Helmut Felber
Infoterm, Wien

Infoterm and TermNet. Plans, Activities, Achievements

Felber, H.: Infoterm and TermNet. Plans, activities, achievements.
In: Intern. Classificat. 7 (1980) No. 3, p. 140–145
A general survey of the activities of the International Information Centre for Terminology (Infoterm) in Vienna during the last ten years and of the aims and plans regarding further coordination work and related activities and measures, also with respect to the establishment of TermNet, a set of programmes for the development of international cooperation in terminology. The entire programme is also presented in diagram form. I. C.

0. Introduction

Infoterm was established in 1971 within the framework of UNISIST (now General Information Programme of Unesco) with a view to worldwide co-ordination of terminological activities. It is affiliated to the Österreichisches Normungsinstitut (Austrian Standards Institute) and functions in close co-operation with TC 37 "Terminology (principles and co-ordination)" of the International Organization for Standardization (ISO), the Secretariat of ISO/TC 37 being held by the Austrian Standards Institute. At the First Infoterm Symposium in Vienna in 1975 it was generally felt that closer international co-operation in terminology is necessary. This led to the establishment of TermNet – a set of programmes for the development of international co-operation in terminology. These programmes comprise the theory of terminology, the preparation of terminologies and terminology documentation.

This paper is intended to give an overview of the efforts undertaken on the international level to achieve better coordination of all terminological activities in the world. It presents not only the aims, plans, activities and achievements of Infoterm and of TermNet but also those measures to be taken in a co-operative action, in order to forge the sophisticated communication tools for special purposes which will meet future requirements for man, man-machine and machine-machine communication alike.

All organizations engaged in terminology are invited to consider the contributions they could make to TermNet for the benefit of all concerned (in terminology) including themselves. Any proposals for future activities would be greatly appreciated.

TermNet is now going through a stage in which work is concentrated on the development of the infrastructure such as the preparation of unified guidelines, formats and of models necessary for the functioning of a network.

The Second Infoterm Symposium is to be convened in 1982. It is intended to discuss at this symposium the progress achieved so far in TermNet, the plans implemented, future TermNet structure (steering and advisory committees, etc.) and future plans.

1. General activities

Infoterm has the function to co-ordinate terminological activities all over the world within the framework of Unesco's General Information Programme. It carries out the following activities:

1.1 *Collecting and analysing of terminological information*

Infoterm collects and analyses terminological publications from all over the world, particularly:
- standardized vocabularies and terminological principles
- specialized vocabularies, terminologies, etc.

It prepares bibliographies of vocabularies.
No specific subject field or language is excluded.

1.2 *Collection of standardized vocabularies*

Infoterm collects standardized vocabularies from all over the world and keeps this collection up-to-date. This collection is a basis for training, for research, for developing terminologies in languages where they do not exist, and for the preparation of BT 2 (see 2.3.2.3(2)).

1.3 *Information service*

Infoterm disseminates information on:
- terminological publications already in existence or in preparation,
- terminological libraries and – as far as possible – on their holdings,
- terminological training

1.3.1 *Passive information service*

Infoterm answers queries (orally, by letter, by telex, etc.)

1.3.2 *Active information service*

Infoterm disseminates relevant information such as surveys of special topics:
1) a *list* of ISO[1] and national standards and recommendations on terminological principles and non-standardized guidelines for terminology, terminological lexicography and thesauri was published as Infoterm Newsletter 4.
2) a *list* of terminological data banks with a list of publications on terminological data banks was published as Infoterm Newsletter 1.
3) a *list* of symposia on terminology held since 1964 was published as Infoterm Newsletter 9, etc.

1.4 *Advice on and dissemination of terminological knowledge*

Infoterm advices on topics within its special competence, e.g.
- application of terminological principles and methods of terminological lexicography
- organization of terminology work
- application of documentation methods and formats, and classifications.

It provides advice to institutions undertaking terminological projects.

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

1.5 *Editing and authorship*

Infoterm is editor, co-editor or author of:
- Infoterm Series (editor and co-author)
- Infoterm Newsletter (editor and co-author)
- TermNet News (in preparation)
- Fachsprache (co-editor)
- papers (author) on terminological topics which are published in relevant periodicals such as International Classification, Fachsprache, etc.
- books such as "Einführung in die Allgemeine Terminologielehre und Terminologische Lexikographie" (author), "Terminologie als angewandte Sprachwissenschaft" (co-editor), "Selected Readings in Terminology" (co-editor), etc.

1.6 *Studies in terminology*

Infoterm prepares studies of specific topics.
These studies are intended to serve as a basis for discussions and decisions of expert panel meetings and for later actions. Examples of such studies are:
1) Study of the development of a network for terminology information and documentation (1978)
2) Comparative study of terminological data elements of the General Theory of Terminology and on those data elements used world-wide in terminological data banks (1979).

1.7 *Pilot projects*

Infoterm launches pilot projects intended to produce prototype models which can be adapted to individual needs. These projects are either carried out by Infoterm or in collaboration with various partners.
Examples of such models are:
1) International bibliography of standardized vocabularies (Infoterm Series 2)
2) World Guide to terminological activities (Infoterm Series 4), and others

1.8 *Terminology teaching*

At the University of Vienna, Institute of Linguistics, a course entitled "Introduction to the General Theory of Terminology" is being taught by the director of Infoterm. This course is kept up to date. Students at the University of Vienna have the possibility to write PhD theses on terminology.

1.9 *Study visits*

Experts from all over the world visit Infoterm to study the theory of terminology, terminological principles, terminology documentation and to acquaint themselves with TermNet projects. So far such experts have come from Europe, North and South America, Africa as well as from transnational and international organizations, universities, big firms, etc.

1.10 *Organization of meetings or conferences*

Infoterm convenes meetings or conferences designed either to inform on new developments or to serve as a forum for discussions with ensuing decisions on common actions to be taken on essential issues.

If the need for a meeting arises Infoterm – in consultation with Unesco – either convenes such a meeting or suggests that such a meeting be organized jointly with Infoterm by a competent organization.
Examples of such meetings are:

1) First Infoterm Symposium on International Co-operation in Terminology, Vienna (1975) (organized by Infoterm)
2) International Symposium on Terminology Teaching, Québec (1978), (organized by AILA[2], University Laval, OLF[3], DGTD[4]. Infoterm shared responsibility).
3) First International Conference on Terminological Data Banks, Vienna (1979), (organized by Infoterm).
4) International Symposium on Theoretical and Methodological Problems of Terminology, Moscow (1979), (organized by GOSSTANDART[5], Academy of Sciences of the USSR. Infoterm and AILA shared responsibility.

1.11 *Management of the Wüster Research Library*

For more than four decades Prof. Wüster collected terminological documents from all over the world in Wieselburg (Lower Austria). After his death this library, located in Wieselburg, was acquired by the Austrian Standards Institute. It is a basic source for scientific work. This library will be moved to Infoterm in Vienna in 1981.

1.12 *Project: International Institute for Advanced Studies in Terminology*

For three decades Prof. Wüster established and directed a private research institute for terminology in Wieselburg. The results of research of this institute became known in competent quarters all over the world.

After Wüster's death Infoterm was asked by various people to ensure continuation of these activities and the operation of the research library.

Since basic research in terminology is becoming increasingly important for future developments and a comprehensive collection of terminological source material is the basis for such research (see 1.11), Infoterm is trying to find the necessary funds for the establishment and management of an international institute for advanced studies in terminology.

The tasks of this institute would be:
- to collect and analyse relevant research literature,
- to continue operation of the Wüster Research Library,
- to provide all those carrying out research in terminology with the necessary source material and assistance,
- to hold training courses and summer schools,
- to carry out scientific pilot projects, etc.

2. TermNet activities

Complying with a recommendation of the First Infoterm Symposium in Vienna a study of the establishment of a network for terminological activities was carried out by Infoterm (see 1.6). The proposals of this study were accepted by the Infoterm Advisory Board, a meeting of which was convened by Unesco in Vienna in 1977. The Infoterm Advisory Board recommended that Infoterm start immediately with the development of the network for terminological activities, called TermNet.

TermNet is intended to encourage:
- co-operative action in the preparation of terminologies, i.e. division of labour with respect to the preparation of terminologies among expert groups and competent professional organizations; exchange of terminological results;
- co-operation in the documentation of terminology, i.e. division of labour in the collection and analysis of terminological literature and recording of bibliographic data, and the exchange of results.

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

This involves:

1) to record in machine-readable form by co-operative action of competent specialized and professional organizations and computing centres specialized in processing terminological data existing terminologies, to update these terminologies and to develop terminologies that do not yet exist,
2) to collect and/or record (in conventional or machine-readable form) bibliographic data on the existing terminological literature by means of co-operative action of all those joining TermNet such as:
- standards, rules, guidelines, methods of terminology work (terminological and lexicographical principles)
- articles on theory of terminology and terminology work in general
- specialized vocabularies
- books and periodicals
- bibliographies on terminological matters

and to exchange these data with TermNet members.

3) to prepare, by co-operative action of all those joinging TermNet, bibliographies either in conventional or machine-readable form:
- International bibliography of terminological papers and books (see 2.3.2.3.)
- International bibliography of standardized vocabularies (see 2.3.2.3.)
- International bibliography of monolingual and multilingual specialized vocabularies (to be prepared in parts "individual subject fields") (see 2.3.2.3.)
- International bibliography of standardized terminological and lexicographical principles and guidelines (see 2.3.2.3.).

and to keep them up-to-date, exchange them with TermNet members and – if possible – publish and disseminate them in conjunction with other TermNet members.

4) to collect and/or record (in conventional or machine-readable form) through co-operative action of TermNet members all data on terminology work and training, particularly data on:
- terminology committees in action
- existing or planned terminology documentation agencies
- current or planned terminology projects
- planned terminology courses or seminars
- terminologists (with indication of subject field) and terminology documentalists

and to exchange these data with TermNet members

The three programmes mentioned below serve TermNet.

Programme 1: Developing the scientific basis for terminology (General theory and principles of terminology)

Programme 2: Establishing closer co-operation in preparing terminologies

Programme 3: Establishing closer co-operation in collecting, recording, processing and disseminating terminological data and information.

2.1 *TermNet Programme 1*

This programme is designed to develop the theory of terminology, to disseminate the international terminological principles (ISO) and to develop training in terminology (with AILA).

2.1.1 General principles

2.1.1.1 General theory of terminology: Co-operative action in developing the theoretical foundations of terminology.

Existing results of research conducted by the Vienna School of Terminology, the Soviet School of Terminology (Moscow), the Prague Linguistic School (terminological branch), GIRSTERM[6] (Canada) and of terminological research in other countries are to be disseminated, discussed and an exchange of views ought to be organized (see 2.1.1.3 Selected Readings).

Wüster's "Einführung in die Allgemeine Terminologielehre und Terminologische Lexikographie" [Introduction to the General theory of terminology and terminological lexicography] was edited by Infoterm and published recently in book form in the "Schriftenreihe der Technischen Universität Wien (volume 8); currently translations are being prepared.

International Symposia dealing with terminology science are to be held on a regular basis. The first Symposium of this kind was held in Moscow in 1979 (see 1.10).

2.1.1.2 Unified guidelines: Unified guidelines are the basis for the joint preparation and exchange of terminologies. They are fundamental to the implementation of Programmes 2 and 3.

Guidelines such as six ISO Recommendations and one ISO Standard were developed within ISO/TC 37 "Terminology (principles and co-ordination)" on the basis of experiences gained during several decades in the preparation of important vocabulary undertakings such as those of IEC[7] and that on the Machine Tool[8].

These guidelines are kept up-to-date.

Standards on this subject are to be disseminated and application is to be promoted.

2.1.1.3 Training: Co-operative action in preparing teaching material and aids for university and postgraduate courses is to be undertaken. International symposia on terminology training are to be organized on a regular basis. The first symposium of this kind was held in Québec in 1978 (see 1.10(2)).

GIRSTERM in co-operation with Infoterm is preparing 6 volumes of the "Selected Readings in Terminology":

Volume 1 Theoretical foundations of terminology work
Volume 2 Linguistic problems in terminology
Volume 3 Terminology, documentation and classification
Volume 4 Methods and procedures used in terminology work
Volume 5 Computational terminology
Volume 6 Standardization in terminology

These volumes will be published by GIRSTERM (University Laval, Canada). Work on Volume 1 has already been completed. Teaching aids are being prepared at the School of Economics (Denmark), at the University of Saarbrücken (FRG), at various universities in Canada, in the German Democratic Republic, in the Soviet Union and in other countries.

2.1.1.4 International postgraduate courses: International postgraduate courses are to be organized on a regular basis to disseminate terminological principles, particularly for the implementation of Programme 2.

2.1.1.5 Key to international terminology: In many languages a great number of terms in science and technology are composed of international term elements (morphemes) mostly of Greek and Latin origin. They form international terms which facilitate communication. Term elements and affixes having the same or similar meaning in many languages are to be collected and are to be stored in classified order. They should be used for the formation of new international terms following unified rules which are to be established. Preliminary work has been undertaken in Austria by a group of experts headed by Wüster. A pilot project is to be undertaken for a special section of a subject field.

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

2.1.2 Specialized principles

2.1.2.1 Theories of specialized terminologies: For individual subject fields such as chemistry, biology and individual languages specialized terminological principles apply. They should be developed and kept up-to-date by competent specialists in universities and specialized organizations.

2.1.2.2 Unified guidelines for specific subject fields: For specific subject fields unified guidelines exist. Their development, dissemination and application is to be promoted by appropriate organizations and nomenclature commissions such as IUPAC and others.

2.1.2.3 Training: Teaching material and aids are to be prepared by appropriate specialized organizations.

2.1.2.4 International postgraduate courses: To disseminate these principles postgraduate courses are to be organized by competent specialized organizations.

2.2 *TermNet Programme 2*

This programme is designed to begin a co-operative project with subject specialists and terminologists in a joint effort to record in machine-readable form terminologies existing in numerous branches of science, technology, economics and in different professions, to keep these terminologies up-to-date and elaborate terminologies which do not yet exist, with due consideration of user needs.

This is a comprehensive undertaking which requires the co-operation of specialized and professional organizations (subject specialists), organizations processing terminological data (terminological data banks, computer centres), organizations for dissemination of terminological data (terminological data banks, information systems, publishing houses). Infoterm could provide terminological advice to and management services for the project.

These terminologies are to be prepared as far as possible in accordance with international terminological principles by subject specialists (e.g. terminology commissions) of competent specialized and professional organizations with the co-operative guidance of terminologists, and kept-up-to-date. They are to be recorded in machine-readable form as far as possible and in an agreed format (terminological data elements). They are to be distributed via terminological data banks, information systems and networks or publishing houses in such a form (magnetic disc or tape, microfiche, book or others) that will meet the needs of different user groups. Modern technology will make it possible to supply these data on microfiche or in bookform, directly accessible via monitor from data banks on small magnetic discs with large storage capacity. The use of microcomputers will enable the user or small co-operative groups of users to have access to a terminological data base, consisting of small discs while holdings of these will of course be kept up-to-date.

Since various user groups (subject specialists, language mediators, information specialists) have different needs, optimal machine-readable terminological files are to be designed in accordance with these needs. This requires research and pilot projects, e.g. files will have to be modelled on the basis of Wüster's General Theory of Terminology to meet terminological needs of subject specialists.

2.2.1 Unified guidelines and formats: Terminological principles (ISO Standards) exist for the preparation of terminologies. For recording of terminologies in machine-readable form international formats based on unified terminological data elements will have to be prepared. In preparation of this format a comparative study on terminological data elements was carried out (see 1.6).

2.2.2 Plan for recording terminologies in machine-readable form: A plan will have to be drawn up which shows the action to be taken by all parties concerned: preparatory work (first stage), elaboration of terminologies by subject specialists (second stage), recording of terminological data in machine-readable form (third stage), processing of these data (fourth stage), and dissemination of these data in the most appropriate form for the user (fifth stage).

This plan is to include proposals for pilot projects, possible presentation of terminological data on various data carriers, outlets for terminological products (terminological data banks, information systems, publishing houses), marketing, etc.

For the implementation of the programme, pilot projects will have to be launched for:
- terminological data elements to be used
- recording of terminological data elements (formats)
- specific files
- data carriers etc.

2.2.3 Co-operation with respect to data processing (terminological data banks): Terminologies prepared by subject specialists working in specialized and professional organizations and recorded in machine-readable form are to be processed by computer centres specialized in processing terminological data (primarily terminological data banks). Co-operation of these specialized organizations with computer centres is necessary for the production of tapes or discs, which are the basis for all other terminological products (terminological data in any desired order on the data carrier (i.e. microfiche, book, etc.)). Terminological data have to be elaborated and recorded on worksheets.

2.3 *TermNet Programme 3*

The purpose of this programme is to promote the co-operation in the collection, analysis, recording and dissemination of

1) terminological data
2) bibliographic data on terminological literature
3) data on organizations engaged in terminological activities, terminology experts, terminology projects, etc.

2.3.1 Terminological data

2.3.1.1 Unified guidelines for recording of terminological data in machine-readable form and for their exchange: Standardized guidelines for the exchange of terminological data are in preparation by ISO/TC 37 (ISO/DP 6156 Exchange format). Methods of recording terminological data in machine-readable form will have to be drawn up (see 2.2.1) and included in other ISO Standards of ISO/TC 37 such as ISO 919, 1149 and 4466.

2.3.1.2 Plan for processing terminological data: A plan for the processing of terminological data prepared and recorded by specialized organizations will have to be drawn up. This plan will show under which conditions terminological data banks or computer centres special-

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

ized in terminology are prepared to process terminological data in the formats desired.

2.3.1.3 Co-operation of terminological data banks: Efforts to foster co-operation among terminological data banks in processing, storing, exchanging and disseminating terminological data.

2.3.1.4 Pilot project "model terminological data files": For specific needs models of terminological data files are to be designed to demonstrate the possibilities. Such models are very important for training, research and for those having to establish a data bank for a specific purpose. Example of such a model: A file of terminological morphemes and affixes for forming national and international terms respectively.

2.3.1.5 Comparative study of terminological data elements: Unified data elements are the basis for the recording and exchange of terminologies (item 2.2). For this reason a draft comparative study of terminological data elements drawn from the General Theory of Terminology, and a study of those data elements used in terminological data banks of the world was prepared by Infoterm in 1980 (TermNet 1–80). A detailed study will have to follow.

2.3.2 Bibliographic data on terminological literature

2.3.2.1 Unified guidelines for recording of bibliographic data in machine-readable form and their exchange: In co-operation with UNIBID (UNISIST International Centre for Bibliographic Description) Infoterm prepared formats for the recording and exchange of bibliographic data for International Bibliographies BT 1 to BT 4 and BT 6 (see 2.3.2.3). These formats are compatible with the UNISIST Reference Manual and ISO Standards.

2.3.2.2 Plan for recording bibliographic data: Infoterm prepared a plan for recording bibliographic data (TermNet 5(5)–79) which was submitted for discussion to the Infoterm Advisory Board meeting held in Vienna in 1979.

2.3.2.3 International Bibliographies: It is intended to collect and record in a co-operative action bibliographic data on terminological literature in machine-readable form, to process them, to store them on magnetic tape for the production of microfiche or books and to keep these international bibliographies up-to-date.

BT 1 – International Bibliography of Terminological Papers and Books: Bibliographic data on more than 1000 articles and books were recorded by Infoterm and other institutions in Canada, CSSR, USSR, GDR and other countries and were classified in accordance with the system designed by Infoterm for this purpose. They were recorded on magnetic tape in the information centre of the Laval University, Québec, Canada under the supervision of GIRSTERM[6]; final publication is pending.

This bibliography is being kept up-to-date. It is hoped that more institutions all over the world will co-operate and send bibliographic data on terminological articles and books to Infoterm or GIRSTERM for processing and inclusion in this bibliography.

BT 2 – International Bibliography of Standardized Vocabularies / Bibliographie internationale de vocabulaires normalisées / Internationale Bibliographie der Normwörterbücher: This bibliography, published in April 1979 as Infoterm Series 2, covers bibliographical references on some 9000 terminological standards (relating to any subject field and language treated). At present it is being kept up-to-date with all data stored on tape; publication of supplements is intended.

Furthermore, dissemination of these data via different information systems is also being investigated.

BT 3 – International Bibliography of Multilingual Specialized Vocabularies: Some pilot projects, such as for building or the social sciences were carried out by Infoterm. The recording of the bibliographic data in machine-readable form and their publication in parts (branches) in book-form is intended as soon as funds are available.

BT 4 – International Bibliography of Monolingual Specialized Vocabularies: Pilot projects will have to be carried out. Recording of the bibliographic data in machine-readable form and publication in book-form is intended as soon as funds are available.

BT 6 – International Bibliography of Standardized Terminological Principles and Guidelines: Infoterm collects all standardized terminological and lexicographical principles and guidelines and prepares BT 6 which is kept up-to-date. BT 6 was published as Infoterm Newsletter 4.

2.3.3 Data on organizations active in the terminological field, terminological experts, projects, etc.: These data are basic for the functioning of TermNet and for all three programmes. In 1977 Infoterm prepared the World Guide to Terminological Activities (Infoterm Series 4). A pilot project is being carried out to record these data in machine-readable form on tape. This collection of data recorded in a format developed by Infoterm and the Institute for Automated Documentation in Graz, Austria (see 2.3.3.1) will be kept up-to-date with data arriving from TermNet partners. It is intended to disseminate these data to interested organizations and information system s and networks.

2.3.3.1 Unified guidelines for recording and exchange of data on terminology organization: Infoterm will prepare guidelines for recording such data on the basis of a pilot project carried out in 1979.

2.3.3.2 Plan for recording data on terminology organization: A plan will be prepared by Infoterm which shows the activities required for the collection, recording, processing and distribution of these data.

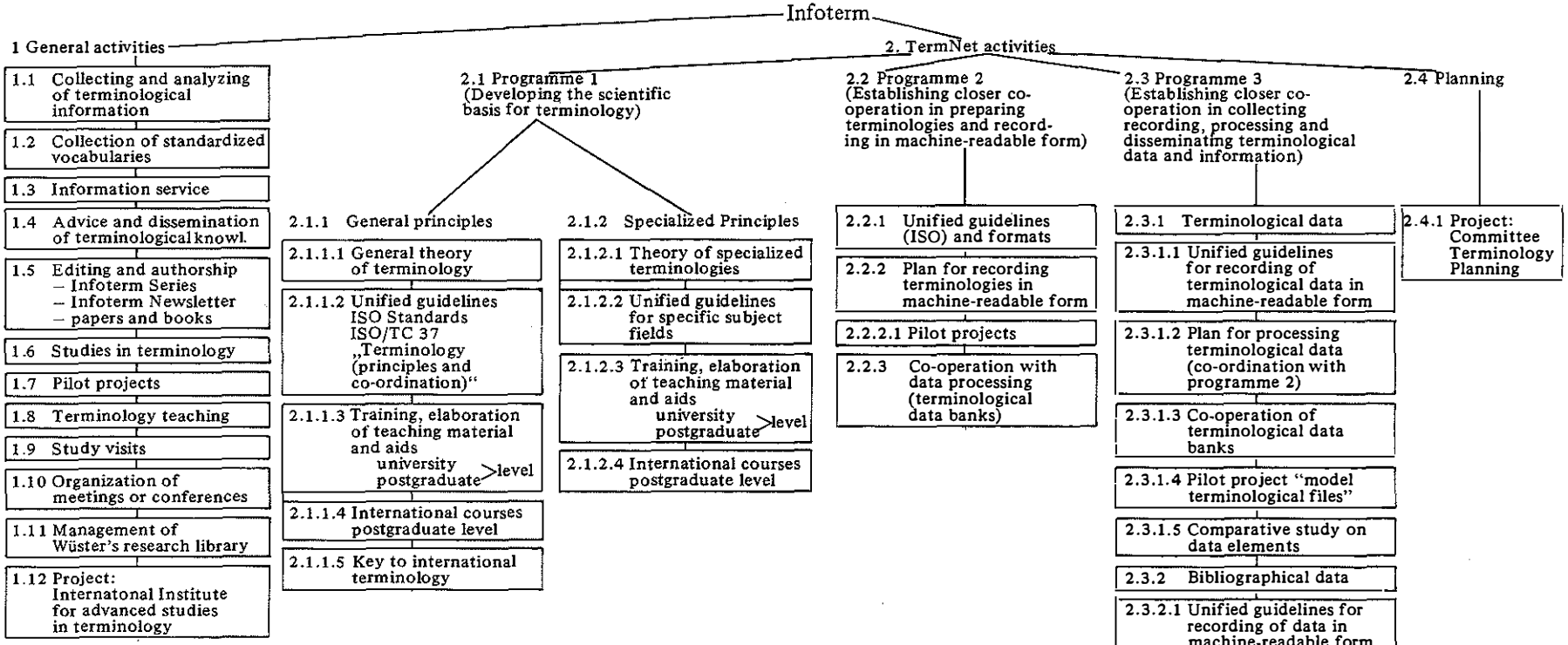
2.3.3.3 Pilot project for recording data on terminology organization: In 1980 Infoterm will record the updated data contained in the World Guide in machine-readable form.

2.4 *Planning*

Advisory Committee: For the future development of TermNet a permanent advisory committee on planning in terminology is necessary.

1 ISO = International Organization for Standardization
2 AILA = International Association for Applied Linguistics.
3 OLF = Office de la Langue Française, Québec, Canada.
4 DGTD = General Directorate for Terminology and Doeumentation, Secretariat of State, Ottawa, Canada.
5 GOSSTANDART = State Committee for Standards of the USSR.
6 GIRSTERM = Groupe Interdisciplinaire de Recherche Scientifique et Appliquée en Terminologie.
7 IEC = International Electrotechnical Commission, Geneva.
8 Wüster, E.: The Machine Tool. An interlingual dictionary of basic concepts. Volume 1: The Master Volume in English and French. London: The Technical Press Ltd., 1968, 756 p., over 570 fig., 145 x 220.

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY



Abbreviations:
BT = International Bibliography
Infoterm = International Information Centre for Terminology
ISO = International Organization for Standardization
TermNet = International Network of Terminological Activities

https://doi.org/10.5771/0943-7444-1980-3-140 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY