Handbook (AC/259-D/901) defines a PFS as a study to indicate whether or not the Outline NATO Staff Target (ONST) merits a deeper Feasibility Study (FS). It is conducted either by industry and/or government agencies or by the NIAG. Its aim is to examine the proposal, assess the trade-off points, and make a broad assessment of the practicable alternatives and also the penalties involved in adopting certain courses of action.

2. The PFS is based on an ONST, which is a very broad outline of the function and desired performances of a new weapon or equipment. The ONST contains operational characteristics, details of the threat, desired capability, and a general indication of scope and broad cost parameters.

3. The PFS will result in the establishment of NATO Staff Target (NST), which is a broad outline of the function and desired performance of new equipment or weapons system(s), before the feasibility or method of meeting the requirement or other implications have been fully assessed.

4. PFS provide a necessary and valuable contribution to the process of armaments co-operation as it forms the basis of national decisions on possible future collaboration as well as proposals for the next phase and proposals for future industrial co-operation (teaming arrangements and possible feasibility study organization). The industrial interaction resulting from the NIAG study work also provides a valuable side benefit.

5. In addition to PFS defined by the PAPS process, NIAG studies can take the form of studies requested by the main groups that support specific armaments co-operation objectives and studies commissioned by CNAD/NADREPs to provide industrial advice.

ANNEX II to
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DEVELOPMENT OF AN NST

The project group, assisted by the NIAG specialist group, could:

(a) agree that enough studies have already been completed to permit a selection of the best alternative(s) studies. In this case, the NST can be developed without further study;

(b) agree to use ongoing national studies (supplemented by additional national studies as needed) or the project group could decide that totally new national studies are needed before it can agree on the best alternative(s) for the follow-on phase;

(c) decide to commission joint or collaborative PFS and share the costs and other responsibilities in some agreed manner;

(d) decide to request that PFS be conducted by the NIAG;

(e) decide to request a study or series of specific lesser magnitude studies can be conducted by NIAG;

(f) request NIAG provide answers to specific questions;

(g) decide on some other option that combines elements of the above options for the conduct of PFS.

CONSIDERATIONS ON USING NIAG TO CONDUCT PFS

1. There are several methods for the project group to use in developing the NST (Annex II). The project group, in consultation with the NIAG specialist group, is responsible to determine the optimum way ahead. In reaching this decision, the project group should consider the following advantages and limitations of NIAG conducting the study as well as the justification criteria developed to focus the decision process.

2. Advantages

(a) NIAG PFS occur early in the life of a weapon system, at a time when countries are not ready generally to fund them on an ad hoc basis;

(b) all countries of the Alliance (government and industry) benefit from these studies. Moreover, carrying them out jointly at an early stage might minimize duplication of effort or separate national studies which would make future co-operation more difficult to achieve;

(c) NIAG studies draw on the knowledge of all of the NATO industries as opposed to national only studies;

(d) NATO pays for only a portion of the actual study effort. Industry absorbs approximately two-thirds of the costs;

(e) the NIAG method of work, which excludes competition, can facilitate the setting up of future industrial arrangements;

(f) the industrial interaction that takes place during the studies provides a foundation for an improved armaments co-operation atmosphere within the Alliance.

3. Limitations

(a) There is a limited NATO budget available to fund NIAG PFS;

(b) near term studies tend to force industry into a competitive situation and, as a result, objectivity may be lost;

(c) difficulties are associated with the transmission and handling of classified data;

(d) there may be some limitation on the sharing of a company's proprietary information. However, sharing is normally sufficient to accomplish the PFS objectives;

4. Justificaton Criteria

(a) What to study.

(1) Is the nature and magnitude of the study appropriate to be conducted by NIAG?

(2) What key financial, technical, or legal problems must be overcome in order for nations to agree to conduct feasibility studies?

(3) What interest has been shown in the PFS by nations and which nations would be interested in progressing into the following stage, given the positive outcome of the study results?

(4) Is sufficient funding available for the conduct of the study or are the firms willing to absorb part or all of the costs?

(b) Why study?

(1) Have these problems not been examined by either national, multinational, or international groups in the past?

(2) Are on-going or recent national or multinational studies adequate or releasable?

(3) Has technology moved to the point that an update of the results of past studies is necessary?

(4) Is there some reason that a study is necessary to gain confidence to move to the feasibility phase?

(c) Why NIAG?

(1) Is a participating nation willing to act as a pilot nation to process the ONST through to an NST obviating the need for a NIAG study?

(2) Are national studies or funds simply not available within the timeframe necessary to meet the mission need?

(3) Is an independent view required to check against the results of other studies conducted by other bodies from a different perspective?

(4) Is NIAG willing to carry out the study and capable of doing a good job?

(d) Why now?

(1) When is the operational capability required by the military?

(2) What is the priority of the PFS and how does it rank relative to the overal objectives of armaments co-operation within CNAD or the main groups?

(e) What results are expected?

(1) Has the study been appropriately scoped such that the objective can be achieved?

(2) Will this study result in agreement by nations to conduct feasibility studies?

(3) What are the implementation plans beyond this study to assure both industry and government participants that the study once completed will have some effect on the project?

(f) Other Considerations

(1) Are there any restrictuions, government or others, that may limit the study?

(2) Would NIAG study duplicate ongoing national studies?

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AC/259-D/1183

PRIORITIZATION CRITERIA FOR THE SELECTION OF NIAG PREFEASIBILITY STUDIES

1. NATO urgency and commonality of the established military need (assumes a mission need has been established and recognized by nations). Does the study address a NATO critical deficiency?

2. Nations are interested in co-operation and a good overall multinational basis (military, technological, and economic) exists for mutually beneficial co-operation and the achievement of RSI.

3. The potential system has a high expected payoff (i.e., a good probability of achieving stated military requirements within available technology and economic constraints) and the likelihood of adoption by NATO nations.

4. An ONST has been finalized in sufficient detail to form the basis of a PFS and has received national approval. In the case of large studies, a project group also needs to have been established.

5. NIAG has evaluated the proposed study, expressed a willingness in doing the study, and is well qualified to do so.

6. Proposed study is balanced with other studies within the responsibilities of each main group; the overall balancing of all main group requests being the responsibility of the CNAD/NADREPs.

7. Relative cost of studies being considered.

8. Resulting industrial interaction.

9. Does the proposed study support the development of an NST?

10. National support for the prefeasibility studies and expectation for follow-on support and work.

CNAD PREFEASIBILITY ACTION CHART

ACTIVITIES IN THE PROCESS OF THE ESTABLISHMENT OF THE NEED AND THE EXECUTION OF NIAG PREFEASIBILITY STUDIES

PAPS PHASE	PROJECT GROUP	NIAG	MAIN GROUP	NADREPS	INTERNATIONAL STAFF
1 MISSION NEED EVALUATION	OMST Development. Request NIAG industrial specialist support. Prepare and send to NIAG an unclassified summary of the OMST	Distribute unclassified summary of OMST and establish NIAG Specialist Group (NSG)		Take note of planned studies follow and study details of ongoing process as deemed necessary	Evaluate ongoing [illegible]. Start to develop draft 5 year study forecast in co-ordination with NIAG and project group. Work on rough estimate of costs [illegible]tion. Enter information in budgeting process as necessary
OMST	Assisted by NIAG Specialists review OMST, and develop method for study, or alternative methods. Consider criteria at Annexes II and III	Review activities of its specialists			
2 PREFEASIBILITY PHASE	If no NIAG study is required establish NSI by other means as decided / If NIAG Study is required, prepare study request in conjunction with NSG. Establish man-months of effort. Send request to main groups	Follow activities of NSG	Evaluate Study request (use criteria of Annexes III and IV). Review and prioritise all proposed PFS in its area of responsibility. Submit request to NADREPs through IS		During process update information / Act as a focal point in co-ordinating iterative process between Main Groups, Project Group and NIAG
	Upon study approval, request NIAG form exploratory group (NEG)	Establish Exploratory Group		Review main groups requests / Prioritise / Approve studies consistent with available resources / Advise CNAD of unfunded studies	Prepare Study requests for NADREPs together with all required supporting information / Arrange contracts for the Prefeasibility Studies
	Prepare tasking request with NEG. Formation of quick reaction group	Exploratory Group to develop proposed organisation NGI plan and timetable			
		Form sub-group to perform study			Administrative support to NIAG Sub-Group
	Presentation of result of study. Proposal for follow-on, report to Main Group	Approval of Study result	Review study results		Preparation of all required documentation for budgeting process
		Evaluation of sub-group report proposals for further action. Report to CNAD			Check on incoming NIAG invoices, authorise payments
	Final Development of NGI				
NGI					

ANNEX B to
NIAG-D(88)15

CNAD

ANNUAL PROCESS

ANNEX VI to
AC/259-D/1183

TO ESTABLISH NEXT YEAR NIAG PREFEASIBILITY STUDY BUDGETS AND 5-YEAR FORECAST

	MAIN GROUPS	NADREPS	CNAD	INTERNATIONAL STAFF Defence Support Division	CIVIL BUDGET COMMITTEE (Supported by IS Office of Management)
JAN	Review NIAG involvement in Prefeasibility Studies. Review all Study requests. Prioritize. Establish need for next budget year and 4-year forecast. Forward to NADREPs through International Staff ▼			Forecast of yearly amounts on NIAG Prefeasibility Budget to Office of Management Assemble budget info for next year and 5-year forecast into consolidated forecast. Indicate budgetary consequences and problems. Submit to NADREPs ▼	
FEB		Study consolidated budget for next year and 4-year forecast. Prioritize based on available resources. Approve studies to be funded. Submit unfunded requirements for CNAD action ▼			
MAR			Decide on disposition of unfunded study requests: - make additional funds available - postpone - do study by other means ▼		
APR					Evaluation of reallocated amounts of next year's budget proposals and 5-year forecast
MAY				Submit accepted proposal for next year and 4-year forecast to Office of Management for their preparation of the evaluation in Civil Budget Committee ▼	
JUN					
JUL	Update budget year plus 4-year forecasts during main accounts group meetings				
AUG				Update consolidated 5-year forecasts ▼	Evaluate the proposed NIAG budget as part of the total civil budget and submit to Council for approval in December. Act on CNAD requests for additional funding ▼
SEP	▼	Review updated forecasts and modify budget year planning (if required) within projected funding ▼			
OCT			Act on any NADREP requests ▼		
NOV					
DEC					

▼ Marks deadline of action

Checklist for the Specialist Group

The completed checklist should be submitted to the NIAG with the report of the Specialist Group.

1. How many meetings have been held with the appropriate Committee of the Main Armament Group?

2. Are all members of the Specialist Group familiar with the NIAG Guidance Manual?

3. Is the ONST adequate for a NIAG Prefeasibility Study? (Refer to Sections 2.1, 2.2 and 5.5).

4. Is the Threat adequately defined for a NIAG Prefeasibility Study? (Refer to Section 5.5.3).

5. Are there any alternatives to a NIAG Prefeasibility Study? (Refer to Sections 2.1, 2.2 and Annex B).

6. Why is a NIAG Prefeasibility Study recommended? (Refer to Annex B).

CHECKLIST FOR THE EXPLORATORY GROUP

The completed Checklist should be submitted to the NIAG with the proposed Programme and Estimate for the Study. (Reference to Chapter on Work of Ex.Gp).

1. How many meetings of the Exploratory Group have been held?

2. Are all members of the Exploratory Group familiar with the NIAG Guidance Manual?

3. How many members of the Exploratory Group have participated in previous NIAG Studies?

4. Is the ONST adequate for a Prefeasibility Study? (Refer to Sections 4.1, 5.5.1 and Annex C).

5. Is the Study and Tasking Request adequate for a Prefeasibility Study? (Refer to Sections 4.1, 5.5.2 and Annex C).

6. Is the Study and Tasking Request confined to activities suitable for Prefeasibility Study? (Refer to Sections 5.5.2 and Annex C).

7. Are all characteristics of the Threat adequately defined for the proposed Prefeasibility Study or will clarification be necessary during the Study? (Refer to Section 5.5.3).

8. Has the organization and schedule of work planned for the Study taken account of the known difficulties and delays in communicating between Teams? (Refer to Section 5.4.2).

9. Does the total effort estimated for the Study and the national contributions represent a good compromise between keeping the manning of the proposed Sub-Group as small as possible and yet utilising the full potential of NATO Industry? (Refer to Section 3.2.1).

10. Do the number and frequency of Team Meetings planned for the Sub-Group Study represent a realistic and acceptable level of effort for the Members and especially Team Leaders to maintain?

11. Do participating Companies recognise and accept that NATO reimbursement for the Study will represent only about one third of the full cost?

12. Have the Heads of National NIAG Delegation nominated Team Members for the Study and is a complete Membership List available?

13. Has the meetings schedule for all Teams in the Study taken into account the necessary flow of information between teams and the possible need for iteration?

14. Is a full meeting schedule available?

15. Following approval for the Study to proceed is there adequate time for security clearances to be processed before the schedule of meetings commences? (Refer to Section 5.4.3).

16. Have all Team Members received copies of the NIAG Guidance Manual?

17. Have Classification Guidelines been agreed with the appropriate committee to the NATO Main Armament Group requesting the Study? (Refer to Section 5.4.4).

GUIDANCE FOR TYPING [illegible] PREFEASIBILITY [illegible] REPORTS

Originators of NIAG Prefeasibility Study Reports are invited to note the following guidance for the layout of documents to be prepared for offset reproduction in NATO.

General

1. All documents should normally be typed on non-headed white A.4 paper.

2. All texts should go no further than 4 cm. from the bottom edge of the A.4 paper so that the classification need go no lower than 3 cm. from the bottom edge.

Please see attached specimens for practical clarification of the layout rules.

Cover Page

For the cover page and/or first page, enough room should be left for the NATO heading, i.e. the classification should be centred at least 7 cm. from the top edge of the paper.

Cover pages do NOT get a page number at THE TOP, only at the bottom of the page; except when NATO, 1110 Brussels is typed on this page.

NATO,
1110 Brussels.: is typed only on the cover page on the left-hand side, 5 cms. from the bottom of the page.

Following Pages

Following pages start on a Verso page, UNLESS OTHERWISE INSTRUCTED.

On RECTO pages the text should leave at least 2 cm. of lefthand margin and at least 1 cm. of righthand margin. On VERSO pages the lefthand margin should be at least 1 cm. wide and the righthand margin should be at least 2 cm. wide.

ANNEXES AND APPENDICES TO DOCUMENTS

Each Annex starts with a Recto page. Start again with page number 1.

2. Roman figures or capital letters for Annexes, e.g.:

ANNEX I to NIAG-D(88)15 ANNEX II to NIAG-D(88)15 etc. or ANNEX A to NIAG-D(88)15 ANNEX B to NIAG-D(88)15

3. An Appendix starts either on a Recto or a Verso page, depending on the last page of the Annex, but continue with the page numbering; e.g. if your Annex has 5 pages, the first page of the Appendix will get number 6.

4. Arabic figures for Appendices, e.g.:

APPENDIX 1 to
ANNEX II to
NIAG-D(88)15

APPENDIX 2 to
ANNEX II to
NIAG-D(88)15

CLASSIFICATIONS

1. On both RECTO and VERSO pages the classification and ensuing text should begin at approximately 3 cm. from the top edge of the paper. From the top classification drop 4 lines for page number and reference. This is not necessary at the bottom, two lines are sufficient.

2. The following classifications are used in NATO:

N A T O U N C L A S S I F I E D
N A T O R E S T R I C T E D
N A T O C O N F I D E N T I A L
N A T O S E C R E T
C O S M I C T O P S E C R E T

The lowest classification is UNCLASSIFIED, the highest COSMIC TOP SECRET.

3. Annexes and Appendices may be classified LOWER than the document, but NEVER HIGHER.

PARAGRAPHS AND SUB-PARAGRAPHS

Indent at 5 for paragraph numbers, at 10 for text, then back to the margin. First paragraph on cover page not to be numbered, except when this paragraph is sub-divided into (a), (b) or (1), (2), etc. First paragraph of an Annex or an Appendix does get a paragraph number, provided the other paragraphs are numbered.

2. When a paragraph is sub-divided into (a), (b), etc. or (1), (2), etc. these letters or figures are blocked at 5 and text at 10, e.g.:

(a) during the .....;

(b) nothing was said .....;

or

(1) during the .....;

(2) nothing was said .....

3. Small Roman figures commence at 10 and paragraph blocked at 15, e.g.:

(i) during the .....;

(ii) nothing was said .....;

(iii) etc.

FOOTNOTES

To be typed before bottom classification, but below NATO, 1110 Brussels.

REFERENCES

1. The word Document appears only on FIRST PAGE (COVER PAGE e.g.:

DOCUMENT
NIAG-D(82)3

On following pages type only classification, page number and reference number, e.g.:

NIAG-D(82)3

2. However, Corrigendum, Annex, Appendix and Addendum to a document on ALL PAGES (in capitals).

3. No spaces must be left in NATO references.

4. Reference number on a RECTO PAGE to be typed on the righthand side; on a VERSO PAGE on the lefthand side.

TABLES

If necessary to use the paper sideways reference to be typed at righthand margin whether recto or verso.

MISCELLANEOUS POINTS

Do not carry over just two lines or leave two lines at the bottom of a page.

The following words take an initial capital when referring to a specific one, in all other cases with small:

Authority	Government	Delegation
Representative	Questionnaire	Draft Report.

Splitting of words

DO NOT SPLIT WORDS UNLESS UNAVOIDABLE.

Correcting of documents

PLEASE PAY PARTICULAR ATTENTION TO CORRECTIONS. It is most important that the whole word be completely obliterated before the correction is made.

Grammar and Punctuation

Splitting of day, month and year:

CORRECT: 1st January, 1974.

1st and 2nd January, 1974.

1st and 2nd January, 1974.

Incorrect 1st January, 1974.

1st and 2nd January, 1974.

When typing month and year only (April 1974) no comma is required.

After a full stop leave: two spaces
After a colon leave: two spaces
After a semi-colon leave: one space
After a comma leave: one space

Communiqué, régime, rôle and détente to be typed with an accent.

Communist	always typed with a capital "C"
Communist bloc	always small "b"
Soviet Zone of Germany	always capital "Z"
NATO Military Authorities	always capitals "M" and "A"

generator	converter	metre	adviser
materiel AND	material	copy original	
discrete AND	discreet	copy original	

HYPHENATED WORDS -6-

above-mentioned
all-weather (adj.)
anti-aircraft
air-conditioned

build-up

Chiefs-of-Staff
co-axial
co-operation
co-ordination
counter-espionage
counter-countermeasures

end-item
end-1985

fire-fighting

half-track

infra-red

long-range
long-term

mid-summer
mid-1975

pre-war
post-1970

short-range
Sub-Group
short-term

Vice-Chairman

well-known
world-wide

SEPARATE WORDS

none the less

in so far as

ONE WORD

airspace

bandwidth
bilateral
blackout
breakdown

centreline
coexistence
collocation
countermeasures
coefficient

fallout
foodstuffs

guideline

inshore
inasmuch as

layout

manpower
multilateral

offset
offshore
overall

peacetime
pipeline

radioactive (ity)
relocation
reorganization

safeguarding
seaborne
shortfall
standby

taxitrack
thermonuclear
throughout
timeframe
today
tomorrow

undercarriage
underdeveloped
unilateral

wartime
wavelength

Abbreviations

The following abbreviations can be used throughout the text, but the abbreviation MUST be spelt out in full the first time it is used.

1.	NATO	North Atlantic Treaty Organization
2.	SHAPE	Supreme Headquarters Allied Powers Europe
3.	SACEUR	Supreme Allied Commander, Europe
4.	SACLANT	Supreme Allied Commander, Atlantic
5.	CINCHAN	Commander-in-Chief, Channel
6.	ACE	Allied Command Europe
7.	MNCs	Major NATO Commanders
8.	MC	Military Committee
9.	STC	SHAPE Technical Centre (The Hague)
10.	IAU	Infrastructure Accounting Unit
11.	ICB	International Competitive Bidding
12.	STANAG	Standardization Agreement
13.	NADGE	NATO Air Defence Ground Environment
14.	R&D	Research and Development
15.	TO&E	Tables of Organization and Equipment
16.	O&M	Organization and Method
17.	ICBM	Inter-Continental Ballistic Missile
18.	HQ	Headquarters
19.	WHQ	War Headquarters
20.	SAMs	Surface-to-Air Missiles
21.	CNAD	Conference of National Armaments Directors
22.	NICSMA	NATO Integrated Communications Systems Management Agency

CURRENCY

Belgium	B.fr.	Belgian francs
Canada	$	Canadian dollars
Denmark	D.kr.	Danish kroners
France	F.fr.	French francs
Greece	Dr.	Drachmae
Germany	DM.	Deutschmark
Italy	It.l.	Italian lira
Luxembourg	Lux.fr.	Luxembourg francs
Netherlands	DG.	Dutch guilders
Norway	N.kr.	Norwegian kroners
Portugal	Esc. and the dollar sign - e.g. 100,000$000	Escudos
Spain	Pes.	Pesetas
Turkey	T£ or TL (copy original)	Turkish pounds or Turkish lira
United Kingdom	£	Pounds Sterling
United States	$	United States dollars

NOTE: £ and $ have no space between sign and figure,
e.g.: £1,000 $1,000

Others are typed with a space between sign and figure,
e.g.: DM. 1,000

ANNEX E to
NIAG-D(88)15

SPECIMEN

NATO UNCLASSIFIED

ORIGINAL: ENGLISH
31st [illegible]

DOCUMENT
NIAG(82)D/3
AC/141(PG/24)D/[illegible]

text

(Signed) A.D. BROWN

NATO,
1110 Brussels.

NATO UNCLASSIFIED

NATO RESTRICTED

ORIGINAL: ENGLISH
31st July, 1982

DOCUMENT
NIAG(82)D/2
AC/141(PG/24)D/[illegible]

text

(Signed) A.D. BROWN

NATO,
1110 Brussels.

This document includes: 1 Annex

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(1) Footnote

NATO RESTRICTED

ANNEX E to
NIAG-D(88)15

N A T O C O N F I D E N T I A L

ORIGINAL: ENGLISH
31st July, 1982

DOCUMENT
NIAG(82)D/2
AC/141(PG/23)D/11

text

(Signed) .....

NATO,
1110 Brussels.

This document includes: 2 Annexes

N A T O C O N F I D E N T I A L

N A T O S E C R E T

ORIGINAL: ENGLISH
31st July, 1982

DOCUMENT
NIAG(82)D/2
AC/141(PG/23)D/11

text

(Signed) .....

NATO,
1110 Brussels.

This document consists of: 6 pages
Annex I of: 13 pages
Annex II of: 2 pages
Annex III of: 1 page
etc.

N A T O S E C R E T

CONSEIL DE L'ATLANTIQUE NORD
NORTH ATLANTIC COUNCIL

7 cm

EXEMPLAIRE / COPY N°

CLASSIFICATION

Original . document reference

Date

TEXT

TEXTE

2 cm

1 cm

EXAMPLE OF COVER PAGE
MODELE DE PAGE DE COUVERTURE

End of TEXT

Fin de TEXTE

CLASSIFICATION

Page Number

Numero de page

4 cm

REFERENCE
DATE

PAPER TITLE

PART
I

INTRODUCTION

1. First Paragraph

(a) First sub paragraph

(i) First sub-sub paragraph

Side Heading

2. Second Paragraph

(a) Text

(b) Text

(c) Text

(i) Sub-sub paragraph

(ii) Sub-sub paragraph

3. Third Paragraph

PART
II

MAIN BODY

4. Fourth Paragraph

PART

II

PAGE LIMITS

1. Executive Summary. This is to consist of pages.

2. Team Reports. These will consist of pages of text and up to pages of Annexes.

PART

III

REPORT FORMAT

3. All reports are to use the following format.

4. Parts. The text may be divided into Parts which should be numbered in ROMAN NUMERALS with a title in the centre of the page:

a. PART

I

SPECIMEN PART

5. Paragraphs. This will be numbered sequentially throughout the report using ARABIC NUMERALS. If a title is used it should be underlined and placed next to the number if governing one paragraph. In each case the title will be initial capitals underlined:

10. Paragraph Heading

Side Heading

11. Further Paragraphs

12. More Paragraphs

6. Sub-Paragraphs. These will be inset 1 cm. or ½" and be lettered in small print:

a. Sub-paragraph

b. Sub-sub paragraph. These will:

(i) be inset 2 cm. or 1"
(ii) use italic numbers in brackets
(iii) both sub and sub-sub paragraphs may use side and paragraph headings.

ANNEX E to
NIAG-D(88)15

SPECIMEN

NATO UNCLASSIFIED

ORIGINAL: ENGLISH
[illegible]

DOCUMENT
NC/4-(SP)D/1234

ENGLISH TYPING POOL

INSTRUCTIONS FOR TYPING OUT A DOCUMENT

(OR "HOW TO KEEP COOL IN THE POOL")

Note by the Potential Secretaries(1)

There were two men walking along the road and one said to the other, "That's strange - you've got a black shoe on one foot and a brown one on the other". "Strange!" "What's strange about it?" "I've got another pair at home."

1. With reference to the above paragraph, you are invited to:

(a) laugh; or

(b) think of a better one yourself.

2. The above "joke" was contributed by one of our most promising PSs, who wishes to remain anonymous.

(Signed) General MALAISE
Head, Lobotomy Section

NATO,
1110 Brussels.

(1) Not here, but elsewhere in this tent, we are referred to as "PSs"

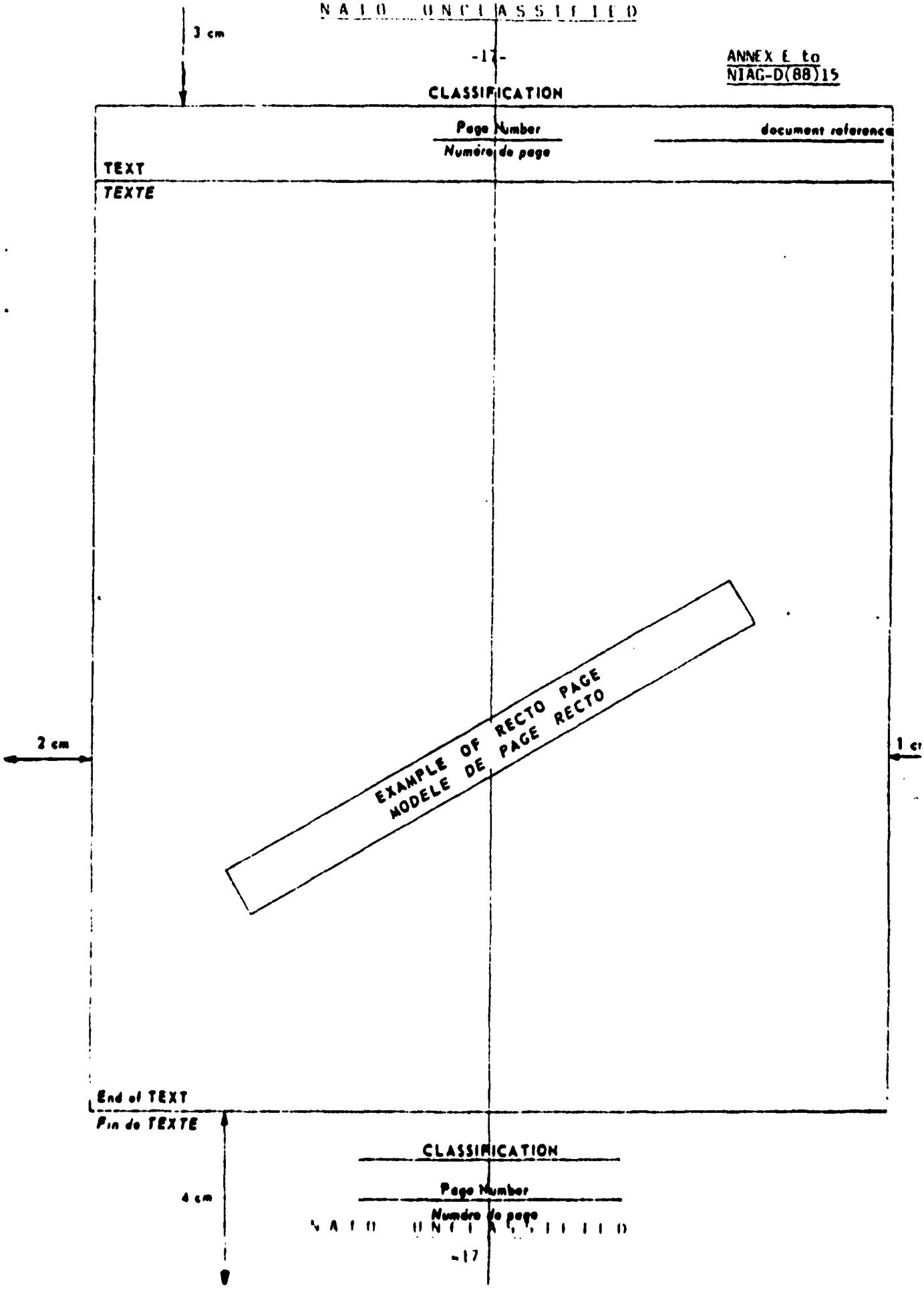
AC/4(PP)D/[illegible]

-1-

TRAVELS WITH MY AUNT

A funny thing happened on the way to the undertaker ... when retired bachelor Henry Pulling, with the urn containing his mother's ashes under his arm, met up with his 75-year-old, not-so-maiden Aunt Augusta. Starting at Aunt Augusta's house for tea, this unlikely team begins a series of hilarious adventures when Aunt Augusta's current lover, a husky young African named Wordsworth, stashes some very good marijuana in with dear old Mother's remains just before the police raid the premises.

From London to Paris, Istanbul to Paraguay, Aunt Augusta belly-dances and smuggles gold with cheerful professionalism, while Henry turns on to pot, adventure and life.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CLASSIFICATION
Page Number
Numéro de page
document reference
TEXT
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EXAMPLE OF RECTO PAGE
MODELE DE PAGE RECTO
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Fin de TEXTE
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CLASSIFICATION

document reference

Page Number
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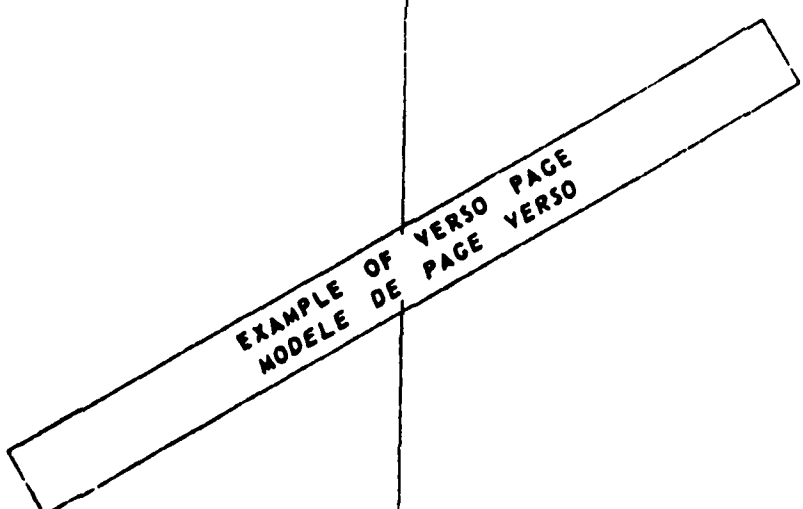

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End of TEXT

Fin du TEXTE

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4 cm

Page Number
Numéro de page

Other Considerations

7. Pages will be numbered at the middle top of the page.

8. Classification will be at top and bottom of each sheet.

9. Single spacing will be used throughout.

10. The reference and date will appear in the top right hand corner of the first page.

11. Each document will carry a part index.

12. Annexes will be in capitals - ANNEX A AND MAIN DOCUMENT REFERENCE.

13. ANNEXURES will be in roman capitals and refer to the Annex.

ANNEXURE I
TO ANNEX A
MAIN DOCUMENT REFERENCE

14. Figures/Diagrams should form Annex where possible but if in text are to be numbered sequentially throughout and include page no.

(a) FIG. 10 p.9

15. Tables will invariably form part of an Annex and be referred to in the text.

16. Example