# Harmonized System Code Updates: Statistics Canada's Experience

Chris Maloney
International Accounts and Trade Division







Delivering insight through data for a better Canada









#### Statistics Canada's CIMT program

- The Canadian International Merchandise Trade (CIMT) program is a monthly statistical program with "mission critical" status
- CIMT serves a number of different types of users
  - Timely macroeconomic indicator
    - Input to Canadian Macroeconomic Accounts
    - Economic forecasting
  - Source of multidimensional customs basis statistics
    - Detailed product categories by value and quantity by country, province, mode of transport, etc.
  - Interest from specific companies and industry associations, other government departments, academics, the media and the general public
- Data products
  - Analytical texts
  - Data tables
  - Data visualizations
  - Custom data extractions
- The Harmonized System (HS) is the foundation for all product-based statistics published









#### **Structure of Canadian HS Codes**

#### **Imports**

1234.56.78.90

HS6: WCO

Tariff code: Finance Canada

Statistical Suffix: Statistics Canada

- Customs Tariff published by the Canada Border Services Agency
- Updates are possible any month, largely due to tariff code changes

**Exports** 

1234.56.78

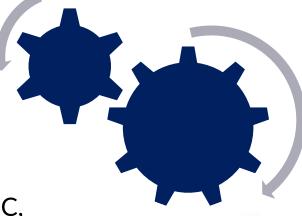
HS6: WCO

Statistical Suffix: Statistics Canada

- Canadian Export Classification published by Statistics Canada
- Updates are generally introduced each January, if applicable

#### **HS Update Process**

- The HS is treated as a "living" classification by Statistics Canada
  - Continuous evolution as opposed to complete classification version changes
  - Use of start/end dates and parent/child relationships to manage HS changes
- Coordination between federal departments to implement changes
  - Canada Border Services Agency
  - Finance Canada
  - Statistics Canada
  - Global Affairs Canada
- Statistics Canada efforts led by International Accounts and Trade Division Metadata team
  - Use of Aria for metadata management
  - Concordances with other classifications maintained (NAPCS, NAICS, BEC, US HTS)



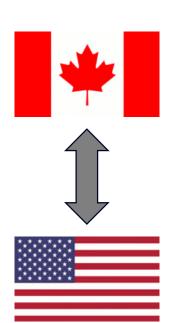
## **HS Update Challenges - WCO Updates**

- Regular WCO amendments require significant effort to implement
  - Relatively short timeframe to complete all required work
  - Collaboration on multiple fronts
- Periodic recommendations to National Statistical Offices between major updates
  - Little time for Statistics Canada to react to proposed changes
  - Breaks in series in relatively quick succession create data challenges



#### **HS Update Challenges - Data Exchange**

- Canada and the US rely on an exchange of import data to compile their export statistics
  - Accuracy and coherence of statistics
  - Reducing administrative burden for traders
- Coordination with the United States Census Bureau on statistical breaks
  - Aligning export statistical breaks with the import breaks featured in the other country's classification
    - Concordances maintained
  - Particularly important for Canada's export classification
    - 75% of Canada's exports are destined to the United States
    - US HTS can be updated in January and July of each year



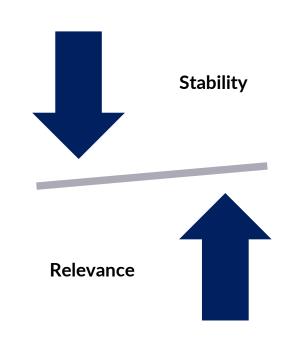


#### **HS Update Challenges - Stewardship**

- Stewardship of the statistical suffix is granted to Statistics Canada by law
  - "The Chief Statistician shall establish a coding system for goods imported into and exported from Canada to enable the Chief Statistician to collect, compile, analyse, abstract and publish statistics in relation to those goods."

- Statistics Act, 1985

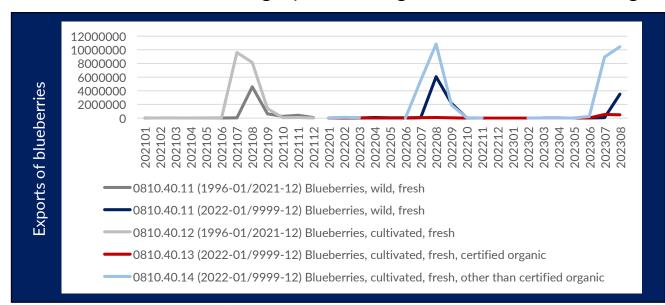
- Specific data users seeking added HS granularity can submit requests for new statistical breaks
- Burden of weighing the needs of different data user groups that can sometimes be in conflict
  - Time series stability vs. maximizing relevance

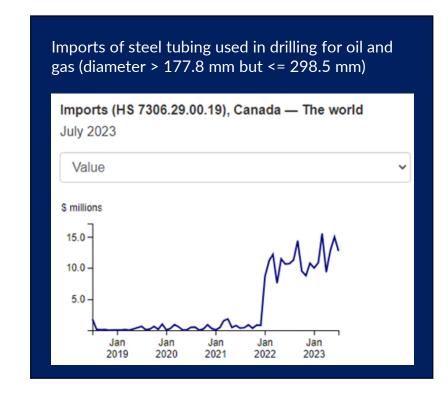




#### Importance of time series in statistics

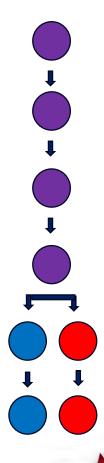
- Time series analysis is challenging when breaks in series exist in a classification
  - The same product is not measured consistently through time
  - Analysis of historical trends becomes limited
  - The existence of a category does not guarantee its correct usage





#### Importance of time series in statistics

- Breaks in series also affect the compilation of trade statistics
  - Tools and processes for outlier detection often depend on historical results
- Particular impact on deflation of merchandise trade
  - Real imports and exports (trade values after removal of price effects) are important components of GDP
  - Compilation depends on tracking prices for a fixed basket of goods over time
    - Methods to compensate for HS changes exist but have limitations
    - Quality of results and ability to analyze movements deteriorate over time as HS changes are applied



#### Achieving the right balance

- HS must change to reflect evolving products and tariff treatments
  - WCO and Tariff code changes are always applied as scheduled
- Statcan approach to managing requests for statistical breaks
  - Internal Statcan assessment of request
    - Materiality of proposed categories
    - Risks related to confidentiality of importers/exporters
    - Impact on price/volume compilation
    - Coherence with US breakouts
  - HS update committee
    - Annual meetings with other federal departments holding a key stake in HS updates
    - Reviewing the merits of the request against the risks and seeking a consensus
  - Wherever possible, deferring these changes to WCO update years





## Thank you

**Chris Maloney** 

chris.maloney@statcan.gc.ca