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## 2025 Guide to TNSP Economic Benchmarking Files

The Zip file ‘*TNSP2025 Benchmarking - Supporting Files - 24Oct2025*’ contains the following folders and files:

### 1 TNSP Benchmarking Data Files 2025 AER

Includes the following files:

- *TNSP AUC calculation (2024 update).xlsx* – Assembles annual user costs for the three capital inputs;
- *TNSP consolidated benchmarking data (2024 update).xlsx* – AER’s database file assembles variables used in the MTFP and MPFP analysis at the TNSP level and at the industry level from the AER’s Economic Benchmarking Regulatory Information Notice (EBRIN) returns and the intermediate files listed above.
- *TNSP opex price index (2024 update).xlsx* – This file contains the calculation of the opex price index for TNSPs.
- *TNSP reliability output metrics (2024 update).xlsx* – This file contains the calculation of reliability output metrics for TNSPs.

### 2 Stata Files

There are two sub-directories and the file:

- *TNSP codes.txt* – This file contains the TNSP names and their respective codes.

#### 2.1 Stata Data Mgt

These files are under three sub-directories.

- Input
- Programs
- Outputs.

##### 2.1.1 Input

- *TNSP consolidated benchmarking data (2024 update).xlsx* – AER database as detailed in Section 1.

##### 2.1.2 Programs

- *crTNSPbench25-firm.do* – Reads from the file *TNSP consolidated benchmarking data (2024 update).xlsx* (specifically, the worksheet ‘TNSP Shazam Data’) and creates data files for use in Shazam (see section 2) and in Stata.

### 2.1.3 Outputs

Generated by running the program on 2.1.2:

- Folder ‘log’ – *crTNSPbench25-firm.log* is the (text) log file.
- Folder ‘dta’ – DTA format files used as input for other Stata programs (see section 2.2):
  - *tnspbench25-firm.dta* – Stata panel dataset for 5 TNSPs and 19 years sorted by TNSP and Year;
  - *tnspbench25-ind.dta* – Stata panel dataset for the aggregated industry and 19 years sorted by Year.
- Folder ‘csv’ – CSV format files used as input for Shazam programs (see section 3):
  - Files for individual TNSPs (*ANTdata.csv*, *ENTdata.csv*, *PLKdata.csv*, *TNTdata.csv*, *TRGdata.csv*) and a pooled data file for all TNSPs (*TNSPdata.csv*);
  - An aggregated industry data file (*TINDdata.csv*).

## 2.2 Stata Index

These files are under three sub-directories.

- Input
- Programs
- Outputs.

### 2.2.1 Input

- Contains the folder ‘dta’ with the same two files from ‘Stata Data Mgt/Output/dta’ (see section 2.1.3).

### 2.2.2 Programs

- *anTNSP25-firm.do* – Calculates MTFP results for each TNSP and the industry, from 2006 to 2024.
- *anTNSP25-pooled.do* – Calculates comparative MTFP results for TNSPs from pooled data;
- *anTNSP25-firm-exens.do* – For a scenario with only four outputs (i.e., excluding ENS), it calculates MTFP results for individual TNSPs and aggregate results for the industry.

### 2.2.3 Output

- Folder ‘log’ – *anTNSP25-firm.log*, *anTNSP25-pooled.log* and *anTNSP25-firm-exens.do* are the (text) log files generated by running the respective Stata programs with the same names.
- Folder ‘excel’
  - *tnsp25\_tsmftp.xlsx* – Spreadsheet with index results for individual TNSPs. These

are in separate sheets labelled 21 (ENT) 22 (PLK) 23 (ANT) 24 (TNT) 25 (TRG), and 26 (whole industry). In addition to output, input and TFP indexes, and opex and capital MPFP indexes, results include partial productivities for individual inputs, contributions of individual outputs and inputs to TFP growth, and growth rates of individual outputs and inputs.

- *tnsp25\_pooled.xlsx* – Spreadsheet with index results for pooled MTFP analysis.
- *tnsp25\_tsmtp\_exens.xlsx* – Spreadsheet with index results for individual TNSPs and the industry when ENS is excluded. Only includes output, input and TFP indexes.

### 3 Shazam Files

These files are under three sub-directories:

#### 3.1 Data input

Data files in CSV format which are read by Shazam programs. The same files as included in the directory ‘Stata/Stata Data Mgt/Output/csv’ (discussed in section 2.1.3);

#### 3.2 Programs

Shazam programs which carry out MTFP calculations and regression-based growth rates. They are included here as text files to aid readability. To run them in Shazam, the file extensions need to be changed to ‘.sha’;

- *TFP25-21ENT.txt* – Program for ENT
- *TFP25-22PLK.txt* – Program for PLK
- *TFP25-23ANT.txt* – Program for ANT
- *TFP25-24TNT.txt* – Program for TNT
- *TFP25-25TRG.txt* – Program for TRG
- *TFP25-26TIND.txt* – Program for the whole industry
- *TFP25-TPOOL.txt* – Program for comparative MTFP analysis of TNSPs.

#### 3.3 Outputs Files

The results from the Shazam program in text files.

- *TFP25-21ENT-Output.txt* – Results for ENT
- *TFP25-22PLK-Output.txt* – Results for PLK
- *TFP25-23ANT-Output.txt* – Results for ANT
- *TFP25-24TNT-Output.txt* – Results for TNT
- *TFP25-25TRG-Output.txt* – Results for TRG
- *TFP25-26TIND-Output.txt* – Results for the whole industry

- *TFP25-TPOOL-Output t.txt* – Results for comparative MTFP analysis.

## 4 TNSP-MTFP Tables-Charts

Contains the Excel workbook *TNSP-MTFP Tables-Charts-27Aug2025.xlsx*, into which the results of the previously described Shazam and Stata programs are pasted. The workbook produces tables and charts formatted so they can be copied into the report.

The first sheet of this Excel workbook, ‘ReadMe’, explains the structure of the workbook and how to use it. The second sheet, ‘Labels & Codes’, defines each of the codes used in the Shazam and Stata output files which are the input files to this Excel workbook.

## 5 Sensitivity analysis (Appendix C)

Contains the Stata files and Excel workbook with the tables and charts used for the sensitivity analysis presented in Appendix C of the report.

### 5.1 Stata Data Mgt

These files are under three sub-directories.

#### 5.1.1 Input

- *TNSP\_MTFP\_modelling\_20250819\_SenAna\_Capacity.xlsm* – AER data adjustments to ERG and TRG capacities, which form the database for the sensitivity analysis. This workbook also includes AER’s own sensitivity analysis, which can be used to cross-check Quantonomics’ results.

#### 5.1.2 Programs

- *crTNSPbench25-firm.do* – Reads from the file *TNSP\_MTFP\_modelling\_20250819\_SenAna\_Capacity.xls* (specifically, the worksheet ‘Shazam TNSP Data’) and creates data files for use in Stata.

#### 5.1.3 Outputs

Generates the results of the sensitivity analysis by running the program on 5.1.2:

- Folder ‘log’ – *crTNSPbench25-firm.log* is the (text) log file.
- Folder ‘dta’ – DTA format files used as input for other Stata programs (see section 2.2):
  - *tnspbench25-firm.dta* – Stata panel dataset for 5 TNSPs and 19 years sorted by TNSP and Year;
  - *tnspbench25-ind.dta* – Stata panel dataset for the aggregated industry and 19 years sorted by Year.
- Folder ‘csv’ – CSV format files
  - Files for individual TNSPs (*ANTdata.csv*, *ENTdata.csv*, *PLKdata.csv*, *TNTdata.csv*, *TRGdata.csv*) and a pooled data file for all TNSPs (*TNSPdata.csv*);

- An aggregated industry data file (*TINDdata.csv*).

## 5.2 Stata Index

These files are under three sub-directories.

### 5.2.1 Input

- Contains the folder ‘dta’ with the same two files from ‘Stata Data Mgt/Output/dta’ (see section 5.1.3).

### 5.2.2 Programs

- *anTNSP25-firm.do* – Calculates MTFP results for each TNSP and the industry, from 2006 to 2024.
- *anTNSP25-pooled.do* – Calculates comparative MTFP results for TNSPs from pooled data;
- *anTNSP25-firm-exens.do* – For a scenario with only four outputs (i.e., excluding ENS), it calculates MTFP results for individual TNSPs and aggregate results for the industry.

### 5.2.3 Output

- Folder ‘log’ – *anTNSP25-firm.log*, *anTNSP25-pooled.log* and *anTNSP25-firm-exens.do* are the (text) log files generated by running the respective Stata programs with the same names.
- Folder ‘excel’
  - *tnsp25\_tsmtfp.xlsx* – Spreadsheet with index results for individual TNSPs. These are in separate sheets labelled 21 (ENT) 22 (PLK) 23 (ANT) 24 (TNT) 25 (TRG), and 26 (whole industry). In addition to output, input and TFP indexes, and opex and capital MPFP indexes, results include partial productivities for individual inputs, contributions of individual outputs and inputs to TFP growth, and growth rates of individual outputs and inputs.
  - *tnsp25\_pooled.xlsx* – Spreadsheet with index results for pooled MTFP analysis.
  - *tnsp25\_tsmtfp\_exens.xlsx* – Spreadsheet with index results for individual TNSPs and the industry when ENS is excluded. Only includes output, input and TFP indexes.

## 5.3 TNSP-MTFP Tables-Charts-Sensitivity Analysis

Contains the Excel workbook *Sensitivity - TNSP-MTFP Tables-Charts-27Aug2025.xlsx*, into which the index results are pasted. The workbook produces tables and charts formatted so they can be used in Appendix C of the report. It only presents results for ENT, TRG and the Industry.