ILO Labour Statistics databases (LABORSTA):
The issue of quality control procedures

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• LABOR STATistics databases
• Data quality framework
• Tests and controls
• Future developments
Generic term for all ILO/STAT statistical databases
Statistical data and
Metadata
Contains data since 1969
Monthly and yearly data
LABORSTA contents

Official, national data
• Economically active population
• Employment, unemployment
• Wages, hours of work, labour cost
• Occupational injuries, strikes and lockouts
• Consumer price indices, October Inquiry

Labour force estimates and projections
Meta data - texts

- Concepts and definitions, ICLS resolutions (extracts)
- International standard classifications
- Explanatory notes
- Methodological descriptions
Data collection – Monthly data

- From national publications (printed or electronic)
- From national statistical websites
- Entered manually in LABORSTA
Data collection – Yearly data

Pre-filled:
- Paper questionnaires
  - Entered manually
- Electronic questionnaires
  - Through Internet
  - Excel files
  - Entered manually or automatically
Dissemination products

- Internet
- CD-ROM
- Printed publications
- Other “ad-hoc” products
Internet: http://laborsta.ilo.org

- Contains all data in LABORSTA
- Publicly available free of charge
- Updated monthly
- Contains data and metadata
Application features:

• Allow users to select, view, print, and download data
• Minimal user navigation to access data
• Easy on-line “help”
• World-wide country coverage
• Links data and metadata
Printed publications

- Statistical publications
  - Yearbook
  - Quarterly Bulletin & Supplement
  - October Inquiry results

- Methodological information:
  - Sources & Methods: Labour Statistics
CD-ROM

- Launched in 2003
- Complements Internet dissemination
- Contains the Yearbook in PDF format
- Allows users to select, view and download data in HTML and CSV format
- Latest 10 years or data from 1969
- Contains related Sources & Methods
Other products

Special requests:

• External
  – UN MDGs Indicator 11

• Internal
  – ILO Industrial Activities Meetings
Data quality framework

Official national statistics
- Cannot be changed
- Integrated to LABORSTA as they are received
- Checked for consistency
- Detected problems reverted to countries
Tests and controls

- Tests at screen level
- Tests on totals and aggregates
- Consistency tests
- Other controls
Tests at screen level

- Performed during data entry or editing
- Tests on authorized values for discrete variables
- Consistency between variables
- Time-series variations
Tests on totals and aggregates

- Performed on additive data
- Computed totals vs. entered totals
- Redundancy
- Thresholds
- Multiples of 9
Consistency checks

Performed on:

- Different parts of one database
  - In Strikes & Lockouts: Time not Worked vs. Average duration of strikes & lockouts

- Different databases:
  - Labour Force vs. Employment & Unemployment
Automatic vs. on-demand tests

All tests:
• Are run every night for all countries, latest 10 years
• Can be run on-demand for any or all countries & specific time-spans
Tests outputs

- Recently developed tests produce HTML files
- Can be seen by all staff members
- Printed tests progressively converted
- Zero-paper test environment
Reliability index

- For each test erroneous observations flagged
- Percentage of non flagged observations
- Gives information on the test itself
  - Relevance
  - Severity (threshold)
  - Usefulness
- Gives information on data reliability
Other controls

- Backups and change lists
  - Run every day and every week
  - If changes detected
    - Backup the database
    - Generate HTML lists of changes

- Automatic documentation
  - List of variables
  - Frequencies
  - Summary of related groups of observations
Future developments

- Battery of tests could be extended
  - Examine the verification process in terms of resources spent vs. value added
- Web based questionnaires
  - Transfer data entry from ILO to constituents
  - Tests need also to be transferred
URL:
HTTP://LABORSTA. ILO.ORG