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## **THE INTRODUCTION AND USE OF INTERNATIONAL CLASSIFICATION SYSTEMS IN KAZAKHSTAN**

### **Report submitted by the National Statistical Agency of the Republic of Kazakhstan\***

1. The transition to international classification systems for types of economic activity and production took place in the field of Kazakh statistics in 1998, and in the Republic as a whole, in 2000. Such a move was necessary since developments in the market meant that the Russian Classification of Branches of the National Economy and the General Classification of Production used previously no longer adequately reflected the branch structure of the economy. With the Russian Classification of Branches of the National Economy it was impossible to codify new types of activity that were not part of the planned economy (real estate transactions, renting and services to bodies corporate, services provided to groups, the general public and individuals and so on). Moreover, the Russian Classification of Branches of the National Economy contained branches that had been broken up in response to market forces (materials and machinery supply and sales, procurement, public utilities and so on).

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2. Notwithstanding the obvious advantages of modern, international classification systems over the outdated Russian schemes, not all countries in the Commonwealth of Independent States (CIS) have introduced European classifications. For that reason, besides the revision of current statistical classification systems that is to be considered at the present meeting, matters relating to the introduction and use of those systems are also of interest. This report describes Kazakhstan's experience and problems in introducing and using international classifications for different types of activity and production.

3. The first step in introducing the classifications in Kazakhstan was to decide which classifications to introduce. Like other CIS countries, in the mid-1990s Kazakhstan only had a Russian-language version of the United Nations classifications. That was a strong argument for using the International Standard Industrial Classification of all Economic Activities (ISIC) and the Central Product Classification (CPC). However, for practical reasons, European Union classifications were chosen. The principle of the industrial origin of products in the European classifications ensured that activity and product codes were identical over the first four digits. That was the deciding factor in the choice of the classifications.

4. Practice has shown that the introduction process is considerably simplified when the first four digits of the classifications for types of activity and products coincide. It would be advisable to adhere to that principle in the new versions of classifications now being developed at the international level; although it should be noted that the use of comparable codes in the classifications can have its downside too. In Kazakhstan, as in many other CIS countries, the branch approach is used instead of the institutional approach for production statistics. With the branch approach it is difficult to draw a distinction between the concepts of branch and product. The existence of codes whose first four digits coincide has resulted in a widespread simplistic view of the classifications among professional statisticians. Even after six years of use, not all professionals fully understand the methodology of the classifications, the main differences between them, such as the difference between the concepts of "type of activity" and "product". This problem can probably be resolved by adopting the institutional approach to data collection.

5. The introduction of international classifications is a fairly complex process. The General Industrial Classification of Economic Activities within the European Communities (NACE) and the Classification of Products by Activities (CPA) were initially approved for use at the departmental level and used in State statistics as of 1 January 1998; they became the State standard on 1 January 2000 (Decision on State Standards Nos. 10 and 11 of 5 July 1999). Since then all State bodies, organizations and enterprises in Kazakhstan have been obliged to use them.

6. From the viewpoint of methodology the question of the comparability of time series in the transition from the Russian Classification of Branches of the National Economy to NACE is of particular interest. At the time of the transition to the new classifications in statistics, all types of statistics contained indicators not only for the reporting period but also for the corresponding period in the previous year. Thus, data for 1997 were collected using both the Russian Classification of Branches of the National Economy and NACE. These data provided an ad hoc basis for recalculating the time series.

7. The recalculation of time series concerned data for all branches covering the period from 1991 to 1998. This major undertaking in the different branches of statistics began two to four years after the classifications were introduced. By that time statisticians had by and large become familiar with the new classifications and were ready to perform the calculations correctly. The recalculation of the indicators is now nearly complete.

8. The problem of introducing the classifications is closely linked with the people who are using the statistics. In Kazakhstan market reforms were actively pursued and users did not press hard for data to be presented in the same way as with the former classifications. However, the problem of “conservative” users does exist. For example, at present there is the problem of analysing data for the branch of construction materials. Such a branch existed under the former Russian Classification of Branches of the National Economy and the classification criterion was the consumer characteristics of the goods manufactured (construction materials). Under the new classification, the concept of a “construction materials industry” does not exist, but the different types of activity relating to the manufacture of construction materials have been divided up into the categories: 14. “other branches of the mining industry”; 26. “manufacture of other non-metallic mineral products”; (26.5. manufacture of cement, lime and plaster; 26.6. manufacture of articles of concrete, cement and plaster and so on); 24. “chemical industry” (manufacture of paints and varnishes); and 36.63.3. manufacture of linoleum and other hard surface floor coverings.

9. An important factor in the successful introduction of classifications of types of activity and products in Kazakhstan was the establishment in the National Statistical Agency of a special classification department. This was responsible for coordinating and centralizing all work relating to the introduction and use of statistical classifications, not only at the National Statistical Agency but throughout the Republic. The department advises regional statistical bodies and other users, assesses whether statistical reporting to State bodies is in conformity with the classifications, checks the correctness of codes allocated in the statistical register, drafts standards and so on.

10. The existence of the special department has allowed work to begin on new, complex projects based on the use of the classifications. An electronic database, “Dinamika”, has already been set up around the classifier of statistical indicators, which is a systematic list of the indicators used in statistical practice. The classifier of statistical indicators is open to new users, and is updated to keep pace with economic development, the social and demographic situation and international standards in the field of statistics.

11. The classifier of statistical indicators is formed by allocating basic and derived indicators. The basic indicators reflect the essence and distinctive features of socio-economic phenomena or processes at a given place and time. The basic indicators, as a rule, do not contain the aggregate values specified by State (i.e. NACE, CPA), official or local classifications. Derived indicators are developed from the basic indicators and are inseparable from them. These derived indicators offer a multidimensional description of the basic indicators. The characteristics (aggregate values) and their hierarchies are established individually for each indicator.

12. The overall structure of the codes for statistical indicators is as follows:

X00000000 _____	branch (of the economy)	
XX0000000 _____	branch (of statistics)	
XXX000000 _____	category (of the branch)	
XXXX00000 _____	basic indicator	
XXXXXX0000 _____	derived indicator	level 1
XXXXXXXX000 _____		level 2
XXXXXXXXX00 _____		level 3
XXXXXXXXXX0 _____		level 4
XXXXXXXXXXX _____		level 5

13. The basic indicator is coded by the four-digit code, all indicators derived from it have five- to nine-digit codes. Most of the indicators with five to nine digits are expanded on under NACE and CPA. Work on the classifier of statistical indicators includes:

- (1) Allocating basic indicators;
- (2) Compiling a list of all the basic indicator characteristics used (including NACE and CPA);
- (3) Establishing hierarchies of characteristics in order of importance;
- (4) Coding derived indicators;
- (5) Compiling tables, indicating under which classifications in the “Dinamika” base there are concrete values for each basic indicator.

14. The “Dinamika” base is already operational. At present work is being completed on a second version of the classifier of statistical indicators. It is planned to use the experience gained from work on the “Dinamika” base in future when compiling the more complex METIS database.

15. The wide use of European classification systems in Kazakhstan makes the need to keep them up to date all the more pressing. The most recent changes to the NACE and CPA classifications were made early in 2004, i.e. one year later than in European countries. The introduction of new versions of international classifications is a far more complex undertaking which will require extensive discussion and concerted action.