

UNITED NATIONS  
ECONOMIC  
AND  
SOCIAL COUNCIL



Distr.  
GENERAL

E/CN.3/479  
11 May 1976

ORIGINAL: ENGLISH



STATISTICAL COMMISSION  
Nineteenth session  
New Delhi, 8-19 November 1976  
Item 5 (d) of the provisional agenda

ECONOMIC STATISTICS

PUBLIC SECTOR STATISTICS

Draft detailing of the classification of the purposes of government

Report of the Secretary-General

SUMMARY

The preparation of a more detailed version of the purpose classification of expenditures of government in the United Nations System of National Accounts (SNA) is part of the work programme of the Statistical Office approved by the Commission at its seventeenth session. A document entitled "Draft detailing of the classification of the purposes of government" (ST/ESA/STAT.82) was accordingly prepared and circulated to national statistical offices and interested international organizations for comment. The present report is a summary of the comments received on document ST/ESA/STAT.82; the latter will be available to the Commission as a background document.

The detailed classification is intended to meet needs that have become apparent since the classification appearing in SNA (table 5.3) was developed. Special attention is devoted to three areas: expenditures on social and community services, needed in connexion with the further development of social and demographic statistics; expenditures on research and development; and expenditures relating to environmental pollution.

A number of the comments received dealt with the principles underlying the classification in these areas. Others were concerned with over-all questions relating to the classification as a whole. Section A of chapter II (paras. 4-31) treats these general topics, dealing first with questions of compatibility with other classifications and of general structure, and then with each of the areas listed above. Section B of chapter II (paras. 32-40) relates to specific comments on particular items in the draft classification.

CONTENTS

|                                                                                 | <u>Paragraphs</u> |
|---------------------------------------------------------------------------------|-------------------|
| INTRODUCTION . . . . .                                                          | 1                 |
| I. ACTION BY THE COMMISSION . . . . .                                           | 2                 |
| II. SUMMARY OF COMMENTS RECEIVED ON THE DRAFT CLASSIFICATION . . .              | 3 - 40            |
| A. Comments on the general principles of the purpose<br>classification. . . . . | 4 - 31            |
| B. Specific comments on selected purpose categories. . . . .                    | 32 - 40           |

## INTRODUCTION

1. Document ST/ESA/STAT.82 entitled "Draft detailing of the classification of the purposes of government", which had been prepared at the request of the Commission at its seventeenth session, 1/ was circulated to a number of national statistical offices and international organizations for comment in October 1975. The present document summarizes the comments received on the draft classification. Respondents commented both on the general principles underlying the draft classification and on specific entries. Both types of comments are summarized in chapter II below. Section A covers issues discussed in the explanatory text accompanying the draft classification, and section B contains specific suggestions regarding selected categories of the draft classification.

### I. ACTION BY THE COMMISSION

2. The Commission may wish, in the light of the comments summarized in chapter II, to comment upon the draft classification, indicating what choices should be made and what further work needs to be done to bring the classification to final form.

### II. SUMMARY OF COMMENTS RECEIVED ON THE DRAFT CLASSIFICATION

3. The explanatory text to the "Draft detailing of the classification of the purposes of government" (ST/ESA/STAT.82) points out that it is intended to serve the increasing interest that has arisen in three areas since the classification appearing in table 5.3 of A System of National Accounts (SNA) 2/ was developed. These areas are: (a) expenditures on social and community services for use in the further development of social and demographic statistics; (b) expenditures on research and development; and (c) expenditures relating to environmental pollution. Section A below summarizes comments relating to this discussion.

#### A. Comments on the general principles of the purpose classification

##### 1. Compatibility with other classifications

4. Many of the comments received point to the importance of adjusting the present draft classification (ST/ESA/STAT.82) to the structure and content of existing purpose and related classifications. If full adjustment is not possible or desirable, links should be provided between this classification and the existing ones, and a description of these links incorporated in the introduction. The

---

1/ Official Records of the Economic and Social Council, Fifty-fourth Session, Supplement No. 2 (E/5236), para. 195 (i) (ii).

2/ United Nations publication, Sales No. E.69.XVII.3.

draft classification contains a short section discussing compatibility with other classifications, but it is mainly limited to consideration of the detailed classification of the purposes of government proposed by the Organisation for Economic Co-operation and Development (OECD). Respondents, however, were also concerned about compatibility with more specialized classifications.

5. In this context, various respondents mentioned OECD and the International Monetary Fund (IMF) extended versions of the SNA purpose classifications, the Frascati Manual 3/ on research and development used by OECD, the classification used by the United Nations Educational, Scientific and Cultural Organization (UNESCO), 4/ the European Economic Community (EEC) and the Joint Institute of Science of the Nordic countries (NORDFORSK) classifications of government research and development funding, the list of government functions and research and development objectives being developed by UNESCO in co-operation with the United Nations Office for Science and Technology, an OECD study on income maintenance outlays in OECD member countries which contains breakdowns of social security and assistance programmes, and finally the International Standard Industrial Classification (ISIC) and the International Standard Classification of All Goods and Services (ICGS); the last document is before the Commission (E/CN.3/493).

6. The UNESCO classification and the classification on research and development presented in the Frascati Manual are closely linked. The Frascati Manual is based on the EEC and NORDFORSK classifications of government research and development functions. Agreement on this classification was reached in a meeting of national rapporteurs on the co-ordination of science statistics with the system of national accounts and balances, held at Geneva in November 1975 under the auspices of the Conference of European Statisticians.

7. The links between the UNESCO/United Nations Office for Science and Technology classification and the present draft classification were extensively discussed in correspondence between the United Nations Statistical Office and the Office for Science and Technology. This correspondence revealed considerable difference in approach. The UNESCO/United Nations Office for Science and Technology classification is based largely on fields of knowledge or problems, whereas the present draft is based on purposes or objectives of government policy.

## 2. Structure of the classification

8. Over-all comments dealing with the classification as a whole questioned balance, feasibility and suitability for developing countries.

---

3/ OECD, The Measurement of Scientific and Technical Activities "Frascati Manual" (Paris, September 1970).

4/ UNESCO, "National survey of scientific and technological activities", Manual for Surveying National Scientific and Technological Potential, chap. II, Science Policy Studies and Documents, No. 15 (Paris, 1970).

(a) Balance

9. A first question was raised on the balance among categories distinguished at different levels of the purpose classification. It was pointed out, for instance, that expenditure on religion and community services if not elsewhere classified (n.e.c.) is distinguished at the two-digit level (7.2), whereas expenditure on degree programmes other than medical at universities, which in most countries would be regarded as more important, is shown only at the four-digit level. A suggestion was made that the numbering system in these and other instances be reconsidered so as to yield a better balance among the subcategories.

(b) Level of detail and feasibility of implementation

10. Another respondent questioned whether it was feasible at the present time to collect data on the detailed subcategories. Recent United Nations and OECD experience has shown that countries even have difficulty in classifying government data according to the nine main purpose categories that now appear in table 15 of the United Nations/OECD national accounts questionnaire. An OECD pilot study on public expenditure was no more encouraging in this respect. Comments from several countries confirmed this point of view. The suggestion was made that the detailed purpose classification be used initially only for central government, and perhaps only for current expenditure. Capital and financial outlays and all transactions of state and local governments would then be reported at the two-digit level.

(c) Amendments for developing countries

11. A proposal was made that the present classification be amended for use in developing countries, to take account of the special data requirements of these countries and of their limited capability for collecting these data. It was suggested that the draft classification be amended as follows:

(a) Use the following categories at the two-digit level:

- 1.4 General research
- 4.2 Hospitals and clinics
- 4.3 Individual health services
- 5.1 Social security and assistance
- 5.2 Welfare services
- 6.1 Housing
- 7.1 Recreational and related cultural services;

(b) Use the three-digit categories of 8.2 (Agriculture, forestry, fishing and hunting);

(c) Replace by single subcategories the following groups:

/...

- 1.1.3/4/9 General administration
- 1.2.3/4 External affairs
- 2.3/4/5 Defence

(d) Rearrange considerably the categories under education. (This proposal will be discussed in section B.3 below)

(e) Retain the detail as presented in the draft classification for all other categories.

### 3. Purpose classification of social and community services

12. One of the main objectives in expanding this part of the classification was to increase its usefulness in connexion with the framework for the integration of social and demographic statistics, and a number of comments dealt with its effectiveness for this purpose. Some respondents favoured basing the classification on social concerns such as those specified by OECD. Others, however, thought that the purpose classification should be more closely linked to the ISIC activity groups or ICGS commodity categories. On the one hand it was pointed out that departing from ISIC and ICGS would create a heavy additional workload for statistical offices in classifying the government data, and all decisions taken in previous discussions on these two classifications would have to be reconsidered in the light of the draft classification of government purposes. On the other hand, it was argued that an activity classification, which presupposes more or less homogeneous units, is less appropriate for the government sector, while fields of social concern would be very useful as a basis for political decision-making. The latter approach would associate with each category not only the services proper, but also related administrative and supporting services.

13. The present draft classification assumes a middle position between these two points of view. Not all social concerns are presented in separate categories: for instance labour exchanges, retraining and other employment programmes are combined with other outlays in category 8.1.2 (General administration and regulation, labour and employment programmes and affairs). But on the other hand not all ISIC activities are shown separately: in particular, expenditures on research and development are in some cases not separately distinguished.

14. A related question concerned the interpretation of the term "purpose". Is "purpose" to be considered an intermediate goal or a final goal of government policy? The present draft classification again takes an intermediate position. Activities directed towards such final goals as improved health and education can be identified, but for such final goals as improved environment, regional development and the development of energy sources, it is rather difficult to extract the pieces that enter into the whole programme to reach these goals.

15. Whatever interpretation is given to the term "purpose", the comments emphasized the need for a clear explanation of its basis in the introduction.

/...

This is important to enable the user to decide how to handle borderline cases not specifically dealt with in the classification. The comments also suggested liberal use of cross-references to indicate categories containing related programmes and activities. For instance, under "health", cross-references should be included to related activities in category 6.3 (Sanitary services); category 5 (Social security and welfare services), which includes certain sickness and disability payments; and category 3 (Education), which covers school health services. Similar suggestions were made with regard to activities related to sanitary services that are not included in category 6.3.

#### 4. Purpose classification of research and development

16. Many of the comments on the classification of research and development (R and D) programmes and activities reflect the solutions adopted in the existing specialized classifications on these types of expenditure mentioned in para. 5 above. Some of the comments, although made in connexion with R and D items, apply equally to other programmes and activities.

17. Some quite fundamental points were raised relating to the principles on which the classification of R and D is based. Most of the questions dealt with the scope and coverage of what is to be distinguished separately as R and D, or with the basis for more detailed breakdowns within the R and D aggregates.

##### (a) Definition of basic research

18. A first set of questions related to the content of basic research (classified in category 1.4). The question was raised whether category 1.4 should include purpose-oriented basic research or whether this type of research should be allocated to the R and D category of the appropriate purpose, as is done in the Frascati Manual. If the latter treatment is followed, some of the R and D activities and programmes now classified under category 1.4, General research, should be allocated to health (4.1.2) and agriculture, forestry, fishing and hunting (8.2.2).

19. In the same context, it was suggested that the heading of category 1.4 be changed to "General scientific advancement" or something similar, and that for all purpose-oriented R and D categories the heading "Research and experimental development" be used. It was also suggested that in para. 10 of the text of the draft classification the adjectives "fundamental", "basic" and "general", as applied to research, all be replaced by the one term "fundamental", in accordance with UNESCO usage.

20. It was further suggested that only three subcategories be shown under category 1.4, in conformity with the UNESCO classification. The modified version would then read as follows:

#### 1.4 General scientific advancement

Promotion of fundamental research and general scientific endeavours financed directly or indirectly through institutions and organizations currently engaged in this work. Covers all expenditures on, and grants for fundamental (pure or oriented) research in the natural sciences, in the social sciences and the humanities as well as in multidisciplinary and interdisciplinary research. Applied research and experimental development programmes which are by definition linked to the provision or promotion of particular kinds of service or activity are excluded from this subject purpose. For the special case of universities, see para. 3.2.5.

##### 1.4.1 Fundamental research in the natural sciences, engineering and technology

Expenditures on fundamental research in these fields of science. Included here are expenditure on fundamental research into mathematical and statistical theories and methodologies. In general, research on human medicine and on animal medicine should be classified respectively under health and economic services because of the clear intention of applicability entailed by its undertaking.

##### 1.4.2 Fundamental research in the social sciences and the humanities

Expenditures on fundamental research in these fields of science. Included here are research on political science, government and public administration but not on diplomacy or international affairs.

##### 1.4.3 Fundamental research and multidisciplinary research n.e.c.

Expenditures on research not elsewhere classified. Included here are multidisciplinary research where no particular field is predominant, such as ecology, oceanography, the biosphere, the atmosphere and space research, and on interdisciplinary research.

#### (b) Role of related activities

21. Another aspect of the coverage of R and D categories about which questions were raised concerns whether "related scientific and technological activities" (in the UNESCO terminology), such as the formulation of standards of measurement and technologies, general market research and exploration for new sources of energy, should be included in the R and D categories or whether R and D should be restricted to activities and programmes of a purely research character. The latter is the practice followed in the UNESCO and CECD classifications. but the categories in the draft classification generally have a wider coverage. This applies especially to categories 8.1.4 and 8.2.2 (Applied research and experimental development) as components, respectively, of economic services in general and of agriculture, forestry, fishing and hunting. Furthermore, the draft indicates that category 6.2.2 (Applied research in community development) consists almost exclusively of related scientific and technological activities that fall under the heading "policy related studies" in the Frascati Manual.



22. Respondents mentioned a number of alternative approaches that might be adopted to clarify and standardize this treatment. All descriptions could be revised in line with the UNESCO and OECD practice. A more general title for the R and D categories could be adopted, such as "R and D and related scientific and technological activities". The R and D categories could be split into two parts, one relating to pure R and D and one covering related activities. This last solution would, however, make the classification very cumbersome.

(c) Allocation of R and D by purpose

23. A third set of questions concerned the allocation of purpose-oriented R and D among purposes. Should the R and D headings only contain programmes and units whose primary purpose falls in the class concerned or should it include all R and D items relevant to that government objective regardless of the primary purpose of the programmes or institutions concerned? If all relevant programmes were to be included, R and D expenditures on health, for instance, would include: (a) programmes usually financed by the ministry of health; (b) programmes principally dealing with human health but undertaken in support of other government missions such as defence, safety in mines, nuclear power stations or other industry; (c) programmes in the medical sciences financed by general government funding for the advancement of research through such instruments as research councils; (d) programmes in the medical sciences carried out in universities and financed out of general funds from the ministry of education; (e) programmes that principally deal with other subjects but have secondary relevance to human health, such as studies of water pollution. Only the first two types would be included if the primary-purpose criterion were followed.

24. OECD, EEC and NORDFORSK surveys of objectives of government R and D funding classify data according to the primary-purpose criterion. Respondents indicated that the present draft classification does not provide sufficient guidance on what criteria to use. A comparison of the coverage of R and D in health (4.1.2) and in agriculture, forestry, fishing and hunting (8.2.2) reveals some differences in treatment. Category 4.1.2 includes all medical R and D funded by the ministry of health and by other ministries except where defence purposes are involved, and also that performed within universities. In other words it covers subparagraphs (a) through (d) of paragraph 23. Category 8.2.2, on the other hand, includes only subparagraphs (a) through (c) and only part of these, because basic research oriented to agriculture is not covered.

25. In view of the practices followed in existing specialized classifications, respondents suggested that the primary-purpose principle be adopted, so that only subparagraphs (a) and (b) above would be included. If deviations from this principle are desirable in certain cases, their nature should be clearly specified in the descriptions of the categories.

(d) Completeness of coverage

26. The practice followed in the draft classification, which separates R and D categories only "in cases where outlays on, support of and the use of resources in

these activities are significant" (ST/ESA/STAT.82, para. 9) was questioned by some respondents, who pointed out that a figure might be small and still intrinsically significant. It was also suggested that the present classification might not be changed for many years to come, and amounts that are negligible today may become substantial as time passes. Additional explicit R and D categories were suggested for categories 1.1 (General administration), 1.2 (External affairs), 5.1 (Social security and assistance), 5.2 (Welfare services), 6.1 (Housing), and 7 (Other community and social services). Separate R and D categories, rather than one combined group, were proposed for 8.3.2 (Mining programmes), 8.3.3 (Manufacturing programmes) and 8.3.4 (Construction programmes); and similarly for 8.5 (Roads), 8.6 (Inland and coastal waterways) and 8.8 (Other economic services). It was also proposed that desalination be added to the activities mentioned in category 8.4.2.1 (Applied research and experimental development (under Water supply)).

(e) Reporting unit

27. A question was raised concerning the units for which R and D activities should be reported. Should all activities, both R and D and non-R and D, of one establishment be allocated to one category, or should R and D activities be separated out and reported separately? The question is particularly important in connexion with category 3.2.5 (Tertiary education), where a substantial part of the funds, 25 to 33 per cent according to a recent OECD study, are used to undertake R and D activities, and category 7.1.2 (Cultural facilities and services) where museums and zoological and botanical gardens often use part of their general grants to perform research. In the first case, the draft classification separates R and D activities, but in the second case it does not.

28. It was suggested that the treatment be standardized as in the second example, i.e., that the activities of single establishments not be split. For education, category 3.2.5, an introductory note was suggested as follows: "Expenditures for separately budgeted research in such institutions should be included in the appropriate research categories. The total amount of general grants and subsidies to universities and other institutes of the tertiary level should be shown here even though it is recognized that fundamental research may be involved in completing requirements for advanced degrees."

(f) Space technology and atomic energy

29. A final set of comments on R and D related to the treatment of activities concerning space technology and the development of a new energy source through atomic fission and fusion. It was felt that the growing importance of these R and D fields was not well reflected in the draft classification. R and D in space technology is divided among many different purpose categories - in 1.4 if space science is involved, in 2.2 if it has defence purposes, in 8.1.4 if it has industrial purposes and in 8.7.8.1 if it concerns communications. Atomic fission and fusion research for the development of energy, on the other hand, is combined with research for other industrial purposes in category 8.3.1 (Applied research and experimental developing in mining, manufacturing and construction).

/...

30. To meet these problems, respondents suggested that all space technology now shown in categories 1.4, 8.1.4 and 8.7.8.1, that is, all except space technology for defence purposes, be brought together in one single category or subcategory, and that activities related to the development of a new energy source through atomic fission and fusion be transferred from category 8.3.1 (R and D in mining, manufacturing and construction) to category 8.4.1 (R and D in electricity, gas and steam). Both recommendations are in accordance with the practice followed in the Frascati Manual.

5. Purpose classification of activities concerning environmental pollution

31. Very few comments were received on the environmental aspects of the draft classification. The general tenor of the observations was that no clear picture can be derived from the draft classification on government-sponsored environmental activities and programmes. The only environmental category that is presented separately, namely category 6.3.4, focuses exclusively on pollution control and abatement programmes. Policies aimed at halting deforestation and desertification and other policies to regulate, control and protect the environment, particularly those concerned with specific industries, are combined with other programmes and activities. It was, therefore, suggested that wherever relevant, separate categories be introduced on environmental policies and programmes. This is particularly important for categories 6.2 (Community development) and 8 (Economic services). Such a treatment would have the added advantage that links could be designed between these categories and the elements distinguished in the two papers on environmental statistics prepared by the Statistical Office (E/CN.3/452), which was before the Commission at its eighteenth session and (E/CN.3/492), which is before the Commission at its nineteenth session.

B. Specific comments on selected purpose categories

1. General administration

32. A question was raised on the treatment of general services such as printing and stationery or maintenance of buildings provided by one department to another. Should such general services be classified on the basis of the supplying unit or the receiving unit? Category 1.1 (General administration) mentions the inclusion of these services, but does not explicitly state how they should be handled when they are delivered to another department with a different purpose. It might be useful to consider this question in the much wider context of all interdepartmental deliveries.

2. External affairs

33. The suggestion was made that subcategory 1.2.2 (Foreign economic aid) be divided into two subcategories: 1.2.2.1 (Economic aid to developing countries (including both bilateral aid and contributions to multilateral aid)); and 1.2.2.2 (Other, consisting mainly of other contributions to international organizations). At the same time, a more specific statement should be included on the treatment of contributions to non-economic aid international organizations such as the United Nations, the specialized agencies etc.

/...

### 3. Education

34. In the context of a proposal for a modified version of the classification to meet the requirements of developing countries (see para. 11), it was suggested that subcategory 3.2 (Schools, universities and other educational facilities, subsidiary services) be restructured as follows:

3.2.1 Pre-primary and primary education (present 3.2.1, 3.2.2 and 3.2.3)

3.2.2 Secondary education (present 3.2.4)

3.2.3 Tertiary education

3.2.3.1 Tertiary education, degree and non-degree programmes other than medical and technical (present 3.2.5.1 and 3.2.5.2, both excluding technical programmes, and 3.2.5.4 as far as non-medical and non-technical programmes are concerned)

3.2.3.2 Tertiary education, medical programmes (present 3.2.5.3 and 3.2.5.4 concerning medical programmes)

3.2.3.3 Tertiary education, other technical programmes (present 3.2.5.1, 3.2.5.2 and 3.2.5.4, each only as far as technical programmes are concerned)

3.2.3.4 Education not definable by level (present 3.2.9)

A number of features of this proposal may be pointed out. The first is the separate identification of technical programmes as part of tertiary education; the importance of these programmes in developing countries might justify this separation. A second is the addition of subsidiary services to the educational programmes to which they pertain, which requires their subdivision by type of tertiary education.

35. This proposal conflicts with another made by other respondents that favours subdividing subsidiary services by type of service, i.e., transport, school meals, school medical and dental services, rather than by level of education. The reason advanced for this latter proposal is that these activities are frequently organized to cover several levels of education. Thus, a local education authority may have a fleet of buses (or a contract with a bus operator) which is used for all schools in its area and may even collect children of different ages on the same bus. Similarly, school meals may be prepared in a central kitchen and delivered to schools at different levels, and medical and dental teams may visit a primary school one week and a secondary school the next.

36. The remaining proposals on education concerned changes in terminology or redefinitions of categories, such as the replacement in category 3.2 of the term "schools for the deaf, blind and dumb of a non-custodial character" by the term

/...

"schools for the handicapped of a non-custodial character" or broadening the category to "schools for the mentally and physically handicapped", thus including schools of a custodial character.

#### 4. Health

37. Respondents expressed some reservations on the usefulness of the two-digit classification of health and its further institutional breakdown. One objection was that the detail far exceeds the present data collection capabilities of statistical offices. A more fundamental objection was that the institutional breakdown is not entirely suitable for an analysis of services provided. The same type of service can be provided by a large general hospital in one country and a small specialized one in another. Further, the distinction between individual and community health services is difficult to make; this is illustrated by the fact that some services directed to community health care are included in category 4.3.3 (Field programmes), which is part of individual health services.

38. Some respondents proposed presenting separate subcategories for certain activities and programmes that they believed had not been accorded sufficient importance in the present draft classification. These include health laboratories and mobile medical clinics, both of which might be shown as separate subcategories of category 4.2 (Hospitals and clinics).

#### 5. Social security and welfare services

39. In connexion with a study on income maintenance outlays, OECD undertook a breakdown of category 5.1 (Social security and assistance). This subdivision is similar to the one presented in the draft classification, except that category 5.1.4 (Sickness, maternity and temporary disablement benefits) is broken down into three subcategories: Compensation for loss of income due to temporary disablement; Maternity allowances; and Compensation for temporary loss of income due to sickness. The descriptions of the subcategories in the OECD breakdown are more elaborate than the ones provided in the draft classification. It was suggested that it would be useful to modify the present descriptions along similar lines. Respondents particularly pointed out that clearer guidelines should be provided on the distinction between activities and programmes to be included here and those that are covered under health. This concerns, among other things, the distinction between benefit payments and compensation for losses of income, particularly with respect to maternity, and the distinction between category 4.2.5 (Nursing and convalescent homes) and category 5.2.4 (Welfare services to the handicapped). It was also proposed that cross-references be included (see para. 15).

40. A number of suggestions were made for aggregating some of the subcategories where it is difficult in practice to make the distinctions called for. One such suggestion was to combine categories 5.1.2 (Old-age and survivors' benefits), 5.1.3 (Permanent disability benefits) and 5.1.4 (Sickness, maternity and permanent disablement benefits). A second was to combine the survivors' benefits included in category 5.1.2 with category 5.1.6 (Family, widows', guardians' and child allowances), which would entail changing the latter heading to "Family allowances".