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MC 74/2

1 February 1965

A REPORT BY THE MILITARY COMMITTEE

to the

NORTH ATLANTIC COUNCIL

on

SELECTION OF STANDARD NATO ON-LINE TELETYPEWRITER

CRYPTOGRAPHIC EQUIPMENT

References: a. SGM-280-63, 26 Jun 63
b. MC 74/1 (Final Decision)

INTRODUCTION

1. In accordance with paragraph 9 c of Enclosure 2 to reference b, an Evaluation Group has examined on-line teletypewriter cryptographic equipment offered to meet NATO point-to-point and tactical communications requirements. A report thereon has been submitted to the Military Committee through the Standing Group. The Evaluation Group consisted of representatives of the Major NATO Commanders, and France, Germany, Netherlands, Norway, United Kingdom and United States. The recommendations of the Group were as follows:

a. No further considerations be given to weighting schemes other than the merit systems adopted.

b. The ELCROTEL be selected as the standard point-to-point teletypewriter equipment for NATO use.

c. The KW-7 be selected as the standard tactical (including ship-shore) teletypewriter equipment for NATO use.

d. If for any reason not within the province of the Evaluation Group the equipments listed in paragraph b or c

2 ENCLOSURES
1. DFM(64)79, 4 Sep 64
2. Netherlands Minority Statement

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above cannot be adopted, the next equipment in the category affected and in the order of merit listed, be adopted as the NATO standard equipment.

2. France, in a minority statement attached to the Report of the majority of the Evaluation Group, disagreed with the above recommendations but subsequently has concurred in recommendation b. The reasons for the French disagreement to the remainder of the above recommendations are explained in Enclosure 1. The Netherlands, while agreeing with the majority on the above recommendations, has also submitted a minority statement relating to the order of merit and the numerical assessments of the point-to-point equipments. This minority statement was attached to the report of the Evaluation Group as Appendix 3. The reasons for the dissentient Netherlands views are contained in Enclosure 2. These orders of merit insofar as they affect equipments considered acceptable for selection as NATO standard are compared below:

Point-to-Point

Equipment	Majority	France	Netherlands
ELCROTEL (GE)	100	95	100
ALVIS with VENDOR (UK)	60	90	80
ECOLEX V with SIMILEX (NE)	35	85	70
MYOSOTIS with oscillators (FR)	35	90	55

Tactical

Equipment	Majority	France
KW-7 (US)	100	90
MYOSOTIS with oscillators (FR)	40	90
ULYSSE (FR)	20	80

DISCUSSION

3. The North Atlantic Council in approving MC 74/1 invited the Standing Group to direct the Evaluation Group:

"a. To continue its evaluation of the equipments offered without taking account of the pride factor.

b. To make every effort to include in its report weighted assessments, expressed in figures, taking into account all factors other than cost, so that the final selection may be based on cost factors adjusted by the weighting figures."

In accordance with a above, the Evaluation Group has made its recommendations solely on the basis of the technical, operational, and logistical aspects of the equipments considered. In the Report the Chairman explains why it is not possible to meet entirely the desires of the North Atlantic Council as set forth in b above. Instead, the Evaluation Group (with the exception of France) agreed on a merit system and applied a numerical value to each equipment. The French delegation considered that such a system did not permit an objective evaluation free of biased personal assessments. Therefore, they applied a detailed weighting system to each equipment in an effort to eliminate the subjective factor.

4. France's disagreement with recommendation 1 d results from disagreement with the merit system. Accordingly, France in Enclosure 1 proposes that except for ELCROTEL the other point-to-point machines be recommended to the North Atlantic Council without any indication of order of merit.

5. With respect to recommendation 1 c above, France proposes that a new Evaluation Group be constituted, composed not only of representatives from the nations having proposed tactical machines, but of representatives as well of those nations which have indicated notable requirements for this kind of equipment. Such a constituted Evaluation Group would involve the addition of Canada to those nations which participated in the original Evaluation Group.

CONCLUSIONS

6. The Military Committee concludes that:

a. There is unanimous agreement that the ELCROTEL be selected on a first choice basis as the standard point-to-point telegraph cryptographic equipment for NATO use.

b. There is a divergence of views regarding the relative merits of other point-to-point as well as tactical telegraph cryptographic equipment offered for NATO use.

c. It has been unable to reconcile the divergent views set forth in b above and that it is necessary to submit the matter to the North Atlantic Council for decision in accordance with procedures established in Enclosure 4 of MC 74/1. Specifically, the Council agreed:

"If the Military Committee's report to the Council is not unanimous, it will be forwarded under cover of an objective appraisal by the Chairman of the Military Committee. The Council will then consider what further procedures to adopt to enable agreement to be reached."

RECOMMENDATIONS

7. The Military Committee recommends that the North Atlantic Council:

a. Take note of the above report and Enclosures 1 and 2 hereto.

b. Determine, in accordance with paragraph 4 of Enclosure 4 to MC 74/1, what further procedures should be established to facilitate the final selection of standard on-line teletypewriter cryptographic equipment.

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ENCLOSURE 1

NORTH ATLANTIC MILITARY COMMITTEE

COMITE MILITAIRE DE L'ATLANTIQUE NORD

Standing Group — Groupe Permanent

DFM(64) 79

4 September 1964

MEMORANDUM FOR THE SECRETARY STANDING GROUP

FROM FRENCH REPRESENTATIVE TO THE STANDING GROUP

SUBJECT : French position on the question of New Generation Cryptographic Equipment

1. While France does pay tribute to the experts of the Evaluation Group, who labored during several months on a difficult task, France is unable to accept the conclusions and recommendations drawn up by this Group. The arguments which served as a basis of the order of merit listed in the report are challenged for they are neither complete nor entirely valid. Conscious of the appreciable progress in the communications field which the earliest possible adoption of the new generation cryptographic equipment would bring to the Alliance, France is especially concerned in seeing that the solution proposed is an effective one.

2. Concerning the point-to-point machines, of the four proposed, the German ELCROTEL was recognized superior regardless of the criteria used by the Evaluation Group or the French experts. France proposes therefore:

a. That the Standing Group recommends to the Military Committee the immediate adoption of ELCROTEL for all NATO point-to-point requirements, thus responding fully to the wishes of the Major Commands who have insisted upon the selection of only one machine.

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b. That the other machines be recommended to the Council without any indication of order of merit.

3. The problem of selecting cryptographic equipment for tactical requirements is not as urgent; as a matter of fact, the requirements of the Major Commands and of certain nations are very small. France does not accept the conclusions of the Evaluation Group's report and proposes therefore that a new Evaluation Group be constituted with the mission of studying tactical cryptographic equipments by considering in a detailed manner the technical, operational and logistical characteristics in accordance with the directives of the Council.

France proposes finally that the new Evaluation Group be composed not only of representatives from the nations having proposed tactical machines, but of representatives as well from those nations having indicated notable requirements for this kind of equipment.

It should be noted that, on the one hand, the Evaluation Group which passed judgment on all the machines included, in addition to Major Command representatives, only the representatives of those specific countries having proposed some machines, while, on the other hand, the Major Commanders expressed only very minimal requirements for tactical machines.

(Signed)
Le General d'Armee HOUSSAY
Chef de la Delegation Francaise
au Groupe Permanent Nord-Atlantique

ENCLOSURE 2

NETHERLANDS MINORITY STATEMENT ON ASSESSMENTS

POINT-TO-POINT EQUIPMENTS

1. The Netherlands does not agree with the numerical assessments endorsed by the majority of the Evaluation Group.

2. In the report of the Evaluation Group, ECSA Serial 309, it is stated inter alia in para IV (a)(8) that the ECOLEX V system performed well during the trial, that there is an existing build-up of experience, training and logistics for the basic unit (ECOLEX IV) in NATO and that it lends itself to use with this basic unit as well as with ETCRRM (also already in use in NATO).

3. The possibility of transferring basic equipments already in use into the required tapeless-rotorless-equipments by supplementing them with new key generating units is an important advantage of the ECOLEX V system over all other systems offered.

4. The Netherlands is therefore of the opinion that the final qualification in the report of the Evaluation Group, that ECOLEX V only marginally meets the requirements of the military characteristics, is too low a valuation.

5. Based on the adopted system of numerical assessments, in which 100 marks is given to the best equipment as standard against which other equipments are measured and in which the technical, operational and logistic aspects of the equipment are considered, the awarded numerical value of 35 for ECOLEX V is also regarded as too low a valuation.

6. In our view the numerical assessments of the ALVIS and MYOSOTIS equipments also need some correction, leading to the following overall order of merit and numerical assessment:

	Equipments	Order of merit	Numerical values
2	ELCROTEL	1	100
3	ALVIS with VENDOR	2	80
4	ECOLEX with SIMILEX	3	70
5	MYOSOTIS with external	4	55
6	oscillators		

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NORTH ATLANTIC MILITARY COMMITTEE

COMITE MILITAIRE DE L'ATLANTIQUE NORD

3 February 1965

CORRIGENDUM NO. 1

to MC 74/2 (Military Decision) 43/48

Holders of MC 74/2 (Military Decision) (Selection of Standard NATO On-Line Teletypewriter Cryptographic Equipment) are requested to amend page 3, line 11, to delete the parenthesis on either side of the words "the order of merit and".

FOR THE MILITARY COMMITTEE:

EF/md

ERNST FERBER
Major General, German Army
Secretary

Corrected 9 Feb. 65

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