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07801

United Nations Industrial Development Organization

PI/60  
5 December 1977  
ORIGINAL: ENGLISH

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UNIDO INDUSTRIAL TRAINING OFFER PROGRAMME 1978

Introduction

1. After the restructuring of the secretariat of the United Nations Industrial Development Organization (UNIDO) in early 1976, a decisive development influenced the UNIDO industrial training operations, namely, the decision of the Executive Director of UNIDO that, beginning in 1977, the UNIDO Training Section should place fellows in European host countries by working directly with the respective National Supervising Authorities (fellows have hitherto been placed by the Fellowship Section of the United Nations Office in Geneva).
2. This bulletin describes the UNIDO Industrial Training Offer Programme for 1978. It is the fourth in a series of annual bulletins that inform Governments and other possible beneficiaries of training opportunities UNIDO will make available during the next calendar year so as to enable them to co-ordinate as early as possible their training needs with the training offered. Such co-ordination is essential if best use is to be made of existing industrial training possibilities.
3. Originally it was planned to issue this bulletin earlier in 1977, to give recipients as much time as possible to make decisions. However, the United Nations Industrial Development Fund (UNIDF) was established in 1977, and its first pledging conference took place only on 28 October. Since the existence of this new fund will be of greatest importance to UNIDO training operations, this bulletin could not meaningfully have been distributed without taking this factor into account.
4. In principle, the goal of UNIDO training operations is to improve the skills and broaden the experience of high-level technical, managerial or administrative personnel engaged in industry or in agencies, organisations or institutions dealing with industrial development. Accordingly, the UNIDO Industrial Training Offer Programme addresses itself to personnel at least at engineer or economist level or equivalent. UNIDO does not normally deal with vocational training or with formal

education to obtain a degree, fields that lie within the competence of the International Labour Organisation (ILO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). In its training operations, UNIDO emphasizes, inter alia, practical training (in-plant or on-the-job); upgrading or updating of professional skills; transfer of technological and managerial know-how and experience, with a view to enlarging the capacity for making the right choice of both technology and equipment and for developing appropriate indigenous technologies; co-operation among developing countries in industrial training; assistance to the least developed among the developing countries; better utilization of installed equipment by such means as efficient production management and preventive maintenance; and better utilization of financial resources for accelerated industrial development.

5. UNIDO training operations are in accordance with the Lima Declaration and Plan of Action on Industrial Development and Co-operation. This Declaration states:

"The training activities linked with the industrial development must be conceived in such a way that they make possible the processing of natural resources and other raw materials in the country of origin and the establishment of permanent structures for specialised, rapid, large-scale and high-quality training of national labour at all levels and for all professional specializations, whether technical or managerial without discrimination with regard to sex";<sup>1/</sup>

"... appropriate measures should be taken by developing countries to organise research institutions and establish training programmes to cover the needs of their industrial development and make possible progressive mastery of the different production and management techniques and of industrial development, thus facilitating the establishment of structures to absorb modern technology";<sup>2/</sup>

"... [industrialisation policies should lay emphasis on ...] the intensification of manpower development programmes and the professional training of management staff including the effective incorporation of women in order to achieve the fullest possible use of available human resources with particular reference to industrial management".<sup>3/</sup>

6. Last but not least, UNIDO training operations endeavour to promote self-reliance of the developing countries by enabling national industrial personnel to replace, eventually, foreign experts on whose services many of these countries still have to rely.

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<sup>1/</sup> Lima Declaration and Plan of Action on Industrial Development and Co-operation (PI/38), para. 53.

<sup>2/</sup> Ibid., para. 55.

<sup>3/</sup> Ibid., para. 58 (k).

A. Industrial training field operations

7. UNIDO is prepared to conduct, at the request of Governments, a variety of training projects in developing countries. Such activities are strongly emphasized particularly because they contribute directly to improving industrial training infrastructure, which in turn leads to a rapid increase in the supply of skilled personnel by means of tailored training activities at relatively low cost. These activities may cover:

(a) Design and development of national and sectoral industrial training institutions. (Example: UNIDO is assisting a ministry of industry in organizing and operating an in-plant training centre for engineers; training needs of engineers already employed in industry are identified; short, intensive, specialized training programmes are designed and conducted in the light of such needs);

(b) Design and development of training departments for Governments, holding companies and individual enterprises. (Example: UNIDO is assisting a large semi-governmental holding company to develop its own central training department and training departments in two or three of its subsidiaries);

(c) Specialized training programmes, including the provision of lecturers, trainers and training equipment, for specific groups of industrial personnel. (Example: UNIDO assisted a country in providing local training courses on quality control for export-oriented industries);

(d) Assistance to national management development institutes. (Example: UNIDO is assisting such institutes in order both to increase their management training capacity and to replace expatriate experts by highly qualified national personnel).

8. Industrial training field projects are normally financed from UNDP country programme funds. Other financing possibilities are the Special Industrial Services (SIS) fund (for short-term, small-scale assistance of what may be called the "fire brigade" type), the UNIDO regular programme of technical assistance and the United Nations Industrial Development Fund (UNIDF).

9. Further and more detailed information on UNIDO industrial training field operations can be requested from the Training Section, Industrial Operations Division, UNIDO. Projects of this type should be requested by Governments in compliance with the established United Nations rules.

### B. Fellowships

10. UNIDO fellowships are awarded in accordance with rules established by the United Nations. Since the inception of UNIDO, in 1968, approximately 5,050 individuals have been awarded fellowships, of whom approximately 4,500 have thus far completed their training programmes. One of the major advantages of individual fellowships is the possibility of designing and implementing a training programme tailored to the needs and wishes of the candidate. Unfortunately, ever more difficulties have been encountered in finding suitable placement facilities in the industrialized countries for individual fellows; at the same time the training and the living costs in most of the traditional host countries have been increasing continuously. Therefore, UNIDO arranges, where feasible, small special group training programmes for fellowship candidates in the same field of training, at a comparable professional level, and with a common training language. Such programmes are carefully designed on the basis of information given in the nomination forms of the candidates. They are implemented and supervised in co-operation with selected enterprises and institutions and may yield better results than the traditional individual training. (These special fellowship group training programmes are not identical with the in-plant group training programmes described in section D).

11. Furthermore, it is the policy of UNIDO to place more individual fellows in suitable industrial training facilities in advanced developing countries, which helps to promote closer technical co-operation between developing countries. Regrettably, the percentage of placements in such countries decreased slightly during 1977. UNIDO is prepared - partly with the support of industrialized countries - to assist potential host countries among the developing countries in identifying local training facilities suitable for trainees from other developing countries and, if necessary, in adapting such facilities to that purpose.

12. With a view to establishing more direct contacts between UNIDO headquarters on the one hand and the UNIDO fellows in the host countries on the other, UNIDO has taken over from the United Nations Office in Geneva the responsibility for placing its fellows in European host countries. This placement is normally done through the responsible agency in the host country, which, as a rule, is also responsible for implementing the bilateral fellowship programmes of that country.

13. In this connection it should be mentioned that placing a fellowship candidate properly is often a cumbersome and time-consuming process (which perhaps even more applies to study tours as described in section C). Thus, for example, the average handling time of individual fellowships from the receipt of a nomination form at UNIDO headquarters to the beginning of the training programme abroad was 8.3 months in 1975 and 7.8 months in 1976. In 1977 the Fellowship Unit of the Training Section of UNIDO was able to reduce this time span to an average of 3.4 months, which was partly the result of the direct placement procedures mentioned in paragraph 12, but partly also the result of extreme pressure of time owing to last-minute nominations. All concerned should be aware that undue haste can be detrimental to the programmes of the fellows (and study travellers), while it also may spoil the good working relations with the National Supervising Authorities of the host countries on whose good services UNIDO has to rely. UNIDO is trying (without committing itself) to reach a sound standard average handling time for fellowship cases of about 4 months and requests all concerned to take this seriously into consideration when planning such programmes.

14. In 1977, the implementation of the UNIDO fellowship activities suffered furthermore from the fact that, within the established UNDP ceiling amounts earmarked for training, fellowship nominations worth almost \$ 800,000<sup>4/</sup> were not submitted to UNIDO.

15. Nominations of candidates for all types of UNIDO fellowships can be made only by Governments through the UNDP resident representatives and must be submitted on official UNIDO fellowship nomination forms accompanied by a completed and duly signed medical report form and a recognized language certificate when the training language is not the candidate's working or study language. These forms can be obtained in the offices of the UNDP resident representatives. UNIDO cannot start any fellowship action until it receives these documents.

Fellowships financed from the UNIDO regular programme of technical assistance

16. A total of \$ 200,000 is earmarked for fellowships within the 1978 UNIDO regular programme of technical assistance (ID/B/184, para. 5). This amount is allocated to the geographical regions as follows:

<u>Region</u>	<u>Cost (thousand dollars)</u>
Africa	60
Americas	52
Asia and the Pacific	52
Europe and Western Asia	36

<sup>4/</sup> Reference to dollars (\$) is to US dollars.

The same total amount with the same allocation to the geographic regions is earmarked for fellowships in the 1979 regular programme.

17. Fellowship posts are not allocated by country. Governments are invited to request fellowship posts from the 1978 regular programme only by submitting a completed nomination form in quadruplicate as described above for each candidate through the UNDP resident representatives. Any announcement of candidates by letters, cables or otherwise cannot be considered. The deadline for submission of such nominations is 30 June 1978. Nominations received after this date cannot be considered for 1978 regular programme fellowships. However, on request of the submitting Governments, they can be brought forward for consideration in the 1979 regular programme.

18. On the basis of the information given in the nomination form and within the framework of the financial resources available, the UNIDO fellowship selection panel will promptly make recommendations as to the amount of the award, the host country (countries), the duration of the fellowship and the type of implementation (e. g. individual training or participation in a special fellowship group training programme or participation in a suitable in-plant group training programme). The duration of fellowships financed from the regular programme should not exceed six months. Neither study tours nor academic studies to obtain a degree can be financed from the fellowship component of the regular programme. Furthermore, these funds cannot be used to compensate for a lack of UNDP country programme funds.

Fellowships financed from UNDP country programme funds

19. Fellowships financed from UNDP country programme funds will normally be organized by UNIDO in the form of individual training as has been the case in the past. However, with a view to the possible participation of nominees in a suitable fellowship group training programme as described in paragraph 10 as well as for administrative reasons, Governments, resident representatives or project managers are strongly requested to ensure that nominations for such fellowships shall be submitted as early as possible.

20. UNIDO would like to draw the attention of all concerned, in particular Governments, industrial development field advisers and managers of large-scale projects, to the possibility of organizing special fellowship group training programmes for teams of counterparts in field projects. Such team training will be designed to meet both the individual needs of the trainees and the needs of the project as a whole, so that the trainees can work together more effectively.

21. Because of the increasing difficulties in placing individual fellows in enterprises in industrialized countries, the number of host countries in which a given fellow will receive his training must often be restricted.

22. Most fellowships (and study tours) financed under the UNDP country programmes and executed by UNIDO are project-oriented, that is to say, such training activities form a component of a technical assistance project comprising also other components, such as expert services or equipment. It is, however, obvious that in most of the developing countries the actual demand for training in industry goes far beyond what such projects can cover. Therefore, Governments and resident representatives might be willing to consider including a UNIDO-executed project entitled "Industrial Training Abroad" (or similar) in the country programme. Such a project could cover the financing of:

- (a) Fellowships (both individual or group);
- (b) Study tours (both individual or group);
- (c) International travel for participants of UNIDO in-plant training programme (see section D below) when the cost cannot be financed from other funds;
- (d) Travel of UNIDO headquarters staff to monitor, evaluate and follow-up training activities as listed under (a) and (b);
- (e) Miscellaneous items such as purchase of technical literature.

23. The budget lines of such projects should, at least at the beginning of a country programme cycle, not be further broken down, so that UNIDO, in co-operation with the Governments and UNDP resident representatives, can have the funds available in quick response to existing needs. The lifetime of such projects for training abroad should not be limited.

24. The size of these projects, while taking into account past practice, should correspond to the estimated needs of the recipient countries for industrial training abroad in priority areas not covered by other field projects or by other sources of technical assistance (e.g. bilateral funds).

25. UNIDO is prepared to assist Governments both in drafting projects for industrial training abroad and in carrying them out.

Fellowships financed from the Special Industrial Services fund (SIS)

26. Fellowships financed from the SIS fund will in general be handled in the same way as those financed from UNDP country programme funds. In this connection it should



be kept in mind that SIS financing should respond to urgent, short-term needs. Under such circumstances projects for industrial training abroad as described in paragraphs 22 - 25 could be financed from SIS funds.

Fellowships financed from funds-in-trust

27. UNIDO is prepared to organize fellowship training at the request of Governments of developing countries willing to bear the full cost plus overhead by establishing funds-in-trust with UNIDO earmarked for this purpose. The use of such funds is particularly appropriate for specific fellowship group training programmes as described in paragraph 10, including project-oriented team training as described in paragraph 20. In other words: this is a variety of the project for industrial training abroad as described in paragraphs 22 - 25, where the respective Government, while paying the total cost itself, benefits from the experience and administrative capacity of UNIDO in this particular field.

28. For fellowships financed from funds-in-trust, the United Nations financial and administrative rules established for this purpose will apply.

Use of bilateral resources for fellowships

29. UNIDO has been informed by several host authorities of industrialized countries that, under certain circumstances and within certain limits, UNIDO fellowship candidates can be financed from their bilateral fellowship funds, on recommendation of UNIDO. Particular emphasis is given to training for nationals of least developed countries. The training programme of such fellows will be carried out in the respective donor countries. UNIDO is trying to extend this possibility, which is still very limited.

C. Study tours

30. At the request of Governments, UNIDO can organize study tours for both individuals and groups. Participants in such study tours can be high-ranking government officials responsible for industrial development, top managerial staff from certain industrial firms or institutions, or national directors or teams of counterpart experts from UNIDO-sponsored projects.

31. The aims of UNIDO-organized study tours are primarily to enable: decision makers from developing countries to exchange views with their peers in other countries; specialists to obtain information on technological developments (e.g. in pertinent institutions or firms or at exhibitions or trade fairs); technologists and managers

to study solutions to problems in existing factories of a certain industrial sector; scientists to compare results of their research; and experts to attend conferences to widen and deepen their professional competence. The duration of UNIDO study tours is, in principle, short, the average tour lasting about two weeks; it should not exceed one month. The maximum number of countries to be visited is five. A tour can be financed from UNDP country programme funds if the project includes a budget line 32 for that purpose; from the SIS fund; from the United Nations Industrial Development Fund (UNIDF); or from earmarked funds-in-trust pledged by the recipient countries. Study tours cannot be financed from the general training component of the UNIDO regular programme of technical assistance; however, special provision is made in the regular programme for study tours for decision makers or government officials from the least developed countries (ID/P/184, paragraph 13).

32. To design and organize a successful study tour is, in most cases, a rather complicated undertaking, which needs continuous close co-ordination on the part of numerous authorities, institutions and firms in several countries. For this reason, nominations of candidates for study tours should reach UNIDO on the study tour nomination form ("short form") at least three months before the date on which the tour is expected to start. This applies also to study tours where part or all of the arrangements have been prepared by direct contacts between the home country authorities or the management of a field project on the one hand and the host institutions on the other. The aforementioned forms can be obtained at the office of the UNDP resident representative. Nominations can be submitted to the Training Section of UNIDO only by Governments through the UNDP resident representatives.

#### D. In-plant group training programmes

33. UNIDO has developed a system of in-plant group training programmes for engineers and advanced technical and managerial personnel from developing countries in co-operation with Governments and pertinent institutions of host countries. These programmes are carried out by industrial firms and institutes that have the relevant specialized know-how and experience.

34. The objective of these programmes is to provide the participants with concentrated practical experience in their fields of training and an opportunity to upgrade and update their theoretical knowledge in a relatively short time (from two to five months).

The programmes are monitored by experts, and most of them comprise four major components: a theoretical introduction; actual in-plant training, which may include laboratory or similar work; study visits; and a final evaluation session. During the evaluation session, the participants assess the value of what they have learned in terms of the conditions prevailing in their home countries. (These in-plant group training programmes are not identical with the special fellowship group training programmes described in paragraph 10.)

35. Many of these programmes are conducted regularly, others on an ad-hoc basis. All of them are carried out subject to the availability of funds and suitable host facilities. The requirements for admission are a degree in engineering (or equivalent) and several years of experience in a responsible capacity within the field of training.

36. Invitations to nominate candidates are sent to the appropriate government authorities of selected developing countries through the UNDP resident representatives once the agreement with the host country has been concluded, funds have been secured, and dates and curriculum of the programme have been established. The selection of the 12 - 20 participants from among candidates nominated is carried out jointly by UNIDO and the host authorities, including, where possible, representatives of the host institutes and UNDP when it is involved.

37. Applications for participation can be made only by Governments, after receipt of a formal invitation - in the form of an aide-mémoire - through the UNDP resident representatives. However, Governments are invited to notify UNIDO as early as possible of their interest in specific programmes. More detailed information, in particular about specific admission requirements and curricula, can be obtained from the Training Section of UNIDO.

38. The table below shows the UNIDO in-plant group training programmes to be carried out in the biennium 1978-1979.

<u>Date</u>	<u>Subject</u>	<u>Host country</u>	<u>L.</u>
January-March	Maintenance of bio-medical electronic equipment	Hungary	I
February-June September-November	Iron and steel industry	Ukrainian SSR	E
February-March	Quality improvement of industrial products	Japan	E
March-April	Documentation and industrial information	USSR	E/F/S

<u>Date</u>	<u>Subject</u>	<u>Host country</u>	<u>Language</u>
March-May	Fertilizer industry	USSR	E
March-May	Grain milling and storage	USSR	E
March-May	Pulp and paper	Sweden	F
March-June	Metalworking industry	USSR	E
March-June	Organization of standardization systems in manufacturing industries	USSR	E
March-June August-November	Electric welding	Ukrainian SSR	E
April-June	Engineering and industrial design	Egypt	E
April-June	Organization and management of maintenance systems	Sweden	E
May-June	Modern foundry technologies	Poland	E
May-June	Methods and techniques of pesticide production and formulation	German Dem. Republic	E
July-August	Industrial co-operatives	Poland	E or S
August-September	Quality control	Sweden	E
August-November	Organization of metrology and metrological quality assurance	USSR	E
September-October	Mould design and mould making in plastics industry	Austria	E
September-October	Plastics technology	Austria	E
September-November	Diesel engines	CSSR	E
September-November	Maintenance buses and trucks	Belgium	F
September-November	Maintenance of railroad equipment	Belgium	F
September-November	Petrochemical industry	Romania	E
September-November	Textile industries	Poland	E
October-November	Management techniques in manufacturing industry	Belgium	F
October-December	Production management of mechanical industry	Japan	E

E. Other group training programmes

39. UNIDO also organizes training programmes and courses of a shorter duration (from two to six weeks). Their objective is to give the participants an opportunity to upgrade or update their professional capability. The activities may include lectures, discussions, working groups, simulations, and visits to plants and to trade fairs or exhibitions.

40. The requirements for admission are a university degree (or equivalent) covering the respective field of study and several years of practical experience in that field. Nominations can be submitted to UNIDO by Governments - only after receipt of a formal invitation - through the UNDP resident representatives. Invitations to submit candidates for a certain programme will be sent to the appropriate government authorities of selected developing countries through the UNDP resident representatives once a programme has been established. Further information on this type of training activity can be obtained from the Training Section of UNIDO.

#### F. Information and Inquiry Service

##### "Guide to Training Opportunities for Industrial Development"

41. For 1978, UNIDO has prepared the sixth issue of its "Guide to Training Opportunities for Industrial Development" (PI/59), which gives information on more than 800 training courses in a great variety of industrial fields, courses that will be organized during 1978 all over the world by private, national and international organizations and institutions, including UNIDO itself. These courses are suitable for and available to industrial personnel from developing countries. Approximately one third of these courses are offered by institutions in developing countries and open to participants from other developing countries. The Guide will be mailed free of charge to Governments; UNDP resident representatives; UNIDO industrial development field advisers; managers of UNIDO-sponsored large-scale field projects; enterprises; industrial associations and institutions; and many others. The total circulation is about 4,500. Requests for copies of the Guide should be directed to the Training Section of UNIDO.

##### Industrial Inquiry Service

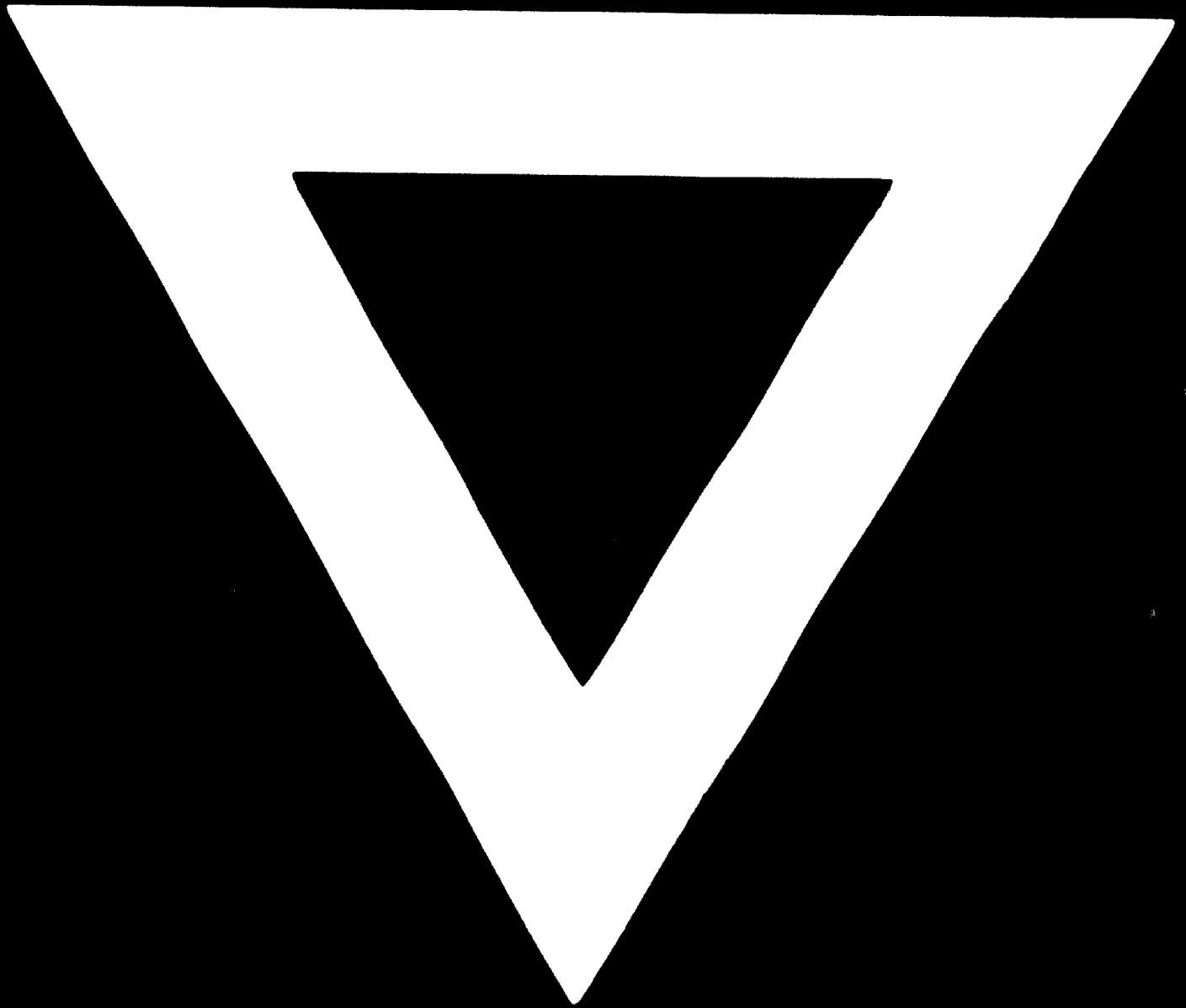
42. The UNIDO Industrial Inquiry Service is prepared, inter alia, to answer any questions related to industrial training. This service, free of charge, is at the disposal of everyone.

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For further information on assistance UNIDO provides or can provide in training, communication may be addressed to:

Training Section  
Industrial Operations Division  
United Nations Industrial Development Organisation (UNIDO)  
P.O. Box 707  
A-1011 Vienna  
Austria

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**79.11.15**