E. Institutional arrangements and data quality

E. Institutional arrangements and data quality

5.22. The effectiveness of institutional arrangements is ultimately judged by the quality of the disseminated trade statistics. Properly functioning institutional arrangements can significantly contribute to the enhancement of data quality.

5.23. As described in chapter IX of IMTS 2010, the dimensions of data quality include prerequisites of quality, relevance, credibility, accuracy, timeliness, methodological soundness, coherence and accessibility. Achieving quality improvements is a complex and time-consuming task. The development and implementation of an effective data quality assurance programme would usually require the cooperation of all involved agencies. Therefore, appropriate institutional arrangements are important in allowing and fostering such cooperation and should clearly identify the roles of each agency in such a programme.

On this page

- Country Experience: Brazil: division of work on trade data quality (ch. 5)
- Country Experience: Canada: Responsibilities for quality assurance (ch. 5)
- Country Experience: Italy: Cooperation between the National Statistical Institute of Italy (ISTAT) and the National Customs Authority, in particular on data quality (ch. 5)

Country Experience: Brazil: division of work on trade data quality (ch. 5)

Box V.3 Experience of Brazil in the division of work on trade data quality

In Brazil, there is a clear division of labour on foreign trade data quality assurance. The agency responsible for the quality of the export data is the Secretariat of Foreign Trade (SECEX) of the Ministry of Development, Industry and Foreign Trade (MDIC), while the agency responsible for the quality of import data is the Federal Revenue Service of Brazil (Customs) of the Ministry of Finance.

Export data quality is guaranteed by the validation system of SECEX/MDIC, as described in Annex IX.A of this *Manual*, while the quality of import data is guaranteed by the application of the Customs Valuation Agreement of the World Trade Organization (WTO) and by application of the parameterized customs system on the physical and documents supervision.

Country Experience: Canada: Responsibilities for quality assurance (ch. 5)

Box V.4 Responsibilities for quality assurance: experience of Canada

In the experience of Canada, there are a number of players involved in the quality assurance of merchandise trade data:

- (a) Canada Border Services Agency (CBSA), which is the supplier of the administrative data for imports, performs basic validity editing to ensure that valid codes for all data elements are transmitted to Statistics Canada. In addition, there is a CBSA amendment programme which is used to correct errors detected by CBSA or the importer. All amendments are also transmitted to CBSA. However, there are no CBSA validity checks or an amendment programme for exports, although corrections from exporters are occasionally received;
- (b) The International Trade Division of Statistics Canada performs a series of checks and reasonability edits and imputations on import and export data. Further, High-value transactions are routinely reviewed and corrected manually where necessary;
- (c) Merchandise trade data are cross-checked against other data series for selected commodities so as to ensure consistency. Examples of such commodities are energy products, aircraft and agricultural products;
- (d) Prior to dissemination, publically released information is presented to Statistics Canada Senior Management to ensure reasonableness and for further comparison with other data series.

Country Experience: Italy: Cooperation between the National Statistical Institute of Italy (ISTAT) and the National Customs Authority, in particular on data quality (ch. 5)

Box V.5 Cooperation between the National Statistical Institute of Italy (ISTAT) and the National Customs Authority, in particular on data quality

Institutional arrangements – establishment of a committee. The National Statistical Institute of Italy (ISTAT), as responsible agency, has established and maintained long-lasting institutional cooperation with the National Customs Authority. From an operational point of view, a dedicated committee, composed of members of each organization and chaired by ISTAT, oversees all the technical, IT and methodological issues related to the successful data transmission of customs data. In addition, the Committee takes on board and examines any issues related to changes in national regulations, EU-level regulations and customs procedures as far as they may affect quality and timeliness in the production and dissemination of external trade figures. The Committee then informs the relevant superior bodies if some action is required in terms of changes in the national legislation or application procedures. In particular, ISTAT is continuously informed by the Customs Authorities of any changes in customs data structure and procedures.

Cooperation on data quality. The provision of high-quality customs data has always represented a key issue in the institutional and technical cooperation between ISTAT and the National Customs Authority. Up to now, the National Customs Authority has supported timeliness in data transmission while performing only formal quality checks on customs and statistical variables. On the other hand, ISTAT has developed a sound methodology for outlier detection and is regularly engaged in data quality checks performed automatically or under the direct supervision of trade experts at the product level. The National Customs Authority has recently expressed its strong interest in cooperating with ISTAT in order to improve the quality of customs data for statistical purposes, under the institutional umbrella of the National Statistical System. This initiative, which implies stronger cooperation on technical and methodological grounds with full respect for national confidentiality rules, was welcomed by ISTAT from both technical and cost-efficiency perspectives. Given the sharp decline in human resources devoted to the foreign trade statistics production process all over the world, such cooperation can be regarded as offering an opportunity to devote the limited amount of available human resources to more value-added quality checks by moving downward (to the level of the data collection and preliminary validation process) more standardized inconsistency and data quality checks.