



CEER TSO Cost Efficiency Benchmark

Financial reporting guide

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1. Introduction

1. The CEER benchmarking projects for electricity and gas Transmission System Operators (TSOs) use two data calls to collect the required data:
 1. the financial data call, and
 2. the asset data call.
2. The financial reporting templates (Excel) and this associated financial reporting guide constitute the financial data call. The reporting of assets is defined in the asset data call.
3. TSOs report their data in the financial reporting template. There are separate templates for electricity and gas. This guide is valid for both electricity and gas and is meant to explain how the reporting template(s) has/have to be filled in.
4. Note that this guide (and its associated reporting template) is essentially a further development of the financial reporting guide used in the previous CEER electricity TSO cost efficiency benchmarks E3grid (2012-2013) and E2gas (2015/2016).
5. TSOs report their data based upon their audited financial statements¹. This way the costs reported in the investment stream align with the costs of investments in the audited financial statements and the reported expenses align with the expenses in the profit and loss account of the audited financial statements.
6. Although it is important that total investments and expenses match the audited financial statements, it might be possible that the required breakdown of costs and expenses does not match your audited financial statements. In that case it is acceptable if you use your general ledger and project administration in order to make estimates as good as possible. Please provide clarification if you have made estimates.
7. Regarding assets owned by the group to which the TSO belongs, but not by the TSO itself, the relevant investment data of the group company have to be used.

¹ This means that only financial accounting data has to be reported. Regulatory (accounting) data shall not be reported.

8. In case TSOs do not publish their audited financial statements, the reported investments and expenses should be visible in the segmented financial information of audited consolidated financial statements of the parent company.
9. TSOs report their data for a given year in the currency used in the audited financial statements of that year.
10. Please note that not all reported investments and expenses will be in scope of the benchmark study, but that some elements are required only for verification purposes.
11. The International Financial Reporting Standards (IFRS) have been used as the basis for this guide, although this does not exclude the possibility that some TSOs use other accounting systems.
12. Please fill in all fields of the financial reporting template. To avoid misunderstandings, always fill in an explicit "0" or "N/A" if that is the case.
13. This guide is structured as follows. In Chapter 2, the activities of TSOs in which the financial reporting is decomposed are described. Chapter 3 of this guide deals with investment reporting. Chapter 4 describes the expense reporting.

2. Activities

Definitions

14. This financial guide uses definitions in accordance with the glossaries of ENTSO-E² and ENTSG³ where possible. Main definitions can be found per chapter. The appendix contains other definitions.
15. The various asset categories for the transport activity are defined in the asset guide.

Activities

16. When reporting investments and expenses, a distinction is made between different activities:

T	Transport;
M	Grid maintenance;
P	Grid planning;
S	System operations;
X	Market facilitation;
TO	Offshore;
SF	Storage Facility;
L	LNG facility (gas only); and
O	Any other activity;
I	Indirect expenses.

Note that I is not a real activity, but for the reporting dealt with as such.

17. Four elements of expenses are, for the amounts reported in the profit and loss account of the audited financial statements, excluded from allocation to activities:
 - a) depreciation, impairment and amortization of assets (excluding depreciation of equipment and vehicles and non-grid related telecommunications);
 - b) finance income and expenses (interest); and
 - c) taxes on declared annual profits
 - d) extraordinary expense and income⁴.

These elements are reported on a separate sheet of the reporting template.

² <https://www.entsoe.eu/data/data-portal/glossary/Pages/home.aspx>

³ <https://www.entsog.eu/publications/glossary-of-definitions#GLOSSARY-OF-DEFINITIONS>

⁴ IFRS prohibits reporting expenses and income as extraordinary, other accounting systems however may still be allowing this.

18. Main changes in comparison to previous CEER TSO cost efficiency benchmarks (E3Grid in 2012/2013 and E2Gas in 2015/2016) are:
- The term 'function' in E3Grid was changed into 'activity' in E2Gas. This financial guide uses the term 'activity'.
 - The A activity was renamed into the I activity to represent all indirect costs and expenses.
 - E2Gas introduced the T activity, which is now common to both electricity and gas.
 - The construction activity (C) has been removed since almost all activities of construction are capitalized and the activity appeared to have no assets or expenses in the audited financial statements of TSOs.
 - The grid ownership activity (F) has been removed since finance income and expenses are omitted from allocation to activities.
 - TO is included in order to have a more refined understanding of the grid.

T Transport

19. For investments (CAPEX) this activity includes all costs regarding construction and maintaining the network⁵, excluding offshore.
20. For expenses (OPEX) this activity includes the expenses for metering, the purchase of energy for operating the network⁶, grid-related insurance and day-to-day management of the network functionality.
21. For revenues this activity includes revenues from third parties for assets used by these parties with a usage share higher than 0% and lower than 100%⁷, reported in the audited financial statements as revenues.

M Grid maintenance

22. For investments (CAPEX) the maintenance is included in the T activity.
23. For expenses (OPEX) this activity includes all expenses regarding maintaining the network.

P Grid planning

24. For investments (CAPEX) this activity includes planning costs which are capitalized as a part of the investment stream⁸. These planning costs are

⁵ This includes grid-related equipment and vehicles which are not specified in the asset reporting.

⁶ Mainly purchase of energy for network losses.

⁷ Costs and expenses of assets with a usage share of 0% are reported under O (Other activities). Assets with a usage share of 100% do not have revenues from third parties.

the costs associated with receiving the permit to construct (a part of) the transmission system and includes costs for environmental studies.

25. For expenses (OPEX) this activity includes all expenses regarding the analysis, planning and drafting of network expansion and network resources, including the expenses for the ten-year network development plan and non-capitalized research and development. This includes long-term planning.

S System operations

For electricity only

26. For expenses (OPEX) this activity includes all expenses regarding balancing services, primary and secondary reserves, capacity management, ancillary services (disturbance reserves, voltage support) and the purchase of energy for congestion management and redispatching. This activity excludes day-to-day management of the network functionality.

For gas only

27. For expenses (OPEX) this activity includes all expenses regarding ancillary services and congestion management. This activity excludes day-to-day management of the network functionality.

X Market facilitation

28. For expenses (OPEX) this activity includes all direct involvement in energy exchanges through information provision or contractual relationships. This comprises regulated tasks through procurement or renewable power, residual buyer obligations or capacity allocation mechanisms, capacity auctioning mechanisms, and work on coordination of feed-in tariffs. This activity includes direct expenses related to the contractual relations excluding transport and storage, primarily information expenses and energy purchases for other purposes than the consumption in the network of the TSO.
29. For revenues this activity includes pass-through income regarding market facilitation, reported in the audited financial statements as revenues .

TO Offshore

30. This activity is defined like T, but for offshore only.

⁸ These only need to be reported for the most recent five years

SF Storage facility

31. All direct and indirect costs and expenses of (gas) storage facilities and peak-shaving plants.

L LNG Facility (gas only)

32. All direct and indirect costs and expenses associated with LNG facilities.

O Other activities

33. This includes all costs and expenses for activities that are not covered by any other activity, for example:
- a. costs and expenses for all assets which are owned by the reporting TSO, but not used by the reporting TSO to fulfil its own supply obligations because the assets are *fully* (100%) leased, rented or made available otherwise by the reporting TSO to third parties. Note that none of these assets should be reported in the asset reporting;
 - b. personnel on the payroll of the TSO and working for a group company.

I Indirect expenses⁹

34. For expenses (OPEX): expenses (e.g. personnel) for administrative support, non-grid related insurance, non-grid related telecommunications, non-grid related equipment, non-grid related vehicles, management, and expenses for the main office. This activity does not include research & development, grid related telecommunications, grid-related insurance and grid-related equipment and vehicles.

⁹ Indirect expenses have to be accounted for separately in the OPEX sheet only. A TSO may have indirect cost allocated to CAPEX, but specification of that is not asked for. In contrast to all other activities, which are direct activities, the indirect activity is not an actual activity but for the reporting will be dealt with as such.

3. Investment reporting

Main definitions

35. Investments are expenditures for assets (or components thereof¹⁰) that are recognized in the audited financial statements as tangible fixed assets.
36. Investments in used assets are expenditures for second-hand assets which were previously owned by a different company (not being a group company), e.g. a DSO or another TSO. Contrary to investments in new assets the acquisition year will differ from the commissioning year. The opening balance assets for a new TSO is also an investment in used assets.
37. Significant rehabilitation investments are large incremental investments into an existing asset without change of any characteristics (i.e. its dimensions and properties). Large is defined as at least 25% of the (real) initial investment. Regular preventive and reactive maintenance, e.g. replacement of system components at or before their lifetime is not counted as a "rehabilitation".
38. Upgrades are investments in existing assets changing the characteristics. Upgrades should be reported as investments.
39. Acquisition year is the year assets are recognized in the audited financial statements.
40. Commissioning year is the year assets, when they are new, are put into operation.
41. Disinvestments are disposals of assets (or components thereof) that are derecognized in the audited financial statements.
42. Capitalized borrowing costs are defined in International Accounting Standard 23, *Borrowing costs*.
43. Capitalized land are the costs of the investments that are due to purchase of land and capitalized payments to third parties as a result of a legal process (e.g. expropriation or compensation agreement), procurement or negotiation, related to the damage, injury of land, and /or the right to use land, roads or waterways for the activities of the TSO. This includes the capitalized direct expenses for judicial assistance, court fees etc. for legal

¹⁰ Including fences, security cameras, etc.

processes (terminated or non-terminated) related to the use, damage or injury of land for the activities of the TSO.

44. Capitalized planning costs are the costs of the investments that are due to planning.
45. Gross investment stream is defined as investments per calendar year over time.
46. Disinvestment stream book year is defined as the original cost¹¹ of disinvestments per year, as occurred in the book year, over time.
47. Disinvestment stream acquisitioning year is defined as the original cost of disinvestments per year, as occurred in the acquisition year, over time.
48. Investment contributions are defined as payments by third parties for investments, investment grants and subsidies received.
49. Net investment stream is defined as the gross investment stream minus the disinvestment stream acquisitioning year.
50. Asset categories are identifiable groupings of assets. The definitions of the asset categories within the T, M and P activities can be found in the asset guides, with the exception of the asset category 'grid-related equipment and vehicles' (see the appendix for the definition). For the financial reporting the following asset categories are combined:
 - Lines and towers (electricity only)
 - Substations, transformers and circuit ends (electricity only)
51. Cost is defined in International Accounting Standard 16, *property, plant and equipment*.
52. Capitalization threshold is the amount above which assets are recognized in the audited financial statements.
53. Major spare parts, stand-by equipment and servicing equipment are defined in International Accounting Standard 16, *property, plant and equipment*.

¹¹ Ref. article 60

Investment stream and disinvestment stream

54. Investments are reported in the investment stream in the year the underlying assets are put *into* operation.
55. Disinvestments are reported both in the year they occurred and also in the acquisition year. The sum of all disinvestments in the disinvestment stream book year has to be equal to the sum of all disinvestments in the disinvestment stream acquisition year¹².
56. The investments in the investment stream for a given year should correspond to the investments in tangible fixed assets in the audited financial statements of the TSO for that year.
57. The disinvestment stream book year should correspond to the disinvestments as reported in the audited financial statements of the TSO for that year.
58. Investments are reported at cost¹³ and have to be based on evidence, e.g. invoices.
59. Investment contributions¹⁴ have to be reported separately.
60. Disinvestments are reported at the original cost of the corresponding investment and have to be based on evidence, e.g. invoices.
61. (Dis)investments are reported in asset categories as specified in chapter 2 of this guide (Activities).
62. The investment stream data for asset categories in activity T should correspond to the assets reported in the asset data call.
63. Major spare parts, stand-by equipment and servicing equipment are included in the investment stream only if they are recognized as tangible fixed assets in the audited financial statements of the TSO.

¹² For example: a disinvestment in 2017, regarding an asset acquired in 2000 for € 100.000, has to be reported in the year 2000 in disinvestment stream acquisition year at € 100.000 and the year 2017 in disinvestment stream book year at € 100.000.

¹³ Revaluations or write-ups are not taken into account.

¹⁴ Depending on the accounting methods in the audited financial statements an investment of € 100 million with an investment contribution of € 10 million was reported at € 100 million or € 90 million. The TSO has to report which of the two methods was used.

64. Investments in significant rehabilitations are reported both in the (dis)investmentstream and separately. TSOs report the ID of the rehabilitated asset (as reported in the asset reporting), asset category, commissioning year, rehabilitation year and the rehabilitation investment amount.
65. Investments in used assets are reported both in the (dis)investmentstream and separately. The remaining weighted average¹⁵ technical lifetime of these assets as estimated by the TSO is reported as well.
66. Figure 1 below shows a flowchart of how to deal with monetary items spent on assets in terms of this reporting.

Gas only

67. Some specific asset categories are reported both in the (dis)investmentstream and separately. These asset categories are inshore pipes, odorization assets, gas chromatographs, and integrated delivery stations (including the reported assets it comprises, like regulators).

¹⁵ Weighted average is necessary when a TSO acquires multiple used assets in one year, with different remaining lifetimes per asset.

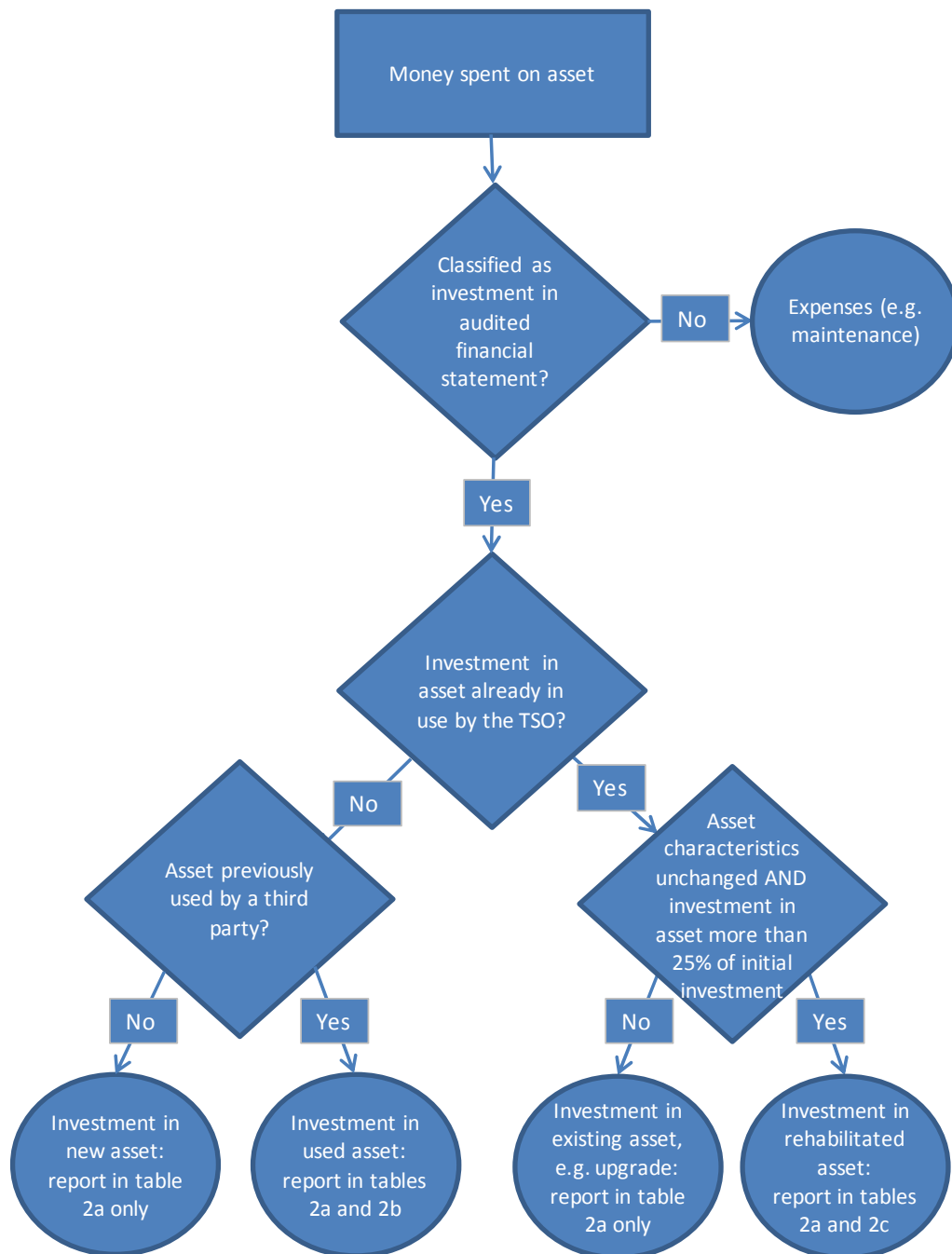


Figure 1: Flowchart for treating investments in this reporting

4. Expense reporting

Main definitions

68. Personnel expenses are the non-capitalized expenses for internal and external personnel including all taxes, charges or fees related to salaries, pensions and other payroll items. This includes personnel on the payroll of the TSO, personnel on the payroll of a group company and carrying out activities for the TSO and hours of temporary personnel carrying out activities for the TSO.
69. Energy expenses are the non-capitalized expenses for purchasing gas and/or electricity to operate machinery and buildings, for energy losses during transport, and for congestion management and redispatch.
70. Expenses for landowner compensation, right-of-way and easement fees are the non-capitalized payments to third parties as a result of a legal process (e.g. expropriation or compensation agreement), procurement or negotiation, related to the damage, injury of land, and /or the right to use land, roads or waterways for the activities of the TSO. This includes the direct expenses for judicial assistance, court fees etc. for legal processes (terminated or non-terminated) related to the use, damage or injury of land for the activities of the TSO.
71. Expenses for taxes and levies are non-capitalized state, municipal and regional taxes, levies and public fees paid for the ownership of specific assets (e.g. property taxes, packaging), the use of specific processes (e.g. environmental levies), for investments and procurement (stamp taxes, legal fees, customs), for non-claimed value-added taxes (foreign VAT).

Expense reporting¹⁶

72. The total expenses reported for a given year should be equal to the expenses in the audited financial statements of the TSO for that year, excluded the expense elements as in Article 17 of this guide.
73. The TSO specifies cost elements per activity as required in the template.
74. The TSO clarifies, per activity, on other expenses.

¹⁶ Any revenue classified in the profit & loss account in the audited financial statements as revenue should not be reported in table 3 (expenses) of the financial reporting template but in table 4 (P&L) only.

Appendix - glossary

Ancillary services

All services necessary for access to and the operation of transmission networks, distribution networks, LNG facilities, and/or storage facilities, including load balancing, blending and injection of inert gases, but not including facilities reserved exclusively for transmission system operators carrying out their functions (source: ENTSOG glossary).

CAPEX

Capital expenditure

Control center

See asset guides for the definition.

Control center expenses

The profit & loss items associated with control centers.

Day-to-day management

The activity to ensure the daily operational availability of the network, including personnel safety (instructions, training), equipment security including relay protection, operation security, cyber security, coordination with operations management of the interconnected grids, coupling and decoupling in the network and allowances to personnel/contractors acting on the live grid. This includes staffing of the control centers.

Energy expense

The profit & loss item for energy.

Expense for landowner compensation, right-of-way and easement fees;

The profit & loss item for landowner compensation, right-of-way and easement fees.

Expense for odorization

The profit & loss item for odorization.

Expense for rent/lease of main office building

The profit & loss item for the main office of the TSO.

Expense for taxes and levies;

The profit & loss item for taxes and levies.

Full-time equivalent

The number of employees on full-time schedules plus the number of employees on part-time schedules converted to a full-time basis.

Grid maintenance

The activity preserving an asset's operational status without extending its life.

Grid planning

The activity concerning planning the development of a network including individual assets.

Grid-related equipment and vehicles

Auxiliary items meant to ensure the functioning of the grid, including vehicles meant for equipment and spare-parts.

Grid-related insurance

Insurance premiums covering the network.

Grid-related telecommunications

See asset guides for the definition.

Investments in grid-related telecommunications have to be reported under the asset category 'control centers'.

Inshore water crossing

See asset guides for the definition.

Integrated delivery station (gas only)

In case the connection point has a delivery station, there can be two situations. Either the delivery station is not an integrated part of the TSO's network, i.e. the connection point lies directly behind a safety valve, or the delivery station is an integrated part of the TSO's network, i.e. the connection point lies behind the delivery station (Integrated). The latter type of delivery station is referred to as an integrated delivery station.

LNG facility (gas only)

A terminal which is used for the liquefaction of natural gas or the importation, offloading, and re-gasification of LNG, and includes ancillary services and temporary storage necessary for the re-gasification process and subsequent delivery to the transmission system, but does not include any part of LNG terminals used for storage (source: ENTSOG glossary).

Long-term planning (electricity only)

The planning of the need for investment in generation and transmission and distribution capacity on a long-term basis, with a view to meeting the demand of the system for electricity and securing supplies to customers (source: ENTSO-E glossary).

Long-term planning (gas only)

The planning of supply and transport capacity of natural gas undertakings on a long-term basis with a view to meeting the demand for natural gas of the system, diversification of sources and securing supplies to customers (source: ENTSG glossary).

Main office

The main office of the TSO (expenditure for renting/leasing the building and the underlying land).

Main office expenses

Non-capitalized expenses for renting or leasing the main office and the underlying land.

Non-grid related insurance

Insurance premiums not related to the network.

Non-grid related telecommunications

Telecommunication cost and expenses not related to the grid. This includes telecommunications for third parties for (e.g. optical fiber or mobile infrastructure) and associated costs, income and expenses which have to be reported under the activity O.

Offshore

See asset guides for the definition.

OPEX

Operational expenditure

Other expenses.

Expenses not attributable to any other expense item.

Pass-through

Monetary item for market facilitation in which expenditure equals income.

Personnel expense

Expenses for internal and external personnel, both on payroll and temporary.

Research & development

Innovative activities in developing new services or products, or improving existing services or products.

Revenue

The profit & loss items reported in the financial statements as revenue.

Storage facility (electricity only)

A facility used to capture energy produced at one time for use as electricity at a later time.

Storage facility (gas only)

A facility used for the stocking of natural gas and owned and / or operated by a natural gas undertaking, including the part of LNG facilities used for storage but excluding the portion used for production operations, and excluding facilities reserved exclusively for transmission system operators in carrying out their functions (source: ENTSOG glossary).

System operations (electricity)

Activities regarding balancing services, primary and secondary reserves, capacity management and ancillary services (disturbance reserves, voltage support).

System operations (gas)

Ancillary services and congestion management.

Transport

The transport of electricity or gas on the network with a view to its delivery to final customers or to distributors.

Usage share

See asset guides for the definition.