

**Taking Demand Seriously:  
The OECD and the Role of Users in S&T Statistics**

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## **Taking Demand Seriously: The OECD and the Role of Users in S&T Statistics**

In a previous paper,<sup>1</sup> I proposed three factors for explaining why OECD Member countries had little difficulty in accepting the Frascati manual. Firstly, since few countries had even begun to collect data on science and technology in the early sixties, the OECD offered them a ready-made model for doing so. Secondly, the standardization was perceived to be relatively neutral since it was proposed by an international organization rather than by a single country. Thirdly, the OECD introduced the manual using a *petits pas* strategy.

Here, I discuss an additional factor for explaining the relative consensus of OECD Member countries towards the standardization of science and technology statistics: user involvement in the construction of OECD statistics and methodological manuals. This took three forms. Firstly, the creation of a Group of National Experts on Science and Technology Indicators (NESTI) to guide OECD activities. Secondly, the setting up of *ad hoc* review groups to align OECD statistical work to users' needs. Thirdly, the collaboration of countries in developing specific indicators.

I will first discuss each mechanism in turn, with particular emphasis on the second. I will then present the ways in which the OECD responded to the challenges that were identified by the users groups. Although the OECD Secretariat had already started work towards improving the situation before the users groups had arrived at their conclusions, the latter served as a catalyst. Finally, I will conclude with brief reflections on the nature and role of users in OECD activities.

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<sup>1</sup> B. Godin (2001), *The Number Makers: A Short History of Science and Technology Statistics*, Montreal: OST.

## **The NESTI Group**

The OECD activities are organized around a threefold structure of work. The OECD Secretariat is responsible for the day-to-day work. It is divided into Directorates that are themselves divided into Divisions. The Secretariat's work is supported by Committees composed of national delegates from Member countries. Each Directorate has its own Committee(s), advises the Secretariat on the program of work, and reports to the OECD Council of ministers. Committees are in their turn advised by two kinds of groups, which are again composed of national delegates. The first consists of working groups or parties that are usually set up on a temporary basis, to deal with a specific question or problem. The second consists of advisory groups that work with the Secretariat and report to the Committee. Both these groups sometimes develop combined program of work.

In the case of science and technology, the Directorate of the OECD Secretariat responsible for statistics is the Directorate for Science, Technology and Industry (DSTI). It includes a Division specifically dedicated to statistical work – the Economic Analysis and Statistics Division (EAS). The Committee for Scientific and Technological Policy (CSTP) deals with science and technology statistics and indicators. NESTI is a subsidiary body of that committee (Figure 1).

NESTI<sup>2</sup> was essentially established in 1962 to finalize the Frascati manual and to organize the first R&D surveys. Up to 1988, its mandate “was merely a compilation of extracts from past decisions of the CSTP”<sup>3</sup> concerning the organization of the first Frascati meeting<sup>4</sup> and the surveys based thereon,<sup>5</sup> and included the extension of membership and competence to cover output as well as input indicators.<sup>6</sup> The mandate was first explicitly defined in 1988 (and slightly updated in 1993) as follows:<sup>7</sup>

<sup>2</sup> The group got its actual name in 1983.

<sup>3</sup> OECD (1988), *Summary of the Meeting of the Group of NESTI*, SPT (88) 2, p. 4.

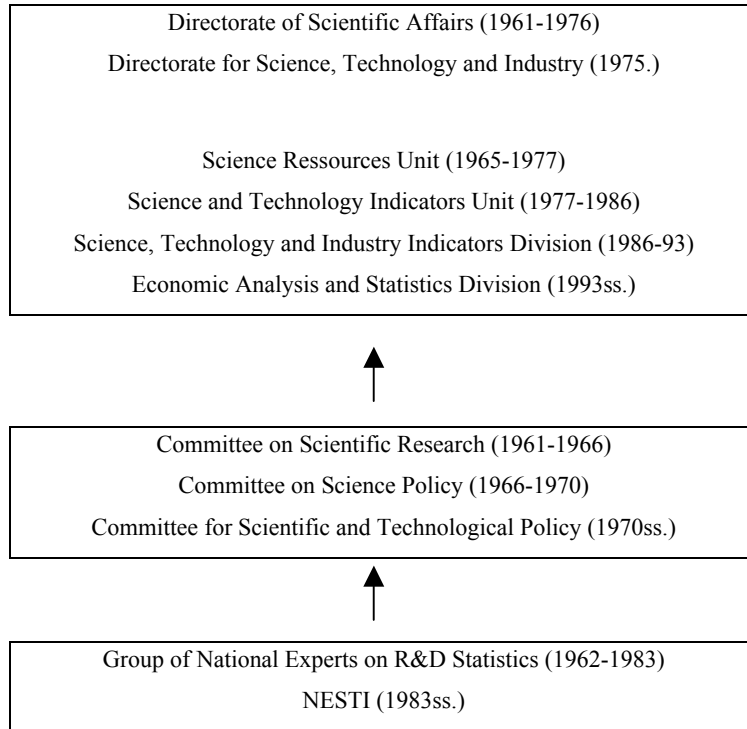
<sup>4</sup> SR (62) 37.

<sup>5</sup> SR/M (63) 1.

<sup>6</sup> SPT/M (83) 2.

<sup>7</sup> OECD (1988), *Revised Mandate for the Group of NESTI*, SPT (88) 5, p. 5; OECD (1993), *The Revised Mandate of the Group of NESTI*, DSTI/EAS/STP/NESTI (93) 9.

**Figure 1.**  
**Evolution of OECD Structures**



- i) To ensure the continued improvement of methodology for the collection of internationally comparable R&D data as laid down in the Frascati manual, to encourage its use in Member countries and to prepare similar methodologies for measuring the output of science and technology.
- ii) To ensure the continued timely availability of internationally comparable R&D data notably via the biennial OECD surveys, and to promote the development of data collection and diffusion systems for science and technology output indicators.
- iii) To assist in interpreting science and technology indicators in the light of policy changes or other special Member country characteristics and to advise the Committee on the technical validity of reports that are based on such indicators.

- iv) To pursue any other work needed to provide the Committee for Scientific and Technological Policy or its subsidiary bodies with requested science and technology indicators.

To meet this mandate, the group met annually two or three days to discuss work in progress and plan future activities.<sup>8</sup> It also met at irregular intervals to carry out revisions of the Frascati manual.<sup>9</sup> Four revisions have been conducted so far – in 1970, 1976, 1981, and 1993 – and a fifth is currently in progress.

Full members of NESTI comprise delegates from all OECD countries, the European Commission and Korea, as well as observers from Israel, South Africa, Eastern European countries and UNESCO. For some time, most countries sent two principal delegates to NESTI, one from a science and/or technology agency (representing data users) and the other from a survey agency, usually the central office of statistics (representing data producers). Today, two-thirds of its principal delegates come from ministries of science and technology or associated bodies, and one-third from central statistics offices or similar statistics producing agencies.

Over the last forty years, NESTI oversaw the realization of regular international R&D surveys as well as regular methodological improvements for collecting internationally comparable data on science and technology. It assisted in developing and interpreting indicators in the light of policy changes and advised the CSTP on the technical validity of reports written on such indicators. It acted, finally, as a clearinghouse through which Member countries could exchange information and experience on methods of collecting, compiling, analyzing and interpreting data.

Over the period 1962-2000, NESTI and the Secretariat produced an impressive amount of work: seven regularly updated methodological manuals; twenty workshops and

<sup>8</sup> The OECD archives contain very few summary records of the meetings of the NESTI before the eighties.

<sup>9</sup> OECD (1962), *The Measurement of Scientific and Technical Activities: Proposed Standard Practice for Surveys of Research and Experimental Development*, Paris.

conferences; biannual and biennial statistical series; and several documents and policy studies.<sup>10</sup> But above all, NESTI was a forum in which national experts exchanged ideas, took decisions and reached consensus.

### **Ad Hoc Review Groups**

NESTI was only one of the mechanisms through which statistics users were involved in OECD work. A second one was *ad hoc* review groups. Over the period 1970-1990, the Committee for Scientific and Technological Policy created three such groups to orient the activities of the OECD statistical unit. Each group based its recommendations on the responses of users to a questionnaire and the responses of the Secretariat to the group's questions regarding needs, priorities and future work.<sup>11</sup>

The first Group's mandate was, among other things, to "make a realistic assessment of the needs of the main users of R&D statistics in Member countries and in OECD itself, [and] to consider the extent to which the fulfillment of these needs would be prejudiced by the proposed cuts (...)"<sup>12</sup> The Directorate of Scientific Affairs (DSA) had in fact proposed cuts to the Science Resources Unit (SRU) in 1972. The total resources employed in the SRU were about 112 man-months. The budget proposal for 1973 would have reduced these resources to slightly more than 55 man-months.<sup>13</sup> The proposed cuts were based on the claim that the SRU's efforts merely satisfied the self-serving needs of statisticians and were of little value to the science officials who used statistics.<sup>14</sup> But there was also a completely different reason: the United States was somewhat reluctant about the SRU getting too involved in comparative analysis (like *Gaps* studies) as opposed to data collection, especially new data on output.<sup>15</sup>

<sup>10</sup> B. Godin (2001), *The Number Makers*, *op. cit.*

<sup>11</sup> For the mandates of each group, see Annexes 1-3.

<sup>12</sup> OECD (1973), *Report of the Ad Hoc Review Group on R&D Statistics*, SPT (73) 14, p. 4.

<sup>13</sup> *Ibid.* p. 12.

<sup>14</sup> B. Godin (2000), *The Emergence of Science and Technology Indicators: Why Did Governments Supplement Statistics with Indicators*, Montreal: OST.

<sup>15</sup> Personal conversation with J.J. Salomon.

An *ad hoc* review group was consequently created in 1972 following “reservations expressed by some Member countries about the suggestions that substantial cuts should be made in the budget for R&D statistics work in 1973 to free resources for new work”.<sup>16</sup> The British delegate, Cyril Silver, chaired the group. He was probably the source of the controversial decision, according to the people I interviewed. The hypothesis that the UK Delegation was at the center of the proposed cuts is probably true since Silver wrote, in the introductory remarks to the report:<sup>17</sup>

I started my task as a skeptic and completed it converted – converted that is, to the view that policy makers use and even depend on R&D statistics and particularly on those giving comparisons of national efforts in particular fields. What I beg leave to question now is whether perhaps too much reliance is placed on these all-too-fallible statistics.

The group studied three different options before arriving at this conclusion, however, including:

The emphasis of the work of the Science Resources Unit has shifted from providing support to the remainder of the Science Affairs Directorate to providing much valued service to Member countries. We considered whether within OECD itself it might not in consequence now be more appropriate administratively for the Science Resources Unit to be associated with the general statistical services of the Organization.

The Group finally formed the view that “on balance, the Science Resources Unit was best left administratively within the Science Affairs Directorate”, but that “the liaison between the Science Resources Unit and the Divisions of the Scientific Affairs Directorate be improved by appointing each of the members of the Science Resources Unit as a liaison officer for one or more specialist activities within the Secretariat”.<sup>18</sup>

Three years later, a second Group, chaired by J. Mullin, was set up. The financial context had not really changed: “the group should assume that there will be no net increase in the resources available for the compilation of R&D statistics within the Secretariat or within

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<sup>16</sup> OECD (1973), *op. cit.*, p. 7.

<sup>17</sup> *Ibid.* p. 6.

<sup>18</sup> *Ibid.* p. 11.



Member countries”, stated the CSTP.<sup>19</sup> But the real issue was new indicators: “the statistical information provided by OECD was considered to be necessary background information for those making decisions; in no case [however] was it considered to be a sufficient basis for such decisions”, reported the group.<sup>20</sup> And it continued: “It is obvious to the group that one cannot forever expect to continue consideration of policy measures whose output are unmeasured”.<sup>21</sup>

By that time, the Secretariat had already chosen the National Science Foundation (NSF) experience as the model to follow: “Science indicators are a relatively new concept following in the wake of the long-established economic indicators and the more recent social indicators. So far, the main work on this topic has been done in the United States where the National Science Board has published two reports: *Science Indicators 1972* (issued 1973) and *Science Indicators 1974* (issued 1975)”.<sup>22</sup> The Secretariat analyzed in depth the indicators contained in *Scientific Indicators* and compared them to the available statistics, and to those that could be collected and at which cost.<sup>23</sup> The *ad hoc* review group was asked “to draw some lessons for future work in Member countries and possibly at OECD”.

In line with the Secretariat’s views,<sup>24</sup> the final report of the Group suggested a three-stage program for developing new indicators:<sup>25</sup>

- Short-term: input indicators (like industrial R&D by product groups).
- Medium-term: manpower indicators (like occupations of scientists and engineers).
- Long-term: output (productivity, technological balance of payments, patents), innovation indicators, and indicators on government support to industrial R&D.

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<sup>19</sup> OECD (1976), *Summary Record of the 13<sup>th</sup> Session of the CSTP*, SPT/M (76) 3.

<sup>20</sup> OECD (1978), *Report of the Second Ad Hoc Review Group on R&D Statistics*, SPT (78) 6 p. 11.

<sup>21</sup> *Ibid.* p. 12.

<sup>22</sup> OECD (1976), *Science and Technology Indicators*, DSTI/SPR/76.43, p. 3.

<sup>23</sup> See particularly the annex of OECD (1976), *ibid.*

<sup>24</sup> OECD (1977), *Response by the Secretariat to the Questions of the Ad Hoc Group*, DSTI/SPR/77.52.

<sup>25</sup> OECD (1978), *op.cit.* pp. 17-21.

The group's recommendations, as well as those of the one that followed, led to the launching of a whole program of work on new indicators.<sup>26</sup> The work would again be expanded following two further review exercises in the nineties: the Technology/Economy Program<sup>27</sup> and the Blue-Sky project on indicators for the knowledge-based economy.<sup>28</sup>

A third *ad hoc* review group (chairman: N. Hurst) was set up in 1984. It dealt with the same issues as the previous two. Firstly, it preferred not "to see the STIU [Science and Technology Indicators Unit] pushed into new areas of responsibility without the guarantee of necessary resources".<sup>29</sup> Secondly, it recommended establishing a regular schedule for producing output indicators and for publishing manuals based thereon. Priority should be given to "output indicators, especially those with an economic context and notably measures of different aspects of the innovation process".<sup>30</sup>

### **Just-in-Time Numbers**

The timeliness of the statistical unit's information was a recurring concern in the three *ad hoc* reviews. The first group formed the view that "comparative R&D statistics were indeed a much valued and widely used tool directly used by policy-makers themselves in many countries", but "there was criticism that data are frequently and unnecessarily out-of-date".<sup>31</sup> The second group also discussed the problem of timeliness and concluded that: "tradeoffs have to be made between timeliness and accuracy of data. An acceptable balance has to be struck",<sup>32</sup> while the third group felt that "STIU output was not reaching the widest range of potential users".<sup>33</sup>

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<sup>26</sup> B. Godin (2000), *op. cit.*; B. Godin (2001), *Measuring Output: When Economics Drive Science and Technology Measurement*, Montreal: OST.

<sup>27</sup> OECD (1991), *Summary Record of the Meeting of Experts on the Consequences of the TEP Indicators Conference*, DSTI/STII/IND/STP (91) 2.

<sup>28</sup> OECD (1995), *The Implications of the Knowledge-Based Economy for Future Science and Technology Policies*, OECD/GD (95) 136.

<sup>29</sup> OECD (1985), *Report of the Third Ad Hoc Review on Science and Technology Indicators*, SPT (85) 3, p. 14.

<sup>30</sup> *Ibid.* p. 12.

<sup>31</sup> OECD (1973), *op. cit.* p. 9.

<sup>32</sup> OECD (1978), *op. cit.* p. 16.

<sup>33</sup> OECD (1985), *op. cit.* p. 9.

What were the reasons for the delays? According to the Secretariat, there were two.<sup>34</sup> Firstly, delays in Member countries' responses: "it is rare that more than four countries respond in time to the International Statistical Year (ISY) surveys". Secondly, delays at the Secretariat itself in data processing, documenting work done and service activities (like typing). All in all, concluded the OECD, "(...) improvements in the rapidity with which all the ISY results are issued cannot be hoped for if the present format of five volumes of data, each containing footnoted figures for the majority of OECD countries and accompanied by country notes, etc. is retained".<sup>35</sup>

Over time, the Secretariat came up with three solutions for correcting the situation. Firstly, it would rearrange the publication of R&D data arising from the ISY survey. Data would be "arranged country by country with only the main indicators in an international format",<sup>36</sup> as was already the case elsewhere in the OECD (notably in national accounts and labor force data). This solution sped up publications since international tables could now be produced without having to wait for countries to provide all their data. Secondly, it would publish a newsletter containing the most recent data,<sup>37</sup> and "Rapid Results" was made available as soon as data national became available. Thirdly, it would gradually create databases from which it would issue its basic international statistical series.<sup>38</sup> These three decisions led to the publication of several official series in the following decade (Table 1).

Besides early publication of results, another task to which the OECD devoted itself regarding timeliness was the forecasting of R&D expenditures. From the beginning, the OECD estimated missing data from national statistics in collaboration with national authorities.<sup>39</sup> The most notable estimations and corrections concerned business R&D.<sup>40</sup>

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<sup>34</sup> OECD (1976), *Methods of Accelerating the Collection and Circulation of R&D Data*, DSTI/SPR/76.52; See also: OECD (1977), *Response by the Secretariat*, *op. cit.*

<sup>35</sup> OECD (1976), *Methods of Accelerating*, *op. cit.* p. 4.

<sup>36</sup> *Ibid*, p. 5-6.

<sup>37</sup> The newsletter was issued biannually between 1976 and 1988.

<sup>38</sup> OECD (1981), *The Science and Technology Indicators Data Bank*, DSTI/SPE/81.38; OECD (1983), *The Science and Technology Indicators Data Bank: Progress Report*, DSTI/SPR/83.17; OECD (1994), *STAN Databases and Associated Analytical Work*, DSTI/EAS/STP/NESTI (94) 7.

<sup>39</sup> G. Muzart, personal communication, 29 May 2001.

But there was also the problem of substantial time lag between the production of data and the publication of results in the OECD series of publication of OECD series. The average lag was two to three years, but as various variables were combined in the early nineties to create databases like STAN (Structural Analysis), the problem of timeliness was compounded – sometimes up to six years.<sup>41</sup> The objective, then, was to reduce the lag to within one year of the current time period. It would at the same time, according to some, protect users from themselves: “users are often not so very particular about the quality of the data, they are prepared to use any information which is available”.<sup>42</sup>

**Table 1.**  
**OECD Series on S&T Indicators**

1. International Survey of the Resources Devoted to R&D by OECD Members Countries (1967-83; biennial)
  - a. 1967 to 1973 Four publications for each survey (one by sector and one general)
  - b. 1975 to 1983 Fascicules by country (+ International Volume for one year only)
2. “Recent Results” and “Basic Statistical Series” (1980-83). The two documents would give rise to the following two publications:
3. Main Science and Technology Indicators (1988-Today: twice a year)
4. Basic Science and Technology Statistics (1991, 1997, 2000)
5. Research and Development Expenditure in Industry (1995, 1996, 1997, 1999)
6. Science, Technology and Industry Scoreboard of Indicators (1995, 1997, 1999)

Most Member countries had projection or forecasting procedures. Some countries based their projections on the observed past, such as straight-line extrapolations (based on regression or exponential models), for example. A number of problems plagued these techniques, however: R&D time series were relatively short and in a number of cases there

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<sup>40</sup> See: B. Godin (2001), *Metadata: How Footnotes Make for Doubtful Numbers*, Montreal: OST.

<sup>41</sup> OECD (1994), *Updating the STAN Industrial Database Using Short Term Indicators*, DSTI/EAS/IND/WP9 (94) 13, p. 2.

<sup>42</sup> Eurostat (1995), *Nowcasting R&D Series: Basic Methodological Considerations: Part A*, DSTI/EAS/STP/NESTI (95) 8, p. 2.

were gaps or breaks in the series.<sup>43</sup> Other countries, like Canada, based their estimates on respondents' spending intentions.<sup>44</sup> But the opinions of R&D managers varied considerably according to the economic climate; their estimates were less accurate, for example, during periods of economic recession. Finally, "nowcasting" was another option: extending the time series based on other relevant statistical data that had already been collected elsewhere for the period.<sup>45</sup> All in all, however, the methods countries used were largely a mystery: only a third of them published their methods, thus limiting one's ability to evaluate the quality of the data.<sup>46</sup>

To improve the situation, NESTI began reflecting on forecasting techniques in the early eighties.<sup>47</sup> But we had to wait until 1993 before a framework was introduced as an annex to the Frascati manual. The annex was intended to sensitize countries to forecasting techniques, and it suggested some broad principles for estimating data for recent and current years. In the meantime, the OECD increased its own efforts to estimate missing points in national data, even creating entire databases based on estimates – STAN and ANBERD.

### **Sharing Work Between Leading Countries**

Besides NESTI and *ad hoc* review groups, there was a third means by which users got involved in OECD work: the development of new indicators. The model used came partly from the Frascati manual revisions. The interesting thing about these revisions was the division of work: a national expert took the lead for a specific topic, produced a discussion document and suggested corresponding modifications to the manual.

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<sup>43</sup> *Ibid*, p.3.

<sup>44</sup> Statistics Canada (1995), *Nowcasting: Comments From Statistics Canada*, DSTI/EAS/STP/NESTI (95) 4.

<sup>45</sup> OECD (1995), *Nowcasting R&D Series: Basic Methodological Considerations: Part B*, DSTI/EAS/STP/NESTI (95) 28; OECD (1995), *Nowcasting R&D Expenditures and Personnel for MSTI*, DSTI/EAS/STP/NESTI (95) 20; Eurostat (1995), *Eurostat's Experience with Nowcasting in the Field of R&D Statistics*, DSTI/EAS/STP/NESTI (95) 19.

<sup>46</sup> OECD (1995), *Nowcasting R&D Series*, *op. cit.*

<sup>47</sup> OECD (1981), *Problems of Forecasting R&D Expenditure in Selected Member Countries*, DSTI/SPR/81.50.

This approach was recently extended to the development of new indicators. Budget constraints at the OECD were partly responsible for this choice: <sup>48</sup> leading countries would accept to start a new series or conduct pilot surveys, i.e. to build the initial momentum for new topics that might later be embraced by other countries. According to NESTI, “these *ad hoc* arrangements are likely to become the norm for new work”. <sup>49</sup>

This approach was applied in the Blue-Sky project for indicators on the knowledge-based economy. According to the Secretariat, the willingness of Member countries to assume a leadership role was essential to the project’s success: “the success of this [project] is largely dependent on a strong involvement of countries (...). It would be highly desirable that leading countries be ready to commit resources to the projects in which they would be more particularly involved”. <sup>50</sup>

As a consequence, six countries and organizations took the lead in specific projects: Italy and Eurostat on the innovative capacity of firms, Sweden on the mobility of human resources, Germany and France on the internationalization of industrial R&D, Australia and Canada on government support for industrial R&D and innovation. <sup>51</sup> Only two projects could not be launched for the lack of a volunteer lead country and/or shortage of Secretariat resources.

## **Conclusion**

Contrary to several episodes in the history of official statistics, like the census, <sup>52</sup> science and technology measurement was not really a space of conflict, at least at the international

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<sup>48</sup> A. Wycoff (1999), *A Strategic Vision for Work on S&T Indicators by NESTI*, DSTI/EAS/STP/NESTI (99) 11, p. 8.

<sup>49</sup> OECD (2001), *Report on the Activities of the Working Party of NESTI*, DSTI/STP (2001) 37, p. 3.

<sup>50</sup> OECD (1996), *New Indicators for the Knowledge-Based Economy: Proposals for Future Work*, OECD/STP/NESTI/GSS/TIP (96) 6, p. 8.

<sup>51</sup> OECD (1997), *Progress Report on the New S&T Indicators for the Knowledge-Based Economy Activity*, DSTI/EAS/STP/NESTI (97) 6.

<sup>52</sup> M.J. Anderson and S.E. Fienberg (1999), *Who Counts? The Politics of Census-Taking in Contemporary America*, New York: Russell Sage; B. Curtis (2001), *The Politics of Population: State Formation, Statistics and the Census of Canada 1840-1875*, Toronto: University of Toronto Press.

level. From the beginning, the OECD included both national experts and policy-makers in the planning of its activities. As years passed, these actors developed a community of views that, overall, prevented major controversies from arising. Over the forty years period 1960-2000, only three debates occurred that pitted some countries against others or against the Secretariat: the *Gaps* study at the end of the sixties, the proposed cuts to the statistical unit in 1972, and the measurement of strategic or oriented research in the early nineties. Each was resolved fairly rapidly:

- The subsequent statistical studies by the Secretariat were more neutral than the *Gaps* study with respect to the United States and its dominant position in R&D;
- The first *ad hoc* review group confirmed the value and importance of the statistical unit's work;
- Specifications on fundamental research (concerning a distinction between pure and oriented research) were added in the 1993 edition of the Frascati manual, as requested by Australia.

What helped achieve this relative consensus was the fact that statistics "users" constituted a specific variety of people: most were officials, be they from statistical agencies or government ministries. If, at times, some Member countries invited academics or consultants to NESTI meetings, they were, first and foremost, under the "superintendence" of the national delegate. For the OECD, "users" meant "official users", that is, mainly policy-makers. Neither the institutions surveyed (nor their representatives), nor the academics working on the statistics were consulted during *ad hoc* reviews - although the latter wrote the first drafts of several methodological manuals and were always invited to present papers during workshops and conferences. One reason for this OECD practice was probably because the needs of official users were well known by the delegates who dealt with them on a regular basis at the national level. But more probably, it was because official statistics had always been considered the preserve of government and its agencies. They were from the beginning specifically developed for government uses, which was a sufficient incentive for taking demand seriously.

**Annex 1.**

**Mandate of the First Ad Hoc Review Group**<sup>53</sup>

- (i) To assess the needs and priorities of Member countries and of the OECD itself for R&D statistics;
- (ii) To assess the importance of R&D statistics for the 1973 program of the Committee for Scientific and Technological Policy;
- (iii) To assess the present methods and operational practices of the Secretariat in the field of R&D statistics;
- (iv) To establishing the precise effects of the proposed cuts on the Secretariat's capacity to meet the needs identified above;
- (v) To examining the relevant efforts of other international organizations in order to avoid unnecessary duplication and particularly to encourage the sharing of common reporting responsibilities.

<sup>53</sup> OECD (1972), *Summary Record of the Second Session of the CSTP*, SPT/M (72) 2.



**Annex 2.**

**Mandate of the Second Ad Hoc Review Group**<sup>54</sup>

- (i) To identify the actual and potential users of OECD R&D statistics;
- (ii) To assess their needs for internationally comparable R&D data and other science and technology statistics;
- (iii) To test the adequacy and timeliness of current information;
- (iv) To establish a list of priorities for future work on R&D statistics at OECD, taking into account the capacity of producers to supply the necessary statistics;
- (v) To assess the current methods and operational practices of the Secretariat in the field of R&D statistics by examining the relevant practices of Member countries;
- (vi) To examine the relationship of the STI Unit with other statistical services within the OECD as well as with other international bodies, including the Commission of the European Communities, in order to ensure the best possible linkages.

<sup>54</sup> OECD (1976), *Summary Record of the 13<sup>th</sup> Session of the CSTP*, SPT/M (76) 3.

### **Annex 3.**

#### **Mandate of the Third Ad Hoc Review Group**<sup>55</sup>

- (i) To identify the needs of actual and potential users of OECD S&T indicators for internationally comparable data;
- (ii) To assess the comprehensiveness and timeliness of existing indicators, the adequacy of their presentation and dissemination, and the desirability of new indicators;
- (iii) To advise the CSTP on priorities for future work while taking into account current and suggested future projects, resource constraints, and other related criteria.

<sup>55</sup> OECD (1984), *Summary Record of the 37<sup>th</sup> Session of the CSTP*, SPT/M (84) X.