



Business scenarios for EDI communication in the gas market

Rules for EDI-based communication between:

-Distribution Company and Gas Supplier

in relation to change of supplier, Relocation and Consumption Statements

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Change log

The change log contains any alteration carried out since the previous version/release was published. Generally, version changes contain significant structural or syntactical changes, whereas new releases contain minor adjustments.

15 February 2009

Version 1.2		
Section	Process	Change
1.9	-	New product code, 3008, calorific monthly values in kWh ϕ / Nm ³ , has been added.
2.1	BS-201	Figure 1 has been adjusted so that transaction BT-004 – submission of base data (E07) – is included as a separate transaction within BT-001.
2.1.6	BS-201	BT-004 is added to the table to reflect the above change.
2.4	BS-204	Figure 4 has been adjusted so that submission of base data (E07) is no longer a part of BT-001, and the figure has been extended with a separate BT-004.
2.4.6	BS-204	BT-004 has been added to the table to reflect the change in the above-mentioned process.
2.9	BS-209	Figure 9 has been adjusted so that submission of base data (E07) is no longer a part of BT-001, and the figure has been extended with a separate BT-004.
2.9.6	BS-209	BT-004 has been added to the table to reflect the change in the above-mentioned process.
2.12.5	BS-213	Consumer portfolio number has been changed from GLN to GSRN.
2.13.6	BS-214	New product code, 3008, calorific monthly values in kWh ϕ / Nm ³ , has been added
2.15.6	BS-216	Consumer portfolio number has been changed from GLN to GSRN.
2.16.5	BS-217	Consumer portfolio number has been changed from GLN to GSRN.

1 October 2009

Version 1.3		
Section	Process	Change
1.2	-	A paragraph has been added, specifying that this document takes precedence of any other documentation for the gas market in case of discrepancies.
1.5	-	The definition of Business Day has been changed.
1.8	-	It has been added that the sender is allowed to contact the recipient after 20 minutes to get an acknowledgement.

1.8	-	It has been emphasised that a <i>negative</i> CONTRL must be submitted not later than 5 minutes after receipt.
2.13.3	BS-214	Step 4 has been added which specifies that the Distribution Company acknowledges receipt.
2.15.5	BS-216	It has been specified that deadlines apply to the submission of daily-read consumption data to the transmission system operator.

1 July 2010

Version 2.0		
Section	Process	Change
1.5		Definitions related to Bio Natural Gas (BNG) have been added.
1.9	-	New product code (3009), including specification, has been added. BNG Transition Point has been added for product codes 3060, 3061, 3062, and 3063.
2.13.1	BS-214	Paragraph about the daily assessment of gas consumption and submission of Non-Validated calorific values has been added. Figure has been adjusted to also contain the daily submission of Non-Validated calorific values.
2.13.2	BS-214	The following sentence has been added: 'At the end of the gas day, the transmission system operator assesses the Non-Validated calorific value of the natural gas for each M/R station.'
2.13.3	BS-214	2.a and 2.b have been added, specifying the difference between the submission of daily Non-Validated and daily and monthly Validated calorific values.
2.13.5	BS-214	Deadline for submitting daily Non-Validated calorific values has been added.
2.13.6	BS-214	New product code (3009), including specification, has been added.
2.15	BS-216	Figure 15, process flow diagram for BS-216, has been changed to also include the role of bio natural gas producer, including a transaction (BT-008) between the Distribution Company and the bio natural gas producer.
2.15.1	BS-216	It has been added that the process also entails bio natural gas producers and noted that there are no requirements for bio natural gas producers with regard to sending acknowledgements (APERAK or CONTROL).
2.15.3	BS-216	An additional point (4) has been added which describes the submission of injection values from the Distribution Company to the bio natural gas producer and the transmission system operator.

2.15.4	BS-216	<p>The sentence has been added: 'For Metering Sites measuring the injection of Bio Natural Gas, the Metering Site administrator must also submit the injection values in kWhø to the transmission system operator and the bio natural gas producer.'</p> <p>The following sentence has been added: 'Where the injection of Bio Natural Gas is concerned, the measured gas flow must have a negative sign in the EDI message. The Distribution Company receiving the gas (and measuring it) must add the gas volume to its total M/R injection.'</p>
2.15.5	BS-216	<p>Deadline for submission of consumption data in connection with gas flow settlement has been changed from 08:00 to 08:30.</p> <p>Deadline for submission of injection values has been added.</p>
2.15.6	BS-216	Paragraph about "Injection of Bio Natural Gas (with negative sign)" has been added.
6 (Appendix 1)	-	Appendix 1 has been removed; please refer to the deadlines indicated for each individual process.

12 August 2011

Version 3.0		
Section	Process	Change
1.1	-	Requirement for use of EDI communication has been added.
1.4	-	<p>Information about where deadlines are stated has been changed.</p> <p>Text regarding Gas Suppliers' possibility of postponing the use of EDI communication for a period of up to 18 months has been deleted.</p>
1.5	-	<p>Definitions of Change of Supplier at Short Notice and Change of Supplier at Normal Notice have been deleted as there will only be one type of change of supplier in future.</p> <p>Definition of Terminal Date has been made more precise.</p>
1.8	-	The possibility of requesting CONTRL has been added.
1.9	-	<p>Designation for E03 has been changed from Change of Supplier at Normal Notice to Change of Supplier.</p> <p>E40 Change of Supplier at Short Notice has been deleted.</p>

		ed. Product codes 3020-3023 have been deleted.
2.1	BS-201	Name of BS-201 has been changed from Change of Supplier at Normal Notice to Change of Supplier.
2.1	BS-201	Adjusted sequential diagram has been inserted
2.1.1	BS-201	Information about the possibility of not using EDI communication has been deleted.
2.1.2	BS-201	The wording used to describe 'start condition' has been changed.
2.1.3	BS-201	It has been emphasised that communication must take place using EDI messages (BT-001, BT-003 and BT-007). The reason for rejection 'Gas Supplier already supplies Metering Site' has been deleted. New description of possibility of cancelling a change of supplier as a result of the consumer's right of cancellation has been added. Wordings used in process descriptions have been changed.
2.1.4	BS-201	New section on the handling of incorrect changes of supplier has been added.
2.1.5	BS-201	Deadlines relevant to change of supplier have been adjusted.
2.1.6	BS-201	Description of data content for data flows for the cancellation of change of supplier has been added.
2.2	BS-202	Adjusted sequential diagram has been inserted
2.2.2	BS-202	The wording used to describe 'start condition' has been changed.
2.2.3	BS-202	The first step of the process description has been adjusted so that it is evident which information the Gas Supplier has to send to the consumer. The reason for rejection to the effect that the requested Terminal Date is not within deadline has been deleted. Process steps have been added to the various scenarios for change of supplier to the effect that the Public Supply Obligation Company must take over the supply to the consumer. Wordings used to describe process steps for the reading of Metering Sites, consumption settlement and the implementation of change of supplier.

2.2.4	BS-202	Deadlines relevant to end of supply have been adjusted.
2.2.5	BS-202	Data content has been added for the messages to be used if EDI communication is used between the Distribution company and the Public Supply Obligation Company.
2.4	BS-204	BS-204 has been deleted as because of the new market rules it is no longer relevant to distinguish between Change of Supplier at Normal Notice and Change of Supplier at Short Notice. All changes of supplier must in future be handled as BS-201.
2.7.4	BS-207	Deadlines relevant to Relocation (vacating consumer) have been adjusted.
2.8.3	BS-208	Information about EDI messages has been added if EDI communication is used between the Public Supply Obligation Company and the Distribution Company.
2.8.4	BS-208	Information about notice of termination has been changed.
2.8.6	BS-208	Deadlines relevant to Relocation notified to the Distribution Company have been adjusted.
2.8.7	BS-208	Data content has been added for the messages to be used if EDI communication is used between the Distribution Company and the Public Supply Obligation Company.
2.9.4	BS-209	Deadlines relevant to Relocation (incoming consumer) notified to the Gas Supplier have been adjusted.
2.10.1	BS-210	Information has been added to the effect that the process must also be used in scenarios where the Public Supply Obligation Company is the supplier.
2.12	BS-213	Adjusted sequential diagram has been inserted.
2.12.2	BS-213	Start condition for submission of market share values has been changed as preliminary and final market share values need no longer be submitted.
2.12.3	BS-213	Process description has been changed so that only market share values are submitted, not preliminary market share values.
2.12.4	BS-213	Deadlines relevant to the submission of market share values have been adjusted.
2.12.5	BS-213	Designation for consumer portfolio number has been changed to GLN. Code for quantity status for estimated value has been deleted.
2.14	BS-215	The process for adjusted residual consumption has been deleted as it is no longer used.
2.15.3	BS-216	A more precise description of the updating of distributed residual consumption has been added.

2.15.5	BS-216	It has been emphasised that the issue in question is distributed residual consumption.
2.15.6	BS-216	Time period for quantity has been specified. Consumer portfolio number has been added for the purpose of submission of residual consumption data. Product codes have been changed.
4	-	The cancelled processes BS-204 and BS-215 have been deleted from the table of business scenarios. It has been added that the form to be used in connection with emergency procedures must also be used in connection with end of supply. Reference to where deadlines are defined has been changed.
4.1	-	Title of form has been changed.
4.2	-	Information about the deadlines applying to the use of the form has been changed.

22 March 2013

Version 3.1		
Section	Process	Change
- (previously 2.7)	BS-208	BS-208 (Relocation (incoming consumer) reported to the Distribution Company) is omitted as the new principles for handling the Public Supply Obligation and Relocaters prescribe that it is no longer up to the Distribution Company to handle Relocation of incoming consumers,
1.1		The demand for Public Supply Obligation Company's use of EDI communication is omitted as it is expected that EDI communication in future is always applied between kcommercial operators in the gas market. Moreover, update to RfGD version 3.
1.5		Addition of definition for Meter Reading. Definition of Terminal Date adjusted according to RfGD version 3.
1.8		Change of use to receive CONTRL.
1.9		Message name 392 changed to "Start of supply". New transaction cause Z08 (Terminal Date changed) added. New transaction Z09 (Request to close down from the Public Supply Obligation Company) added . New transaction cause Z10 (Termination of Metering Point) added.

		Reason code for reading 2 changed to "Final Consumption"
2.1	BS-201	The process is changes to encompass both change of supplier for existing Metering Points as well as initialisation of new Metering Point.
2.1.1	BS-201	Text added. Two extra transactions added.
2.1.3	BS-201	Text adjusted to also encompass initialisation of new Metering Site.
2.1.4	BS-201	Deadline for start of delivery to the Public Supply Obligation Company added..
2.1.5	BS-201	Data content for new transactions added.
2.2	BS-202	EDI communication between the Distribution Company and the Public Supply Obligation Company has been clarified and the charts updated.
2.2.1	BS-202	Text added. Two extra transactions added.
2.2.2	BS-202	Text about the Gas Supplier as Public Supply Obligation Company added..
2.2.3	BS-202	Description of the procedure around the Gas Supplier as Public Supply Obligation Company added.. New item 3 added Text about the communication between the Distribution Company and the Public Supply Obligation Company has been clarified with EDI transactions.
2.2.4	BS-202	Deadlines for Gas Supplier as Public Supply Obligation Company added.
2.2.5	BS-202	Text regarding "If EDI communication is applied..." has been deleted.. Contact address is moved from "Announcement of start of supply" to "Submission of Base data".
2.2.6	BS-202	DK-BT-004 added.
2.6	BS-207	BS-207 (Relocation (vacating consumer) – reported to Distribution Company) changed as the new principles for handling Public Supply Obligation and movers prescribe that is is no longer up to the Distribution Company to handle moving out. Subsequently BS-207 comprises a process for Termination of Metering Point and is partly replaced by a new process, BS-218 (Relocation (vacating consumer) – reported to Gas Supplier). Sequence chart and text in the entire section regarding the process have been changed to only cover Termination of Metering Point.
2.7	BS-209	Headline changed to "BS-209: Relocation (incoming consumer)". Thus the remark about "reported to Gas Supplier" is omitted. Adjusted sequence chart is added.
2.7.1	BS-209	Bullet list adjusted in accordance with the order in the sequence chart.

2.7.2	BS-209	Text changed to no distinguish between Gas Supplier and Public Supply Obligation Company. Text regarding time of Terminal Date has been deleted.
2.7.3	BS-209	Adjustment of numbering in accordance with the sequence chart. New item 3 added. Item 1. Meter reading added to information which incoming consumer must give to the Gas Supplier. Item 2. Meter reading added to the information, which the Gas Supplier must give to the Distribution Company. Remark about Non-Daily Read Metering Points with conversion equipment added.. New item 3. Distribution Company sends separately message with Base date to the Gas Supplier. New item 4. Remark about difference between the relocation date of vacating and incoming consumer added. New item 5. remark about the difference between the date of moving in and moving out deleted. Old item 4b. Deleted. New item 6. Message is only sent if Relocation (Vacating consumer) has not been announced. New item 8. Information of transport consumption is omitted as it is not considered relevant to mention here. New item 10. Information about transport consumption is omitted as it is not considered relevant to mention here.
2.7.4	BS-209	Adjustment of deadlines. Request to start supply changed to 15th Business Day. . Submission of Base data is changed to 1 Business Day . Text about it taking place in continuation of confirmation of Start of Supply has been deleted. Message about End of supply has been changed to no later than the 16th Business Day after the Terminal Date for Relocation (incoming consumer).
2.7.5	BS-209	Announcement of Start of supply added to Meter Reader. Information about End of supply added to transaction cause E01 (Relocation) Information about Non-Daily Read consumption added vintage code2 (Final consumption)
2.8.1	BS-210	Text regarding Relocation (vacating consumer) deleted. Text regarding use of EDI communication between Distribution Company and Public Supply Obligation Company deleted.
2.8.4	BS-210	Added remark to explanation of process.
2.14	BS-218	New business process "BS-218: Relocation (vacating

		consumer” added. Replaces ”BS-207: Relocation (vacating consumer) - reported to the Distribution Company”.
2.15	BS-219	New business process ”BS-219: Change of Terminal Date” added. Handles discrepancies between relocation date of vacating and incoming consumer in processes BS-209 og BS-218 respectively.
4		Names of business processes have been changed in the chart. In addition added and deleted, cf. previous comments in the change log. Emergency procedures for new processes added.

1 General

1.1 Introduction

This specification describes the EDI model to be used when handling, for instance, a change of Gas Supplier in the Danish gas market. It must be used by all players having a role in this communication. The specification is based on the North European ebIX standard and has been adapted to the Danish market model and the existing Danish EDI communication in the gas market.

Metering Point

With reference to the Rules for Gas Distribution, version 3, the use of EDI communication mandatory for all commercial players in the gas market.

1.2 Documentation principle

The documentation has been structured so as to simplify the mapping and documentation of new scenarios as well as changing existing ones. Readers with a business background need not focus on technical details and technicians not on business aspects.

The documentation, which is available in Danish and English, is divided into five parts:

- *Business scenarios for EDI communication in the gas market*
- *Danish Business Transactions for the Gas Market*
- *Danish Message Implementation Guides*
- *EDI communication (Regulation F)*
- *Danish product code list.*

In case of any discrepancy between the above-mentioned documentation, *Business scenarios for EDI communication in the gas market* will at all times be the primary reference. In particular, discrepancies may occur between this document and the transaction examples given in *Danish Business Transactions for the Gas Market*.

Business scenarios for EDI communication in the gas market provides a description of business rules and procedures for the practical handling of change of supplier and other business scenarios. The target group consists of superusers and others active in the Danish gas sector. The document has been prepared in the form of so-called sequential diagrams providing a general illustration of the data exchanged between the individual players and the points in time of the exchange.

The technical content of the data exchanges is not specified in any detail, and reference is only made to relevant parts of *Danish Business Transactions for the Gas Market*. As a consequence, the need for new or adjusted business scenarios is more readily identified and can be more easily implemented, ie market players will be less restricted by technical obstacles. Documentation can be found at www.gasmarked.dk.

Danish Business Transactions for the Gas Market specifies the use in Denmark of the European ebIX model. This part of the documentation, which is targeted at IT suppliers, specifies how the IT systems should operate in relation to data exchange in the market. The documentation is presented in the form of activity diagrams for the IT systems' handling of the individual EDI messages and associated data models for the individual situations. All business transactions are autonomous and independent of other business transactions. They are used as 'building blocks' in the business scenarios. A business transaction developed for a given business scenario can be re-used in other business scenarios. The relevant documentation can be found at www.gasmarked.dk.

Danish Message Implementation Guide describes the use in Denmark of a given EDIFACT message, eg UTILMD. The basis of the description is the European ebIX Message Implementation Guide, the Danish version of which shows the concrete Danish definition of the attributes applied and the values and codes allowed. The documentation can be found at www.gasmarked.dk.

EDI communication (Regulation F) applies to the electricity and gas markets and contains a specification of all documentation common to the exchange of EDI messages, ie issues such as addressing, opening hours, communication protocol and error handling at the individual levels. The documentation applies to all exchanges of data via EDI communication, for instance when metered data are implemented in a revised form and in the case of a change of supplier in the electricity or gas sector.

The documentation is used as supplement to ebIX' *Common rules and recommendations*, available at www.ebix.org, and therefore contains primarily the Danish rules that are not included in the ebIX recommendation. Approval is granted by the organisation(s) responsible for the business rules, eg the transmission system operator (TSO) and projects for the implementation of new market rules. The documentation can be found at www.gasmarked.dk.

The ***Danish product code list*** applies to the electricity and gas markets, containing all the common Danish product codes. The product code list can be found on www.energinet.dk.

1.3 The basis of the specification

This EDI specification, which has been prepared by Energinet.dk and the natural gas distribution companies in Denmark, is based on Rules for Gas Distribution, which are available on www.gasmarked.dk.

In respect of data exchange, the specification is based on the following documents, which can be accessed at or downloaded from www.ebix.org :

- *ebIX model for customer switching*, version 0.8 A of 25 September 2003.
- *Implementation guide for Utility Base Data Message (UTILMD)*, version 5.0 B.
- *Implementation guide for metered services consumption report (MSCONS)*, version 2.4D.
- *Implementation guide for Application error and acknowledgement message (APERAK)*, version 2.4B.
- *ebIX code list: www.ebix.org*

1.4 Other communication

Other communication is communication by letter, telefax or email. The Distribution Company, the Gas Supplier and the transmission system operator must use other communication in the following cases:

- In situations where EDI communication is not used. Each business scenario specifies when other communication is or can be used as well as the applicable deadlines.
- In emergency situations where it is technically impossible to use EDI communication. For most business scenarios, emergency procedures have been established that must be complied with by the Distribution Company, the Gas Supplier and the transmission system operator. These emergency procedures are described in section 4, which also includes a form to be completed in the event of a change of supplier.

1.5 Definitions

The business terms used in the gas sector and in this guide are defined below.

Business Day

Business Days are Monday through Friday with the exception of holidays etc. as specified in the Business Day calendar on Energinet.dk's website (www.energinet.dk). The definition is the same for the electricity and the gas markets.

Bio Natural Gas (BNG)

Bio Natural Gas is bio gas which has been upgraded with a view to fulfilling the quality specifications for natural gas in the Danish Gas System. BNG can be physically transported in the Danish Natural Gas System through the Distribution Network.

BNG Transition Point

A **BNG Transition Point** is a virtual point facilitating the supply of BNG into the Danish Natural Gas System. Each BNG Transition Point will be assigned a GLN (Global Location Number).

Distribution Company

Distribution Company is any natural or legal person authorised to carry out natural gas distribution.

Market Share Value of the Distribution Area

The Market Share Value of the Distribution Area is the sum of the Market Share Values of the Metering Point of all the Non-Daily Read Metering Points in a distribution area.

Relocation

Relocation is the situation when a consumer vacates a specific Metering Point and/or a new consumer moves to the same Metering Point.

Public Supply Obligation Company

Public Supply Obligation Company is a Gas Supplier who in accordance with the Danish Natural Gas Supply Act is responsible for supplying gas to consumers and potential consumers in areas designated for natural gas supply in accordance with the Danish Heat Supply Act and to other consumers who are or will be connected to the distribution system.

Market Share Value of the Gas Supplier

The Market Share Value of the Gas Supplier is the sum of the Market Share Values of the Metering Point for the Non-Daily Read Metering Points which the Gas Supplier supplies in a distribution area;

GLN

GLN (Global Location Number) is the number assigned to each Player in order to identify such Player in relation to communication.

GSRN

GSRN (Global Service Relation Number) is the number that must be assigned to each Metering Point (Metering Point id) and each consumer portfolio (consumer portfolio number) to ensure identification of the Metering Point or the consumer portfolio.

Gas Supplier

Gas Supplier is any natural or legal person supplying consumers with natural gas.

Meter Reading

Meter Reading is when the gas meter is read. The reading is done in whole m³, i.e. no decimals. At Metering Points with conversion equipment both the gas meter and the conversion equipment are read.

Metering Point

Metering Point is the actual point where the gas meter is physically located and where the natural gas is supplied to the consumer from the distribution system (place of supply).

Market Share Value of the Metering Point (expected annual consumption)

The Market Share Value of the Metering Point is the expected annual consumption of natural gas for a Non-Daily Read Metering Point as specified by the Distribution Company.

Non-Daily Read Metering Point

Non-Daily Read Metering Point is a Metering Point settled between the players in accordance with the rules for non-daily metered consumption.

Terminal Date (or Date Terminal)

Terminal Date may be a Business Day and holidays etc. and is one of the following dates in connection with change of supplier, end of supply, or Relocation:

1. At 06:00 on the date on which a Gas Supplier takes over the supply to a Metering Point
2. At 6:00 on the date on which a Gas Supplier discontinues the supply to a Metering Point
3. In connection with Relocation the Terminal Date is one of the following dates:

- in case of the vacating consumer's Gas Supplier's notification of Relocation, the date when the agreement with the Distribution Company expires as a result of the consumer's termination of the agreement. The conditions determining when the agreement expires are laid down in the distribution conditions; or
- in case of a notification of Relocation by the incoming consumer's Gas Supplier, the date when the change of supplier takes effect. The Terminal Date must be the same date on which the incoming consumer takes over the Metering Point.

Daily Read Metering Point

Daily Read Metering Point is a Metering Point which is settled between the players in accordance with the rules for daily-read consumption (and where consumption data on a daily basis are available).

Validated

Validated is when consumption data have been finally Validated and adjusted, if necessary, by the Distribution Company for settlement purposes.

Non-Validated

Non-Validated is when consumption data are preliminary and have not been finally Validated by the Distribution Company.

1.6 Use of signs and decimals in messages

All values communicated in the messages must be positive unless otherwise indicated in the individual business scenarios.

Non-daily read consumption data values (MSCONS 7) must be given with a maximum of three decimals. All other values must be given in integers (including the consumption reported in a base data message (UTILMD E07)).

1.7 Handling of business transactions

All players must be able to use the latest version of a given business transaction used in the business scenarios described in this document.

1.8 Deadlines for acknowledgements

The deadline for sending acknowledgements is not later than two hours after receipt of a message unless otherwise indicated in the relevant business scenario. After 20 minutes, the sender is allowed to contact the recipient to ask for an acknowledgement. A *negative* CONTRL acknowledgement must be sent not later than five minutes after receipt of a message.

If a Distribution Company wants to receive CONTRL from the transmission system operator or a Gas Supplier, they must use UNB Segment ref. 0031 “ACKNOWLEDGEMENT REQUEST” with the value “1”, which results in the recipient sending CONTRL. For further information about the use of APERAK and CONTRL, see *Appendix Report 3 in EDI communication (Regulation F)*.

1.9 Codes used in EDI messages

In the EDI messages used in the business scenarios, various codes are applied. They are:

- EDIFACT codes consisting of max. three characters
- ebIX codes, all beginning with 'E'
- Danish function codes, all beginning with 'Z'
- Four-digit Danish product codes

The following codes are used in this guide:

Message name (all)

- 7 Time series report (MSCONS)
- 392 Request of start of supply (UTILMD)
- 406 End of supply (UTILMD)
- 414 Confirmation of start of supply (UTILMD)
- 432 End of supply (UTILMD)
- E07 Base data (UTILMD)
- Z01 Report on Non-Daily Read Metering Point (MSCONS)

Message function (all)

- 5 Replace (MSCONS)
- 9 Original (MSCONS)
- 34 Received, approval given at transaction level (APERAK)

Transaction cause (UTILMD)

- E01 Relocation
- E03 Change of supplier
- E05 Cancellation of previous transaction
- E06 Transfer to Public Supply Obligation Company

- E20 End of supply
- E32 Update of base data as agreed
- Z02 Change of meter location address
- Z03 Change of next scheduled date(s) of reading
- Z04 Change of estimated annual consumption
- Z05 Change of consumer party name(s)
- Z06 Change of physical status of Metering Point
- Z07 Change of meter-reading method
- Z08 Terminal Date changed
- Z09 Request for closure
- Z10 Termination of Metering Point

Status (UTILMD)

- 39 Transaction approved
- 41 Transaction rejected

Rejection codes (UTILMD)

- E10 Metering Point not identifiable
- E16 Unauthorised Gas Supplier
- E17 Requested Terminal Date not within deadline
- E22 Metering Point blocked for change
- E59 Already existing relation
- Z11 Missing consumer name

Meter reading method (UTILMD)

- E01 Non-daily reading
- E02 Daily reading

Physical status of Metering Point (UTILMD)

- E22 Metering Point connected
- E23 Metering Point disconnected

Product code (MSCONS)

- 1082: Adjusted residual consumption in kWh_ϕ
- 3001: Total consumption in kWh_ϕ, Non-Validated
- 3002: Total consumption in kWh_ϕ, Validated
- 3003: Total consumption in Nm³, Non-Validated
- 3004: Total consumption in Nm³, Validated
- 3005: Total consumption in m³, Non-Validated
- 3006: Total consumption in m³, Validated
- 3007: Calorific daily values in kWh_ϕ/ Nm³, Validated consumption
- 3008: Calorific monthly values in kWh_ϕ/ Nm³, Validated average consumption
- 3009: Calorific daily values in kWh_ϕ/ Nm³, Non-Validated consumption

- 3011: Reconciliation statement in kWh_ø
- 3012: Periodised consumption in kWh_ø
- 3013: Market share value of the distribution area in kWh_ø
- 3014: Market Share Value of the Gas Supplier in kWh_ø

- 3030: Consumption per M/R station in kWh_ø, Non-Validated consumption
- 3031: Consumption per M/R station in kWh_ø, Validated consumption
- 3032: Consumption per M/R station in kWh_ø, first correction
- 3033: Consumption per M/R station in kWh_ø, second correction

- 3040: Daily read consumption per Gas Supplier (aggregated) in kWh_ø, Non-Validated consumption
- 3041: Daily read consumption per Gas Supplier (aggregated) in kWh_ø Validated consumption
- 3042: Daily read consumption per Gas Supplier (aggregated) in kWh_ø first correction
- 3043: Daily read consumption per Gas Supplier (aggregated) in kWh_ø second correction

- 3050: Distributed residual consumption in kWh_ø Non-Validated consumption
- 3051: Distributed residual consumption in kWh_ø Validated consumption
- 3052: Distributed residual consumption in kWh_ø first correction
- 3053: Distributed residual consumption in kWh_ø second correction

- 3060: Consumption per Metering Point, injection per M/R station or BNG Transition Point in the case of gas flow settlement in kWh_ø, Non-Validated consumption
- 3061: Consumption per Metering Point, injection per M/R station or BNG Transition Point in the case of gas flow settlement in kWh_ø, Validated consumption
- 3062: Consumption per Metering Point, injection per M/R station or BNG Transition Point in the case of gas flow settlement in kWh_ø, first correction
- 3063: Consumption per Metering Point, injection per M/R station or BNG Transition Point in the case of gas flow settlement in kWh_ø, second correction

Reason code for reading (MSCONS)

- 1 Periodic reading
- 2 Change of supplier
- 3 Non-periodic reading
- 9 Reading required for change of meter-reading method

Quantity status (MSCONS)

- 31 Estimated yearly consumption
- 99 Final value, estimated
- 136 Final value, metered

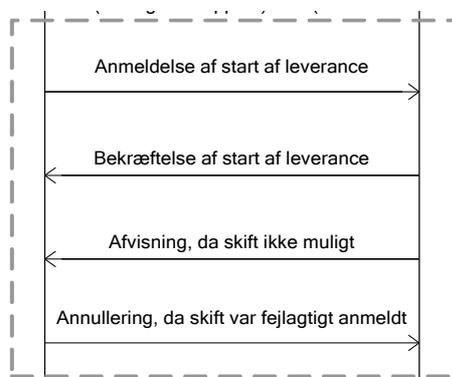
- Z01 Final value, manually corrected

Error codes (APERAK)

- 42 Error in a data element
- 100 The transaction is approved

2 Business scenarios

This section describes the business scenarios by means of so-called sequential diagrams and associated descriptions of the business procedures and rules.

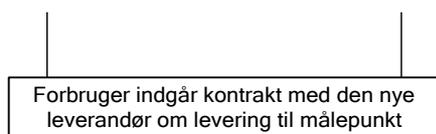


An area within the diagrams, as shown to the left, represents a transaction and the messages involved. The messages are illustrated by horizontal arrows between the players.

The area is identified by the unique denomination of the transaction, eg BT-001: Start of supply.

Translation:

Notification of start of supply
 Confirmation of start of supply
 Rejected, change not possible
 Cancelled, notification of change incorrect



A white bar indicates a manual procedure/activity, which can take place either between individual players or internally in a player's company. In this context, 'manual' means communication not occurring by EDI communication, ie letter, email or phone.

Translation:

The consumer concludes a contract with the new supplier on the supply of a Metering Point

2.1 BS-201: Change of supplier

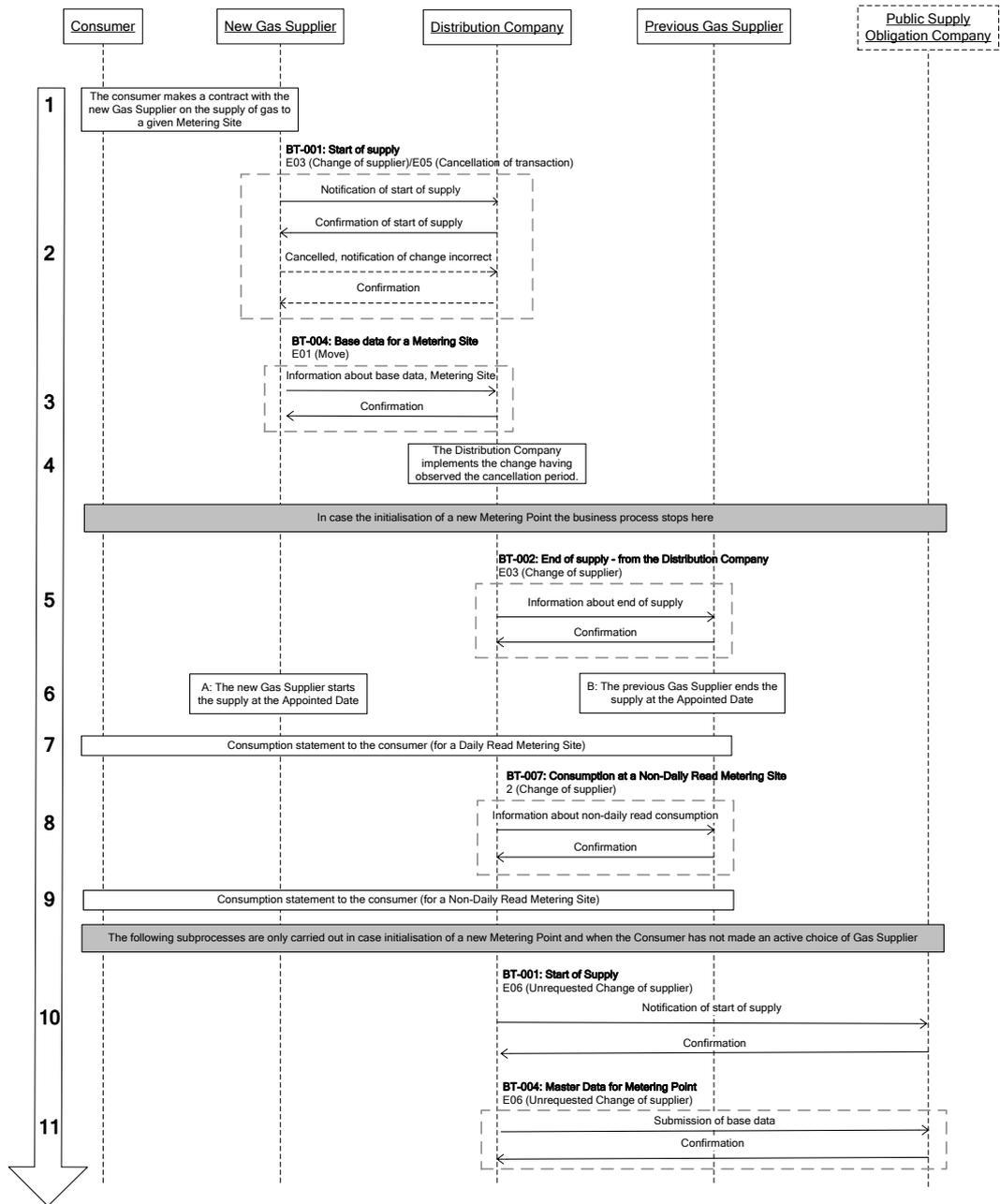


Figure 1: BS-201: Change of supplier

General about change of supplier

A request for a change of supplier must always be submitted to the Distribution Company by the Gas Supplier as the consumer is not entitled to do so.

Change of supplier is announced for existing Metering Points or at the initialisation of a new Metering Point.

This business scenario consists of five transactions:

- Notification of start of supply
- Notification to the previous Gas Supplier of end of supply
- Notification to the previous Gas Supplier of the consumption metered at the Non-Daily Read Metering Point.
- Announcement of Start of supply to the Public Supply Obligation Company
- Base data for Metering Point

Start condition for change of supplier

In order for the Gas Supplier to submit an electronic notification of a change of supplier for a given Metering Point ('Start of supply'), a contract must have been concluded with the consumer on the supply of natural gas to the relevant Metering Point from a given Terminal Date.

Steps in the scenario 'Change of supplier'

1. The consumer makes a contract with the new Gas Supplier on the supply of natural gas to a given Metering Point.
2. Following the conclusion of the contract, the new Gas Supplier sends an EDI message about start of supply (BT-001) to the Distribution Company, indicating the Terminal Date requested.

In reply to the Gas Supplier's notification of start of supply, the Distribution Company sends an EDI message (BT-001) with the answer status (approved/rejected).

If the Distribution Company rejects the message, it must state one of the following reasons:

- Metering Point not identifiable
- Unauthorised Gas Supplier

- Requested Terminal Date not within deadline
- Metering Point blocked for change of supplier, eg because:
 - Change of supplier has already been reported as at the Terminal Date
 - if Relocation has been reported for the Metering Point before the Terminal Date for change of supplier
 - Metering Point has been recorded as being closed down as at the Terminal Date.

Note that if the Distribution Company receives a notification from two Gas Suppliers in respect of the same Terminal Date, the Gas Supplier whose communication arrives first will be awarded the supply. Consequently, all notifications received after the one first approved are rejected.

The Gas Supplier is also entitled to cancel an approved change of supplier if the consumer exercises his right of cancellation. However, the Gas Supplier is responsible for ensuring that start of supply is requested in time for the consumer's right of cancellation in connection with distance selling to expire before the Gas Supplier's cancellation deadline expires.

The Gas Supplier also has the right to cancel an approved change of supplier for other reasons, eg if the Gas Supplier and the consumer withdraw from the contract.

If the Gas Supplier wants to cancel a change of supplier, he must do so by sending an EDI message to the Distribution Company (BT-001).

In reply to the Gas Supplier's cancellation message, the Distribution Company sends an EDI message approving or rejecting the cancellation (BT-001).

If the Distribution Company approves the cancellation of a change of supplier, the business scenario ends here.

If the new Gas Supplier rejects the cancellation, one of the following reasons must be stated:

- Metering Point not identifiable
 - Gas Supplier not approved
 - Cancellation after expiry of deadline
3. If the Distribution Company approves the request to change Supplier, the Distribution Company will subsequently submit Base data as described in business process BS-203: Submission of Base data.

In cases where the road code of the installation address does not exist and thus does not appear on the Base data message, the road code will be forwarded in a new message.

Based on the consumer party's name and the Metering Point's address, it is the new Gas Supplier's responsibility to manually check that the Change of Supplier has been carried out at the correct Metering Point and the correct consumer. If this is not the case, the new Gas Supplier must cancel the Change of Supplier within the cancellation period.

After having accepted the change of supplier, the Distribution Company notifies the consumer of the change of supplier and provides - as a minimum - information about Terminal Date, the new Gas Supplier, the GSRN number of the Metering Point as well as information about what the consumer should do if he wants to cancel the change of supplier.

For Non-Daily Read Metering Points the Distribution Company sends together with the information about the change of supplier a meter-reading card to the consumer, requesting him to read his meter on the Terminal Date if the time of approval for start of supply is close to the Terminal Date. If the time of approval is much earlier than the Terminal Date, the meter-reading card will be sent separately when the Terminal Date approaches.

4. When the new Gas Supplier's cancellation deadline has expired, the Distribution Company implements the change of supplier as at the Terminal Date. After this has been done, a change of supplier can only be cancelled if the incoming consumer, the vacating consumer or the incoming consumer's Gas Supplier subsequently reports a Relocation for the Metering Point.

In case the initialisation of a new Metering Point the business process ends here.

5. The Distribution Company notifies the consumer of the change of supplier implemented.
6. A: The new Gas Supplier starts the supply of gas to the approved Metering Point on the Terminal Date.

B: The previous Gas Supplier stops the supply of gas on the Date Terminal for the change of supplier.

7. In the case of a Daily Read Metering Point, the previous Gas Supplier has the data necessary to settle the consumption with the consumer and sends the consumption statement to the consumer in accordance with applicable rules when the Validated metered data to be used for settlement are available.

If the previous Gas Supplier supplies gas to a Daily Read Metering Point, the business scenario ends here.

8. When the Distribution Company has received reading data for a Non-Daily Read Metering Point, the Distribution Company sends an EDI message with a statement of consumption up to the Terminal Date to the previous Gas Supplier (BT-007).
9. In the case of a Non-Daily Read Metering Point, the previous Gas Supplier makes a final settlement for the consumer on the basis of the consumption statement sent by the Distribution Company.

In the case of a Non-Daily Read Metering Point, the consumption statement may result in a new value for estimated annual consumption. In this case, the Distribution Company submits base data for the Metering Point to the new Gas Supplier in accordance with business scenario BS-203: Submission of base data.

The following subprocesses are only carried out in case initialisation of a new Metering Point and when the Consumer has not made an active choice of Gas Supplier.

10. If an approved Start of supply from another Gas Supplier is not available within the deadline, the Public Supplier Obligation Company will take over the delivery as per the start date. The Distribution Company informs of the Start of supply with transaction cause E06 (transfer to Public Supply Obligation Company) til the Supply Company.
11. The Distribution Company sends a message containing Base data for the Metering Point to the Public Supply Obligation Company.

Handling incorrect changes of supplier

Errors may have been committed in connection with the Gas Supplier's notification of a change of supplier.

If the error is discovered before the expiry of the Gas Supplier's cancellation period, the error can be remedied by the Gas Supplier sending a cancellation message (for the approved start of supply).

If the error is discovered after the expiry of the cancellation period, the issue is resolved by using other communication. Situations that could not have been avoided by exercising general due care are considered errors.

The Distribution Company only offers assistance in the handling of errors in connection with existing supplier relationships, ie the change of supplier that has resulted in the present supplier having taken over the supply. Any errors made in connection with a previous supplier taking over the supply are of no concern to the Distribution Company and must be handled by the parties involved.

The Distribution Company does not offer assistance in the handling of errors that should reasonably have been discovered earlier. The Distribution Company considers a change of supplier to be incorrect if the consumer vis-à-vis the Gas Supplier has reacted to the Distribution Company's information about an imminent change of supplier and the Gas Supplier has not reacted in time (ie by the cancellation deadline). If a consumer has made a supply agreement with a new Gas Supplier even though he was bound by an agreement with the previous Gas Supplier, the Distribution Company does not consider this an incorrect change of supplier.

The Gas Supplier initiating the incorrect change of supplier must also initiate procedures to handle/remedy the error. The Distribution Company only handles/remedies errors if all parties involved have consented to this and such consent is documented.

If the Gas Supplier makes a request in the period between the expiry of the cancellation deadline and start of supply, the Distribution Company can cancel the change of supplier so that the previous Gas Supplier continues the supply of gas.

If the Gas Supplier makes a request after start of supply, the change of supplier is not cancelled retrospectively. The Distribution Company may assist in ensuring that:

- the previous Gas Supplier takes over the supply or that - if the previous Gas Supplier is opposed to this - the Public Supply Obligation Company takes over the supply instead
- a meter reading is taken so that the parties involved can indemnify the injured parties.

Deadlines for change of supplier

Process	Deadline	Explanation
Start of supply	As quickly as possible and not later than at 18:00 on the 10th Business Day before the Terminal Date.	Notice of request for change of supplier before Terminal Date.
Approval of start of supply	Not later than 2 hours after receipt of start-of-supply message.	
Submission of base data	To be sent immediately in continuation of but after acceptance of start of supply.	Submission of base data to new Gas Supplier in continuation of confirmation of start-of-supply
Information to consumer	Not later than 1 Business Day after receipt of start-of-supply message.	The Distribution Company sends information about new Gas Supplier to the consumer.
Notification of end of supply	2 hours after expiry of cancellation deadline.	The Distribution Company gives notification of end of supply to the previous Gas Supplier.
Submission of consumption data for a Non-Daily Read Metering Point	Not later than 20 Business Days after the Date Terminal for the change of supplier.	The Distribution Company submits consumption data for a Non-Daily Read Metering Point to the previous Gas Supplier.
Start of supply to Public Supply Obligation Company	At the time when the Metering Point becomes active.	The Public Supply Obligation Company inherit the supply.

Figure 1. Deadlines for change of supplier

Data content for change of supplier

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the scenario.

Notification of start of supply

- Metering Point id
- Start date of supply
- Supplier id

Confirmation of start of supply - approval

- Metering Point id
- Supplier id

- Status
 - Approved

Notification of start of supply - rejection

- Metering Point id
- Status:
 - Rejected
- Reason for rejection:
 - Metering Point not identifiable
 - Unauthorised Gas Supplier
 - Requested Terminal Date not within deadline
 - Metering Point blocked for change of supplier, eg because:
 - Change of supplier has already been reported as at the Terminal Date
 - Metering Point has been recorded as being closed down as at the Terminal Date
 - If Relocation has been reported for the Metering Point before the Terminal Date for change of supplier.

Submission of base data

- Transaction cause:
 - E03 Change of supplier
- Metering Point id
- Meter location address (coded address)
- Reading method used at Metering Point
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id
- Date of reading
- Estimated annual consumption
- Consumer party name and possible second consumer party name

Confirmation of start of supply - cancellation

- Metering Point id
- Start date of supply
- Supplier id

Confirmation of cancellation of approved Start of Supply

- Metering Point id
- Supplier id
- Status
 - Approved

Rejection of cancellation of approved start of supply

- Metering Point id
- Status:
 - Rejected
- Reason for rejection:
 - Metering Point not identifiable
 - Unauthorised Gas Supplier
 - Cancellation not within deadline

Information about end of supply

- Metering Point id
- End date of supply
- Supplier id

Information about non-daily read consumption

- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh₆
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (up to three decimals)
- Reason code for reading
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Manually corrected value

The following data content apply to initialisation of new Metering Point where the Consumer has not actively made a choice of Gas Supplier.

Announcement of Start of supply

- Transaction case
 - E06 (Transfer to Public Supply Obligation Company)
- Metering Point id
- Start date for supply
- Supplier id
- Consumer party's name

Confirmation of Start of supply – approval

- Metering Point id
- Start date for supply
- Supplier id

Submission of Base data

- Transaction cause
 - E06 (Transfer to Public Supply Obligation Company)
- Metering Point id
- Metering Point address
- Metering Point reading form
- Connection status

- Date of validity
- Start date of supply
- Supplier id
- Day of reading
- Expected annual consumption
- Contact address

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-201
BS name	Change of supplier
BS version	3
BS release	1
BS date	
EDI transactions:	
BT ID	DK-BT-001
BT name	Start of supply
BT version	4
BT ID	DK-BT-004
BT name	Base Data for Metering Point
BT version	4
BT ID	DK-BT-002
BT name	End of supply - from MPA
BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.2 BS-202: End of supply

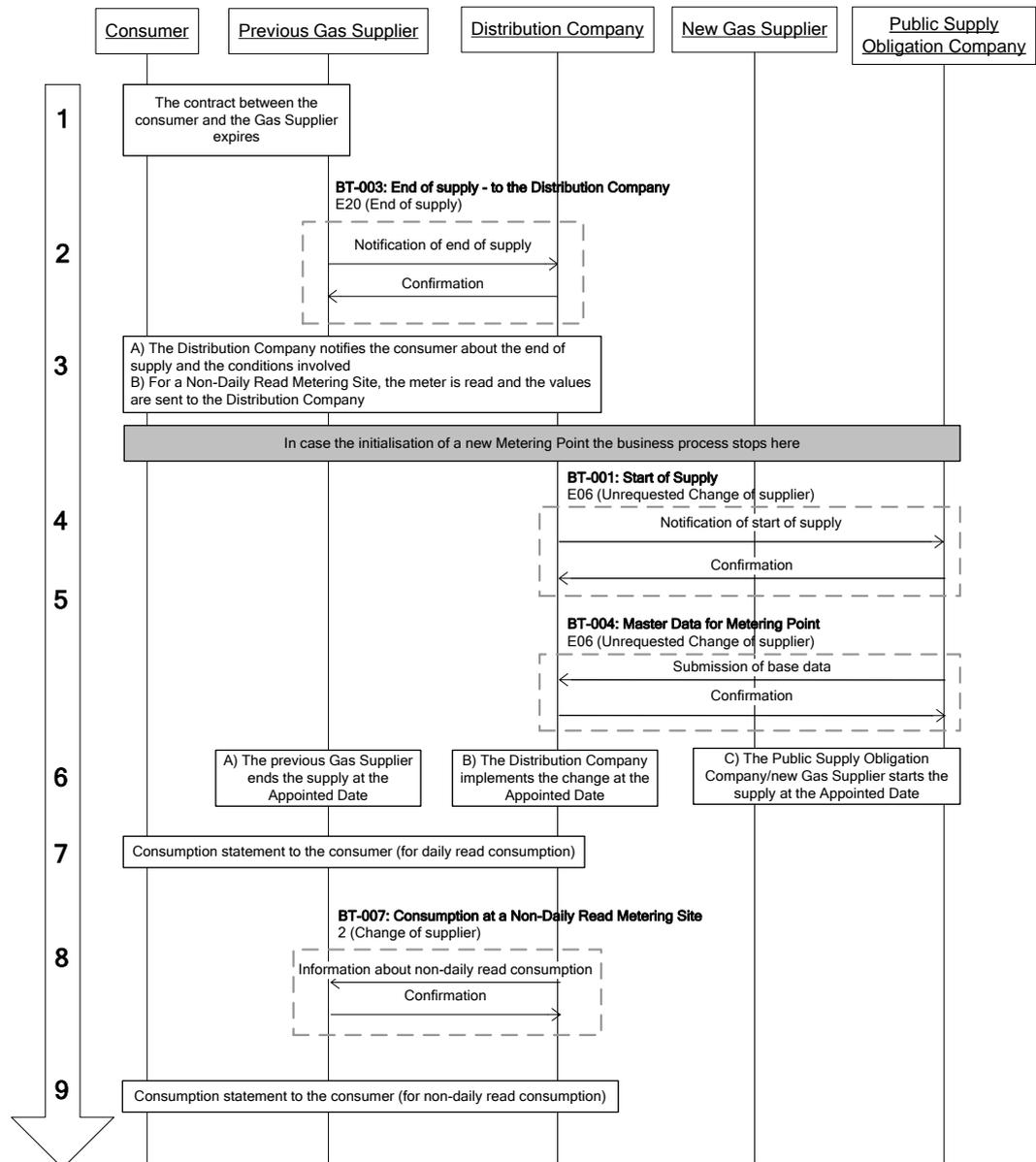


Figure 2: BS-202: End of supply

General

A Gas Supplier remains responsible for a given Metering Point until a new Gas Supplier takes over the responsibility (business scenario BS-201) or the Gas Supplier, by giving the notice applicable at the relevant time, informs the Distribution Company that supply of the Metering Point is no longer required. In the latter case, the messages are to be sent in accordance with the business scenario described in this section.

If the previous Gas Supplier is the Public Supply Obligation Company this process applies, however with a different deadline.

This business scenario consists of four transactions:

- End of supply (to the Distribution Company)
- Start of supply
- Base data for Metering Point
- Consumption data for a Non-Daily Read Metering Point

Start condition for end of supply

The Gas Supplier is aware that the supply will stop at a given Terminal Date, typically if the consumer or Gas Supplier does not want to renew or renegotiate his contract, or if there is a breach of contract before the expiry of the agreement.

If the Gas Supplier is the Public Supply Obligation Company, the company is subject to the Danish Energy Regulatory Authority's standard practice concerning the Public Supply Obligation Company's reminder procedures and can request End of supply when following standard practice.

Steps in the scenario 'End of supply'

1. The Gas Supplier notifies the consumer that the supply will end as at the Terminal Date. The Gas Supplier must as a minimum state the Terminal Date and the deadline by which the consumer must have found another Gas Supplier. The Gas Supplier must also state that the Public Supply Obligation Company will be Terminal Gas Supplier if the deadline for finding another Gas Supplier is not observed.

The contract concluded by the consumer and the Gas Supplier expires, and the supply stops on the given Terminal Date.

The Public Supply Obligation Company sends information to the consumer about the End of supply on the Terminal Date after having complied with the Danish Energy Regulatory Authority's standard practice concerning the Public Supply Obligation Company's reminder procedures and end of supply.

2. The Gas Supplier notifies the Distribution Company of end of supply, stating the Metering Point and the associated Terminal Date (BT-003 with reason

code E20 (End of supply)). If the Distribution Company rejects the message, it must state one of the following reasons:

- Metering Point not identifiable
- Unauthorised Gas Supplier (if the Gas Supplier does not supply the Metering Point).
- Requested Terminal Date not within the deadline.

If the previous Gas Supplier is the Public Supply Obligation Company the reason code for BT-003 is Z09 (Request for closure from the Public Supply Obligation Company).

In case the previous Gas Supplier is the Public Supply Obligation Company discontinues the business process her and continues in MS-210.

3. A) The Distribution Company informs the Consumer about the end of supply and the terms in this connection.

B) For Non-Daily Read Metering Points the Distribution Company sends reading cards to the Consumer and requests reading on the Terminal date.

4. If on the ninth Business Day before the Terminal Date a start of supply has been approved by another Gas Supplier as at the Terminal Date for the end of supply or earlier, and the cancellation deadline for an approved start of supply has not expired, the expiry of the cancellation deadline is awaited. If the approved start of supply is cancelled, the Public Supply Obligation company takes over the supply as at the Terminal Date for end of supply.

If on the ninth Business Day before the Terminal Date for end of supply another Gas Supplier has approved a start of supply as at the Terminal Date for the end of supply or earlier, and if the cancellation deadline for approved start of supply has expired, the process stops here and is continued under BS-201.

If on the ninth Business Day before the Terminal Date for end of supply another Gas Supplier has not approved a start of supply as at the Terminal Date, the Public Supply Obligation Company takes over the supply as at the Terminal Date.

The Public Supply Obligation Company is not entitled to refuse to take over the supply of the Metering Point but may subsequently and if necessary enter into a payment agreement with the relevant parties.

The Distribution Company informs about Start of supply med transaction cause E06 (Transfer til Public Supply Obligation Company) to the Public Supply Obligation Company.

5. The Distribution Company sends a message containing Base data for the Metering Point to the Public Supply Obligation Company.
6. A) The previous Gas Supplier stops the supply as at the Terminal Date (which may be earlier than the end of supply date due to a reported change of supplier).
B) The Distribution Company implements the change as at the Terminal Date.
C) The default gas supply company starts the supply on the Terminal Date.
7. In case of a Daily Read Metering Point, the previous Gas Supplier has the necessary basis for settling the consumption with the consumer and sends the consumption statement to the consumers in accordance with applicable rules when the necessary settlement basis is available.

If the previous Gas Supplier supplies natural gas to a Daily-Read Metering Point, the business scenario ends here.

8. When a meter-reading card for a Non-Daily Read Metering Point has been received, the Distribution Company sends an EDI message (BT-007) and a statement of consumption up to the Terminal Date to the previous Gas Supplier.
9. In case of a Non-Daily Read Metering Point, the previous Gas Supplier will prepare a final settlement for the consumer on the basis of a consumption statement sent by the Distribution Company.

Deadlines for end of supply

Process	Deadline	Explanation
Notification of end of supply	Not later than on the 20th Business Day before end of supply	The Gas Supplier sends notification of end of supply to the consumer. In case the previous Gas Supplier is the Public Supply Obligation Company the company is subject to the Danish Energy Regulatory Authority's standard practice concerning reminder procedures and end of supply.
Request for end of supply	Not later than at 18:00 on the 9th Business Day before the Terminal Date. If the previous Gas Supplier is the Public Supply Obligation Company, the deadline is 6 pm on the 3rd Business Day before the Terminal Date.	The Gas Supplier sends a request for end of supply to the Distribution Company.

End of supply accepted	Not later than 2 hours after receipt of request.	
Information about start of supply	As soon as it is certain that the Public Supply Obligation Company will take over the supply - on the 9th or 4th Business Day before the Terminal Date, depending on the circumstances	The Distribution Company sends information to the Public Supply Obligation Company.
Submission of consumption data for a Non-Daily Read Metering Point	Not later than 20 Business Days after the Terminal Date for change of supplier.	The Distribution Company submits consumption data for a Non-Daily Read Metering Point to the previous Gas Supplier.

Table 3. Deadlines for end of supply

Data content for end of supply

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the scenario.

Information about end of supply

- Metering Point id
- End date of supply
- Supplier id

Confirmation of end of supply - approval

- Metering Point id
- End date of supply

Confirmation of end of supply - rejection

- Metering Point id
- Reason for reply

Information about non-daily read consumption

- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh₀
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (up to three decimals)
- Reason code for reading
- Quantity status
 - 99: Final value, estimated

- 136: Final value, metered
- Z01: Manually corrected value

Notification of start of supply

- *Metering Point id*
- *Start date of supply*
- *Supplier id*
- *Consumer party name*

Confirmation of start of supply - approval

- *Metering Point id*
- *Start date of supply*
- *Supplier id*

Submission of base data

- *Transaction cause - end of supply*
- *Metering Point id*
- *Meter location address*
- *Reading method used at Metering Point*
- *Physical status of Metering Point*
- *Validity start date*
- *Start date of supply*
- *Supplier id*
- *Date of reading*
- *Estimated annual consumption*
- *Contact address*

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-202
BS name	End of supply
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-001
BT name	Start of supply
BT version	4
BT ID	DK-BT-003
BT name	End of supply - to MPA
BT version	4
BT ID	DK-BT-004
BT name	Base data for Metering Point

BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.3 BS-203: Submission of base data

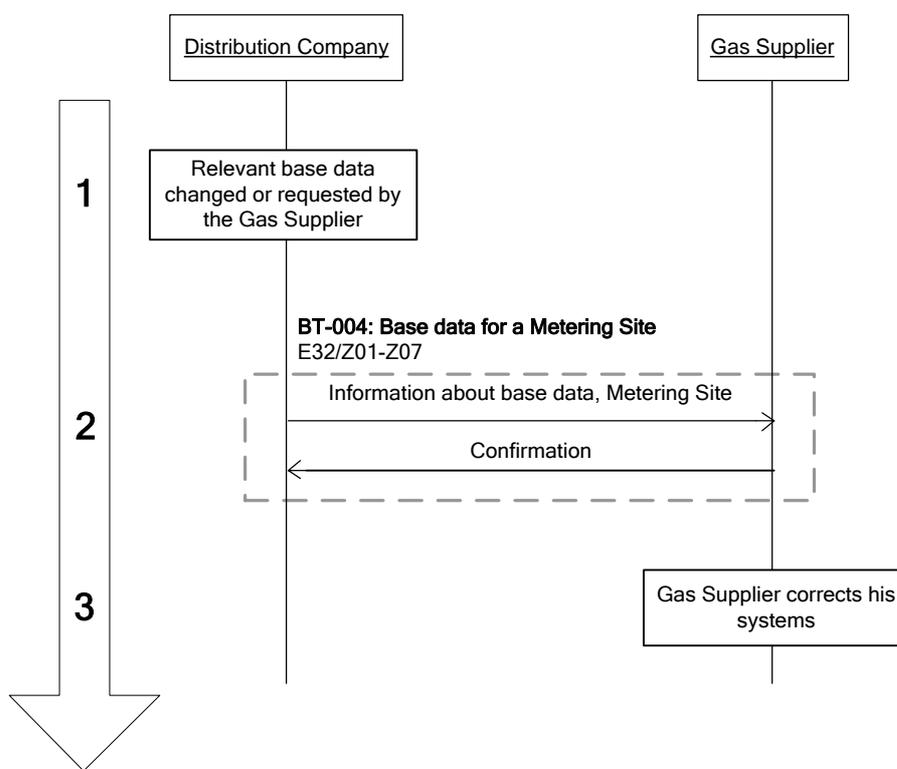


Figure 3: BS-203: Submission of base data.

General

The Distribution Company is responsible for the base data of a given Metered Point. Changes in the base data used by the Gas Supplier must be communicated to him as soon as possible in accordance with this business scenario. Once a change of supplier of a Metering Point has been approved, the updated base data must also be sent to the new Gas Supplier including the values applicable as from the Terminal Date. If a change is made from non-daily to daily read consumption, a final statement made according to the relevant business scenarios must also be submitted.

If several data for a Metering Point have changed, and more than one validity start date is involved, a transaction must be sent for each date.

The Distribution Company's IT system must be capable of submitting **all** base data for a given Gas Supplier. The Gas Supplier may manually request the submission of base data for all his Metering Points. Such requests can only be filed twice annually with the Distribution Company, which will send the data either through EDI communication or in another structured format, eg Excel.

This business scenario consists of one transaction:

- Base data for a Metering Point

Start condition for submission of base data

The Distribution Company has observed that base data relevant to the Gas Supplier have been changed. It may be that a control reading has resulted in a different estimated annual consumption, or the actual consumer has asked to have his on-account settlement changed as consumption at the Metering Point has changed. The Distribution Company's submission of a base data message to the Gas Supplier can be caused by the following:

- Update of base data as agreed
- Change of meter location address
- Change of next scheduled date(s) of reading
- Change of estimated annual consumption (Market Share Value of the Metering Point)
- Change of consumer party name(s)
- Change of physical status of Metering Point
- Change of meter-reading method.

Steps in the scenario 'Submission of base data'

1. The Distribution Company finds out that relevant base data have changed, or the Gas Supplier has requested that base data be submitted.
2. The Distribution Company sends a base data message to the Gas Supplier specifying the validity start date.

The Gas Supplier checks that the Metering Point is one that he supplies. If the Gas Supplier rejects the message, the Distribution Company can either send a new message or contact the Gas Supplier by other means.

3. Having received the new base data, the Gas Supplier corrects his systems entering the base data that have been changed in accordance with the transaction cause provided. Other base data contained in the message can be ignored.

Deadlines for submission of base data

Process	Deadline	Explanation
Updating of base data	Not later than 1 Business Day after updating	The Distribution Company submits the updated base data to the Gas Supplier

Table 2. Deadlines for submission of base data

Data content for submission of base data

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Information about base data, Metering Point

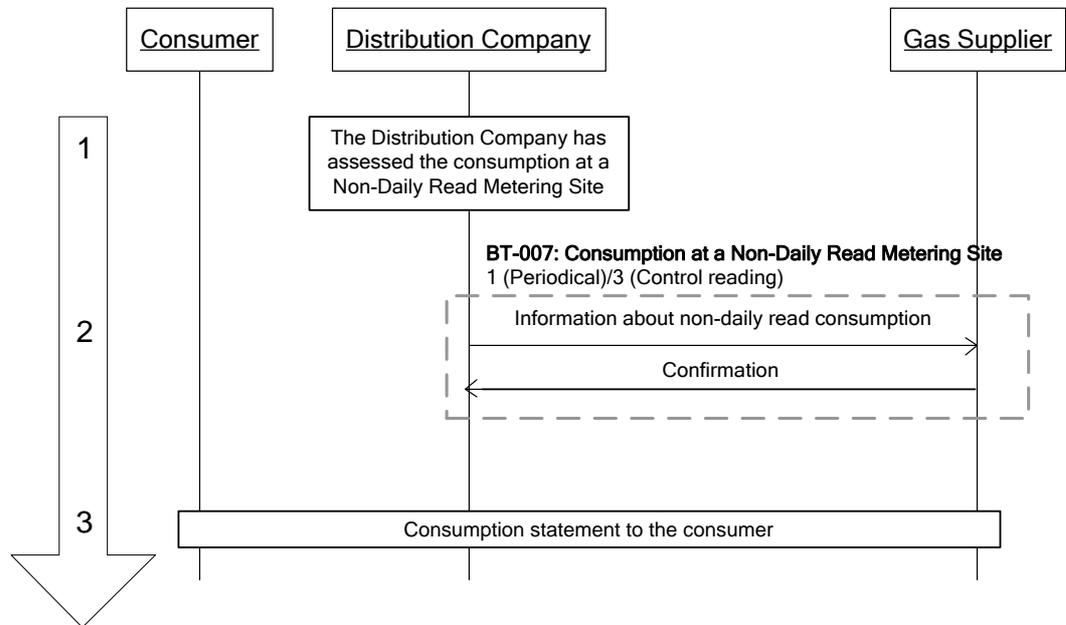
- Transaction cause
 - E32: Update of base data as agreed
 - Z02: Change of meter location address
 - Z03: Change of next scheduled date(s) of reading
 - Z04: Change of estimated annual consumption
 - Z05: Change of consumer party name(s)
 - Z06: Change of physical status of Metering Point
 - Z07: Change of meter-reading method
- Metering Point id
- Meter location address (coded address)
- Reading method used at Metering Point
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id
- Date of reading
- Estimated annual consumption
- Consumer party name and possible second consumer party name.

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-203
BS name	Submission of base data
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-004
BT name	Base data for Metering Point
BT version	4

2.4 BS-205: Consumption statement for a Non-Daily Read Metering Point



Figuer 4: BS-205: Consumption statement for a Non-Daily Read Metering Point.

General

The consumption statement for a Non-Daily Read Metering Point is used, for instance, in connection with ordinary periodic meter readings, whether monthly or annual. The business scenario is also used in case a control reading causes an already effected settlement to be changed. The Gas Supplier will be informed by means of a new consumption statement for the period in question.

This business scenario consists of one transaction:

- Submission of consumption data for a Non-Daily Read Metering Point (to the Gas Supplier).

Start condition for submission of consumption statement for a Non-Daily Read Metering Point

The Distribution Company has assessed the consumption at a Non-Daily Read Metering Point, for example in connection with an ordinary periodic meter reading, and quality-checked it in accordance with company procedures.

Steps in the scenario 'Submission of consumption statement for a Non-Daily Read Metering Point'

1. The Distribution Company assesses the consumption at a Non-Daily Read Metering Point.
2. In the case of a Non-Daily Read Metering Point, the Distribution Company notifies the Gas Supplier of the consumption metered in the relevant period.
3. In the case of a Non-Daily Read Metering Point, the Distribution Company and the Gas Supplier assess the consumption of gas and gas transport and send a consumption statement to the consumer in accordance with the applicable rules once the necessary settlement basis is available.

Correction of metered values

If the Distribution Company discovers an error in a previously submitted consumption statement for a Metering Point, a correction message must be sent involving only Metering Points with values corrected in respect of previously submitted consumption statements.

Error handling in relation to the Gas Supplier

In case of metering errors, the Distribution Company is subject to the practices of the Danish Energy Regulatory Authority regarding the length of the period for which the consumer is to receive retrospective refunding or effect retrospective payment to the Distribution Company with regard to metering errors. Refunding of metering errors is effected on the basis of a corrected consumption statement.

The Gas Supplier is subject to the same rules regarding deferred adjustment as the Distribution Company, and the Distribution Company is responsible for giving the Gas Supplier the correct basis for his settlement in relation to the consumer. As a consequence, the consumption correction, which forms the basis of any deferred adjustment of the consumer's distribution payment, is sent to the Gas Supplier(s) that has/have been servicing the Metering Point in the period for which the distribution payment may be subject to deferred adjustment. The consumption correction is sent to the Gas Supplier through EDI communication as a correction of consumption statements previously submitted to him.

Deadlines for submission of consumption statement for a Non-Daily Read Metering Point

Process	Deadline	Explanation
Communication of consumption data to the Gas Supplier.	In the case of monthly readings, not later than on the 10th Business Day of the month. In the case of annual readings, not later than on the 20th Business Day after the date of reading.	The Distribution Company sends consumption data to the Gas Supplier for monthly or annually read Metering Points.

Table 3. Deadlines for submission of consumption statement for a Non-Daily Read Metering Point

Data content for submission of consumption statement for a Non-Daily Read Metering Point

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Information about non-daily read consumption

- Message function
 - 9 Original (for the first submission(s))
 - 5 Replace (for correction message)
- Value interval
- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh_g
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (up to three decimals)
- Reason code for reading
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Manually corrected value

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-205
BS name	Consumption statement for a Non-Daily Read Metering Point

BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.5 BS-206: Consumption statement for a Daily Read Metering Point

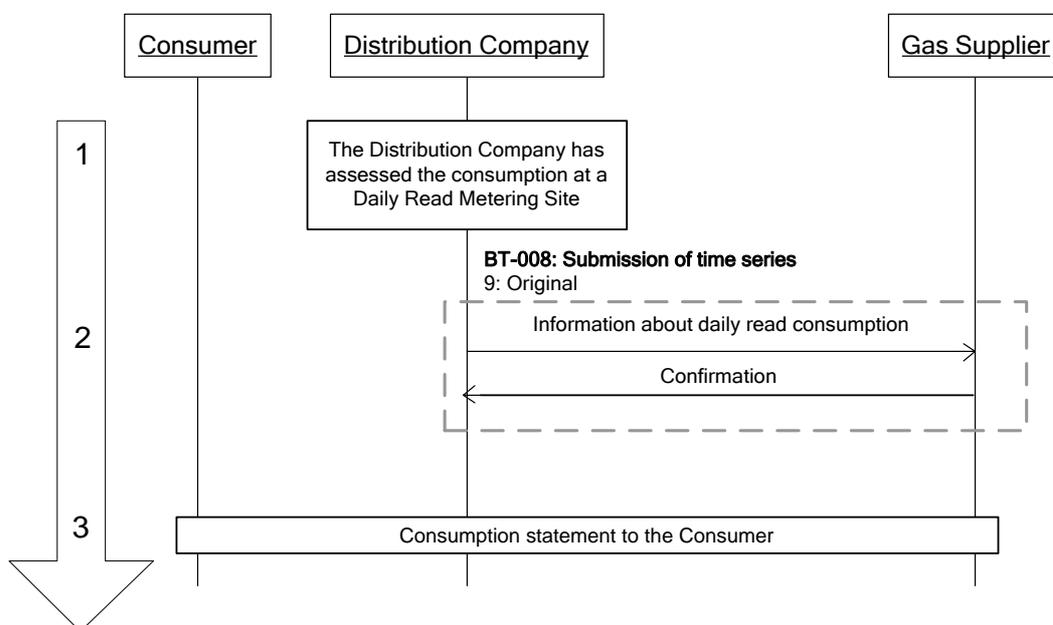


Figure 5: BS-206: Consumption statement for a Daily Read Metering Point.

General

In the case of a Daily Read Metering Point, the Non-Validated consumption is assessed on a daily basis. The resulting figures are to be made available to the Gas Supplier for his nomination. The message is therefore sent daily in the form of hourly values for the preceding gas day and in compliance with the agreed deadlines.

At the end of the month, hourly values for the entire month are resubmitted specifying the relevant month's Validated hourly values to be used in invoicing the consumer.

In addition to daily and monthly (re)submitted hourly values this business scenario is also used if a control reading causes a settlement already effected to be changed. The Gas Supplier will be informed of this by means of a new consumption statement for the period in question.

In the case of a Daily Read Metering Point, the Gas Supplier may request a consumption profile from the Distribution Company. To protect sensitive data, the Distribution Company must make sure that the consumer has authorised the disclosure of the con-

sumption profile. The request is made manually, and the consumption profile is sent in a comma-separated format.

This business scenario consists of one transaction:

- Submission of time series

Start condition for submission of consumption statement for a Daily Read Metering Point

The Distribution Company assesses the daily read consumption on a daily or monthly basis.

Steps in the scenario 'Submission of consumption statement for a Daily Read Metering Point'

1. The Distribution Company assesses the consumption for a Daily Read Metering Point.
2. In the case of a Daily Read Metering Point, the Distribution Company informs the Gas Supplier of the consumption.
3. Once the Gas Supplier has received the Validated consumption data, the consumer can in principle be invoiced.

Correction of metered values

If the Metering Point administrator discovers an error in previously submitted Non-Validated data for a Metering Point, replacement values must be sent provided the error is considered material. If the Metering Point administrator discovers an error in previously submitted Validated data for a Metering Point, the error must be remedied in accordance with the rules in section 0.

Deadlines for submission of consumption data for a Daily Read Metering Point

Process	Deadline	Explanation
Communication of consumption data (Non-Validated) to the Gas Supplier.	Not later than at 11:00 on every gas day (for the previous gas day).	Every day, the Distribution Company sends Non-Validated consumption data for Daily Read Metering Points to the Gas Supplier.
Communication of	Not later than on the	Every month, the Distribution Company sends

consumption data (Validated) to the Gas Supplier.	6th Business Day of the month for the previous month's consumption.	Validated consumption data for Daily Read Metering Points to the Gas Supplier.
---	---	--

Table 4. Deadlines for submission of consumption statement for Daily Read Metering Points

Data content for submission of consumption statement for Daily Read Metering Points

The significant data fields involved in the individual data flows are listed below. 'Significant data are data crucial for the professional handling of the business scenario.

Information about daily read consumption

- Message function
 - 9 Original
- Quantity time period (daily messages contain 1x24 hourly values, and monthly messages contain up to 30x24 hourly values depending on the number of days the Supplier has supplied the Metering Point)
- Metering Point id
- Quantity time interval
- Product code
 - 3001/3002: Total consumption in kWh₀ (Non-Validated/Validated)
 - 3003/3004: Total consumption in Nm³ (Non-Validated/Validated) (if conversion equipment available)
 - 3005/3006: Total consumption in m³ (Non-Validated/Validated) (if conversion equipment NOT available)
- Quantity (up to three decimals)
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Final value, manually corrected

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-206
BS name	Consumption statement for Daily Read Metering Points
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-008
BT name	Time series transmission

BT version	4
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2.6 BS-207: Termination of Metering Point

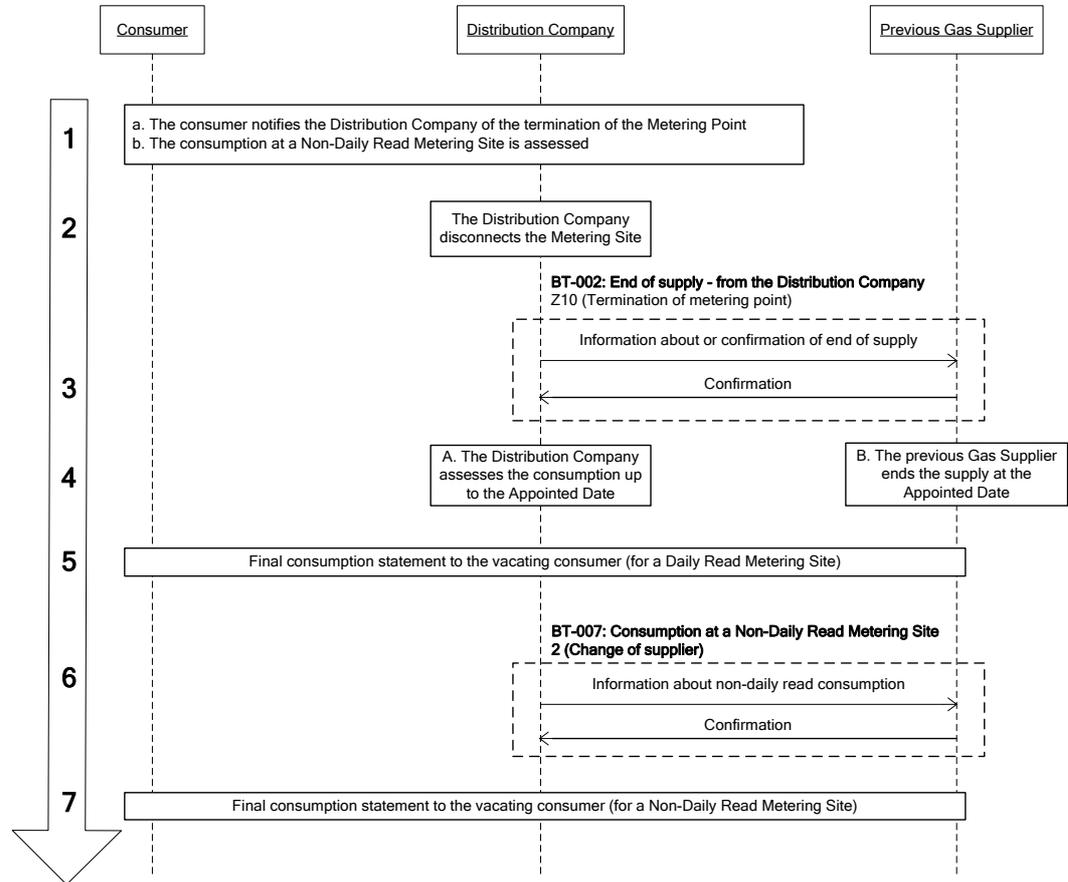


Figure 6: BS-207: Relocation (vacating consumer) notified to the Distribution Company

Generally about termination of a Metering Point

This scenario also applies if the Metering Point is terminated.

This business scenario consists of two transactions:

- End of supply - from the Distribution Company
- Consumption statement for a Non-Daily Read Metering Point

Start condition for Termination of Metering Point

The consumer notifies the Distribution Company of the termination of the Metering Point.

Steps in the scenario 'Termination of Metering Point'

1. The consumer notifies the Distribution Company of the termination of the Metering Point.

The Consumer's initial contact with the Distribution Company includes, besides a certain date of the termination, also information about the Consumer's new address with regards to the final settlement.

- 1b. In the case of a Non-Daily Read Metering Point, a meter reading must be made on the Terminal Date in accordance with the Distribution Company's rules, and the vacating consumer must be informed accordingly.

2. The Distribution Company disconnect the Metering Point.

3. The Distribution Company informs the Gas Supplier of the end of supply indicating transaction cause Z10 (Termination of Metering Point). If a change of supplier has been registered for the Metering Point, a message is also sent to the new Gas Supplier.

4. A. On the basis of a meter reading performed on the Terminal Date for the termination, the Distribution Company assesses the consumption up to the Terminal Date.

B. The previous Gas Supplier stops the supply on the Terminal Date.

5. In the case of a Daily Read Metering Point, the Distribution Company and the previous Gas Supplier assess the consumption of gas and gas transport and send a final consumption statement to the vacating consumer in accordance with the applicable rules once the necessary settlement basis is available.

If the previous Gas Supplier supplies a Daily Read Metering Point, the business scenario ends here.

6. In the case of a Non-Daily Read Metering Point, the Distribution Company notifies the Gas Supplier of the consumption metered up to the Terminal Date.

7. In the case of a Non-Daily Read Metering Point, the Distribution Company and the previous Gas Supplier assess the consumption of gas and gas

transport and send a final consumption statement to the consumer according to the applicable rules once the necessary settlement basis is available.

Deadlines for termination of Metering Point.

Process	Deadline	Explanation
Message from consumer		In agreement with the Distribution Company
Notification about end of supply.	As soon as possible after the termination of the Metering Point - but not later than at 18:00 on the 5th Business Day after the termination the Metering Point.	The Distribution Company submits a request for end of supply to the Gas Supplier.
Submission of consumption for a Non-Daily Read Metering Point	Not later than 20 Business Days after the Terminal Date for the termination the Metering Point.	The Distribution Company submits consumption data for a Non-Daily Read Metering Point to the previous Gas Supplier.

Data content for termination of Metering Point.

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Information about or confirmation of end of supply

- Metering Point id
- End date of supply

Information about non-daily read consumption

- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh_o
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (showing up to three decimals)
- Reason code for reading
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered

- Z01: Value, manually corrected

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-207
BS name	Termination of Metering Point.
BS version	3
BS release	1
BS date	
EDI transactions:	
BT ID	DK-BT-002
BT name	End of supply – from MPA
BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.7 BS-209: Relocation (incoming consumer)

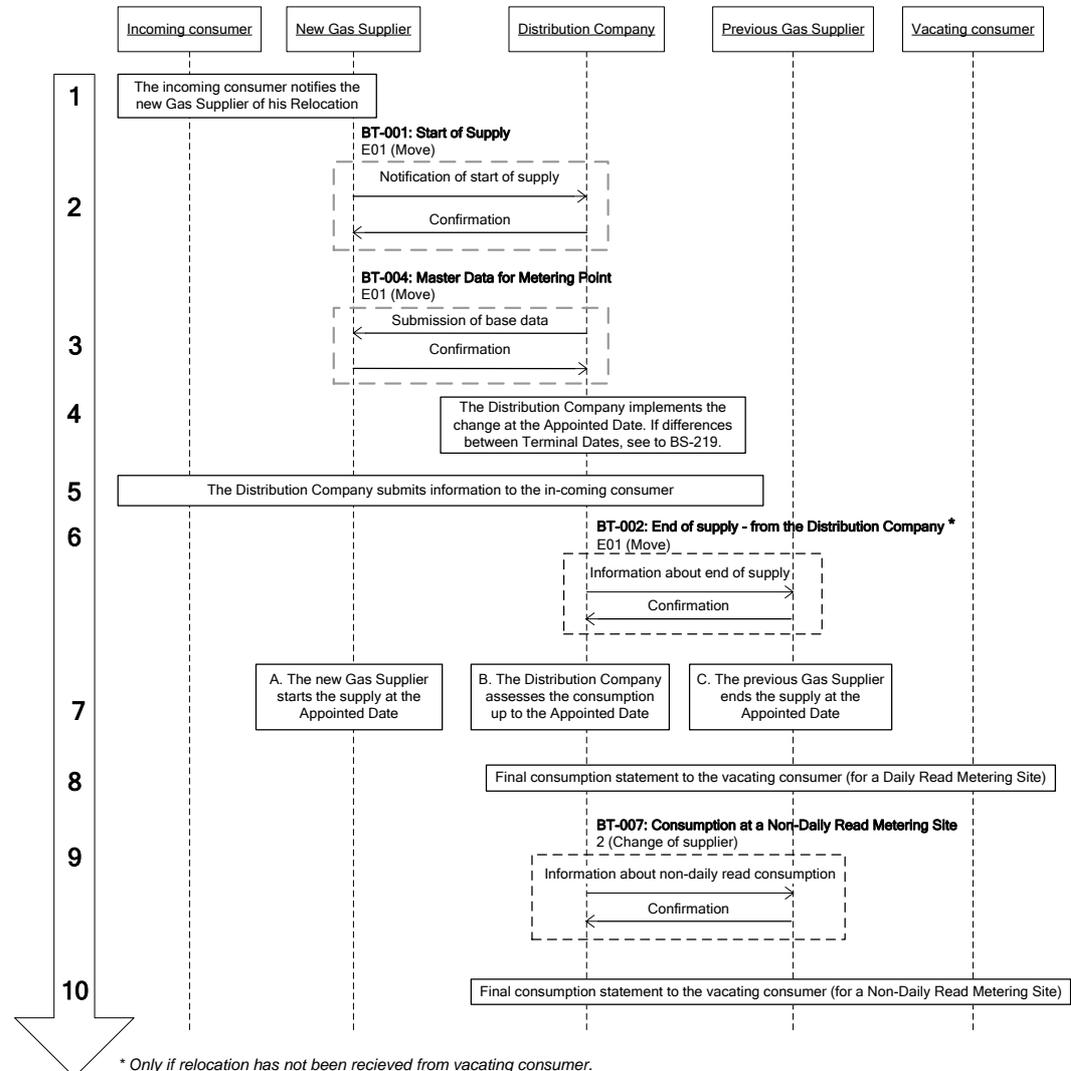


Figure 7: BS-209: Relocation (incoming consumer) notified to the Gas Supplier

Generally about Relocation (incoming consumer)

This business scenario must always be applied if the Gas Supplier wants to supply the Metering Point from the Terminal Date for Relocation (incoming consumer). It must also be applied if the Gas Supplier is already the vacating consumer's Gas Supplier at the Metering Point.

This business scenario consists of four transactions:

- Start of supply
- Base data for Metering Point
- End of supply - from the Distribution Company

- Consumption at a Non-Daily Read Metering Point

Start condition of Relocation (incoming consumer)

An incoming consumer is to relocate to the Metering Point and wants to actively choose his Gas Supplier. A contract must be concluded with the incoming consumer on the supply of natural gas to the relevant Metering Point from a specified Terminal Date. Terminal

Steps in the scenario 'Relocation (incoming consumer)

1. The incoming consumer contacts the Gas Supplier about his Relocation stating his GSRN number (EAN-GSRN number), the requested Terminal Date and meter reading. If the incoming consumer does not know the relevant meter ID number the Gas Supplier must request the number from the Distribution Company. The incoming consumer must also state his name and contact address. The address is relevant if the meter location address is not his domicile, eg a holiday home.
2. The Gas Supplier notifies the Distribution Company of the start of supply indicating transaction cause E01 (Relocation). The notification must contain, among other details, the incoming consumer's contact address and meter reading. Meter readings for Non-Daily Read Metering Points with conversion equipment are communicated via different communication. On meters with conversion equipment there are more counters and thus more meters All meters are to be used as a basis for the Distribution Company's and the Gas Supplier's final settlement with the vacating consumer.

Meter reading from Non-daily read Metering Points are not to be forwarded seeing as the Distribution Company has this information.

e

- Metering Point not identifiable
 - Unauthorised Gas Supplier
 - Requested or lacking Terminal Date not within deadline
 - Metering Point blocked for change of supplier
 - Consumer name is missing
3. If the change is approved, the Distribution Company will submit the Base data for the Metering Point to the Gas Supplier.

To ensure that the Relocation has been made for the correct Metering Point, the Gas Supplier checks that the meter location address corresponds to the one specified by the incoming consumer. If this is not the case, the Gas Sup-

plier must contact the Distribution Company in order to have the Relocation cancelled.

4. In the case of a Metering Point for which the incoming consumer has been approved, the Distribution Company implements the change of supplier as at the Terminal Date. If the Distribution Company determines another Terminal Date, refer to BS-219: Change of Terminal Date.
5. The Distribution Company provides the incoming consumer with information about the Gas Supplier relationship for the meter ID number and other necessary information.

Terminal.

6. The Distribution Company notifies the previous Gas Supplier of the end of supply stating transaction cause E01 (Relocation). If the previous and the new Gas Supplier are identical, the IT system must be capable of relating the notification of end of supply to the contract of the vacating consumer. Message is only sent if relocation (vacating consumer) has not been announced. If a change of supplier for the Metering Point has been registered after the Terminal Date, a message is sent to the future Gas Supplier about End of Supply.
7.
 - A. The new Gas Supplier starts the supply on the Terminal Date.
 - B. On the basis of a meter reading relating to the incoming consumer and perhaps also one relating to the vacating consumer, the Distribution Company assesses the vacating consumer's consumption.
 - C. The previous Gas Supplier stops the supply on the Terminal Date.
8. In the case of a Daily Read Metering Point, the Distribution Company and the previous Gas Supplier assess the consumption of gas send a final consumption statement to the vacating consumer in accordance with the applicable rules once the necessary settlement basis is available.

If the previous Gas Supplier supplies a Daily Read Metering Point, the business scenario ends here.

9. In the case of a Non-Daily Read Metering Point, the Distribution Company informs the Gas Supplier of the consumption metered up to the Terminal Date.
10. In the case of a Non-Daily Read Metering Point, the Distribution Company and the previous Gas Supplier assess the consumption of gas and send a final

consumption statement to the vacating consumer in accordance with the applicable rules once the necessary settlement basis is available.

Deadlines for Relocation (incoming consumer)

Process	Deadline	Explanation
Request for start of supply	Not later than at 18:00 on the 15th Business Days after the Date Terminal for Relocation (incoming consumer)	The Gas Supplier submits notification of Relocation (incoming consumer) on behalf of the incoming consumer.
Request accepted	No later than 2 hours after receipt of request.	
Submission of base data	Not later than 1 Business Day after approval of request for start of supply	Submission of base data to the new Gas Supplier
End-of-supply message	No later than the 16th Business Day after the Terminal Date for Relocation (incoming consumer)	The Distribution Company notifies the previous Gas Supplier of end of supply. Message is only sent if Relocation (vacating consumer) has not been announced.
Submission of consumption data for a Non-Daily Read Metering Point.	Not later than 20 Business Days after the Terminal Date for Relocation.	The Distribution Company sends consumption data for a Non-Daily Read Metering Point to the previous Gas Supplier.

Data content for Relocation (incoming consumer)

The significant data fields involved in the individual data flows are mentioned below. 'Significant data' are data crucial for the professional handling of the business scenario.

Notification of start of supply

- Transaction cause:
 - E01 Relocation
- Metering Point id
- Start date of supply
- Supplier id
- Consumer party name and
- Contact address
- Meter reading

Confirmation of start of supply - approval

- Metering Point id
- Start date of supply
- Supplier id

Confirmation of start of supply - rejection

- Metering Point id
- Reason for rejection

Submission of base data

- Transaction cause:
 - E01 Relocation
- Metering Point id
- Meter location address (coded address)
- Reading method used at Metering Point
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id
- Date of reading
- Estimated annual consumption

Information about end of supply

- Transaction cause
 - E01 Relocation
- Metering Point id
- End date of supply

Information about non-daily read consumption

- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh_o
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (showing up to three decimals)
- Reason code for reading
 - Final consumption
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Value, manually corrected

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-209
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BS name	Relocation (incoming consumer)
BS version	3
BS release	1
BS date	
EDI transactions:	
BT ID	DK-BT-001
BT name	Start of supply
BT version	4
BT ID	DK-BT-004
BT name	Base Data for Metering Point
BT version	4
BT ID	DK-BT-002
BT name	End of supply – from MPA
BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.8 BS-210: Disconnection and reconnection of a Metering Point

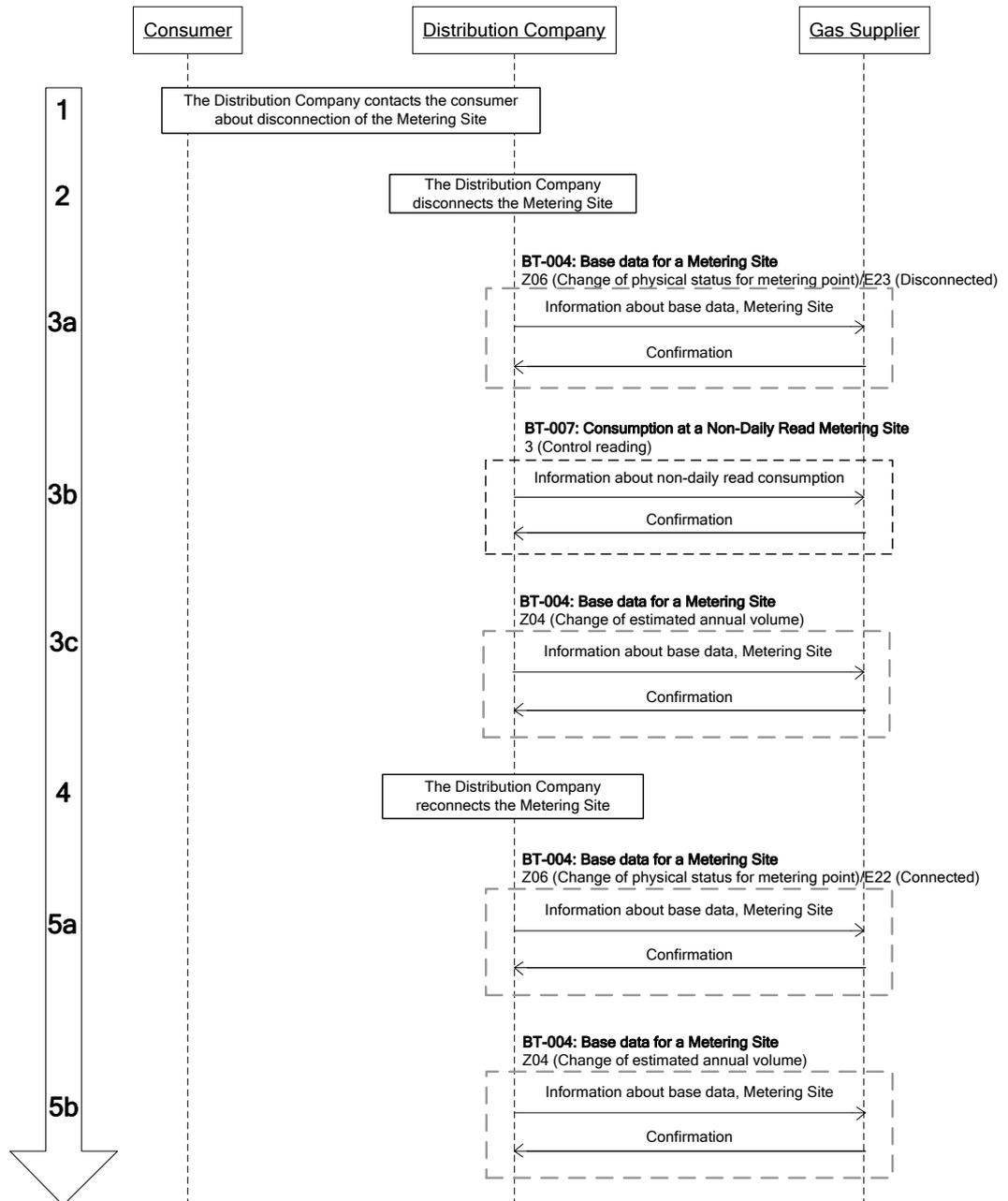


Figure 8: BS-210: Disconnection/reconnection of a Metering Point

General

This scenario applies to the situation where the Distribution Company disconnects and reconnects a Metering Point.

Note that if a change of supplier has been registered for the Metering Point, the Distribution Company must undertake all the steps of the scenario also in relation to the future Gas Supplier.

Termination of a Metering Point is not implemented according to this scenario but is treated according to BS 207: Termination of Metering Point.

Note that the scenario also applies if the Public Supply Obligation Company is the supplier when the Metering Point is disconnected, and a new Gas Supplier has not been registered before the reconnection. In those situations, the role of Gas Supplier will be replaced by the role of Public Supply Obligation Company. The Public Supply Obligation cannot refuse to start the supply of a reconnected Metering Point.

This business scenario consists of two transactions:

- Base data for a Metering Point
- Consumption at a Non-Daily Read Metering Point

Start condition for disconnection/reconnection of a Metering Point

The Distribution Company is aware that a given Metering Point is to be disconnected, eg due to non-payment.

Stages in the scenario 'Disconnection/reconnection of a Metering Point'

1. The Distribution Company contacts the consumer regarding the disconnection of the Metering Point.
2. The Distribution Company disconnects the Metering Point and takes a meter reading.
- 3a. The Distribution Company submits a base data message to the Gas Supplier stating transaction cause Z06 (Change of physical status of Metering Point) and indicating physical status E23 (disconnected).
- 3b. If, in the case of a Non-Daily Read Metering Point, the Distribution Company chooses to make use of a meter reading it has taken, the Distribution Company informs the Gas Supplier of the consumption metered up to the disconnection date stating reason code 3 (assessment on the basis of non-periodic reading) with a view to final settlement.

- 3c. If, when calculating the Market Share Value of the Gas Supplier, the Distribution Company adjusts the disconnected Metering Point's estimated annual consumption, the Distribution Company submits a base data message to the Gas Supplier stating transaction cause Z04 and indicating the adjusted estimated annual consumption.
4. The Distribution Company reconnects the Metering Point.
- 5a. The Distribution Company sends a base data message to the Gas Supplier stating transaction cause Z06 (Change of physical status of Metering Point) and indicating physical status E22 (connected).
- 5b. If, pursuant to item 3c, the Distribution Company has adjusted the estimated annual consumption, it submits a base data message to the Gas Supplier stating transaction cause Z04 and indicating the adjusted estimated annual consumption.

Deadlines for disconnection/reconnection of a Metering Point

Process	Deadline	Explanation
Submission of base data	Not later than 1 Business Day after change of physical status	Forwarding of base data message to the Gas Supplier stating that the physical status of the Metering Point has been changed.
Submission of consumption data for a Non-Daily Read Metering Point	Not later than 5 Business Days after disconnection	The Distribution Company submits consumption data for a Non-Daily Read Metering Point to the Gas Supplier. In case of difficulties obtaining a meter reading from the consumer at the disconnection, consumption is submitted as soon as possible.

Data content for the scenario 'Disconnection/reconnection of a Metering Point'

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Disconnection:

Information about base data, Metering Point - disconnection

- Transaction cause
 - Z06 Change of physical status of Metering Point
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading

- Physical status of Metering Point (E23)
- Validity start date (date of disconnection)
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption
- Consumer party name and possible second consumer party name.

Information about non-daily read consumption

- Metering Point id
- Quantity time interval
- Product code
 - 3002: Total consumption in kWh_o
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (up to three decimals)
- Reason code for reading (3)
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Value, manually corrected

Information about base data, Metering Point (if annual consumption is zeroed)

- Transaction cause
 - Z04: Estimated annual consumption adjusted
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption (=0)
- Consumer party name and possible second consumer party name.

Reconnection:

Information about base data, Metering Point

- Transaction cause
 - Z06: Change of physical status of Metering Point
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading
- Physical status of Metering Point (E22)
- Validity start date
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption
- Consumer party name and second consumer party name, if any.

Information about base data, Metering Point (if annual consumption has been zeroed)

- Transaction cause
 - Z04: Estimated annual consumption adjusted
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption
- Consumer party name and second consumer party name, if any.

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-210
BS name	Disconnection/reconnection of a Metering Point
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-004
BT name	Base data information for Metering Point
BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.9 BS-212: Change of meter-reading method

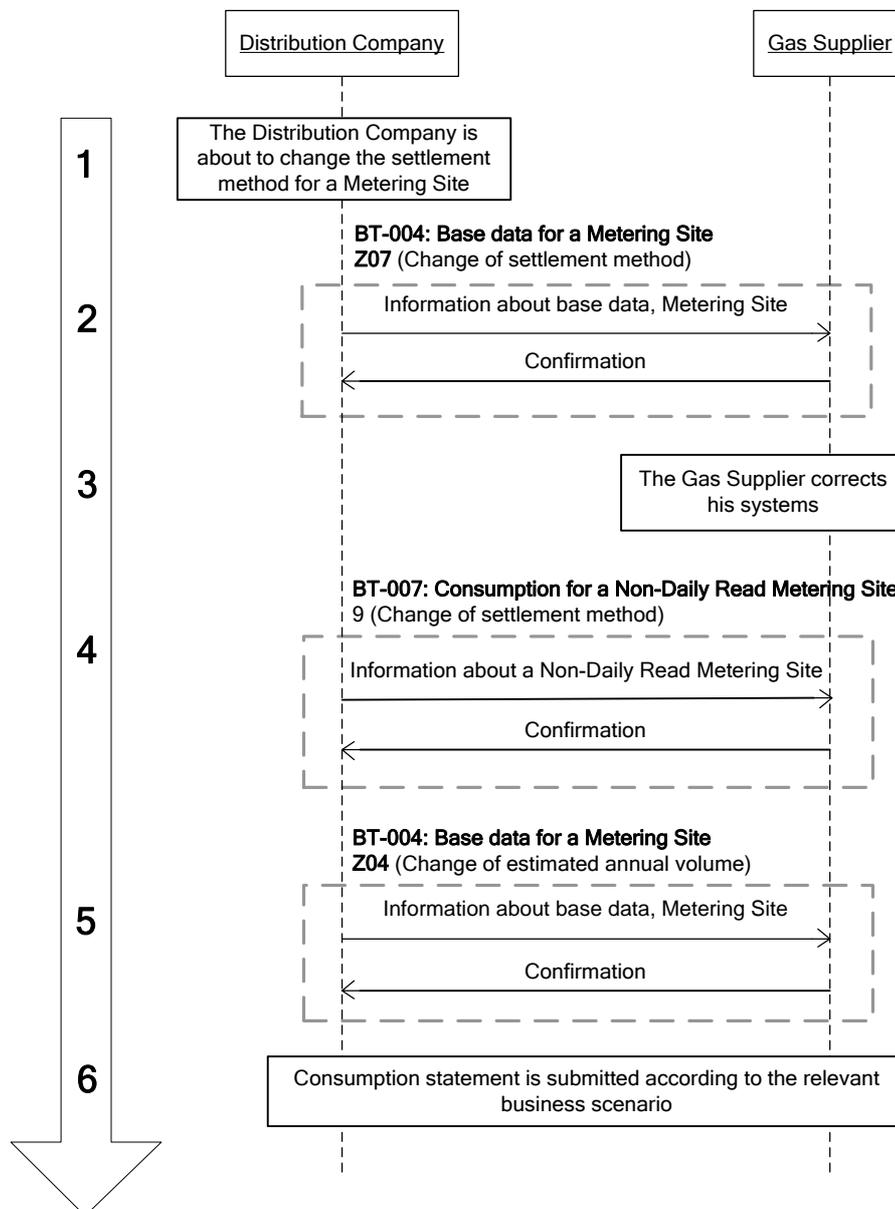


Figure 9: BS-212: Change of meter-reading method

General

The scenario concerns the switch between a Non Daily Read and a Daily Read Metering Point. If the meter-reading method is changed, the Gas Supplier must be informed in accordance with this business scenario. The meter-reading method may change for the following reasons:

Reason 1. Required by the Distribution Company, which changes the mandatory limit for daily reading.

Reason 2. The consumer's registered annual consumption exceeds/falls short of the mandatory limit for daily reading (based on a control reading, for example).

Reason 3. The consumer has requested daily/non-daily reading.

A change due to reasons 2 and 3 must be effected to the first day of a month, giving 2 months' notice to be communicated to the Gas Supplier through EDI communication in accordance with this business scenario.

This business scenario consists of two transactions:

- Base data for a Metering Point
- Consumption at a Non-Daily Read Metering Point

Start condition for change of meter-reading method

The Distribution Company is about to change the meter-reading method for a Metering Point, and the Gas Supplier must be informed accordingly through EDI communication.

Steps in the scenario 'Change of meter-reading method'

1. The Distribution Company is about to change the meter-reading method:
2. The Distribution Company submits a base data message stating transaction cause Z07 (change of meter-reading method) and including data corresponding to the new meter-reading method. The validity start date must be the date of the change of meter-reading method.

The message must be sent to the Gas Supplier supplying the Metering Point at the validity start date and to a potential future Gas Supplier for the Metering Point.

3. The Gas Supplier must prepare for a change of meter-reading method.
4. In the case of a shift from Non-Daily Read to Daily Read Metering Point, the consumption up to the time of the change is assessed in accordance with the Distribution Company's rules. The Distribution Company sends the Gas Supplier a final consumption statement stating reason code '9' (Change of meter-reading method).
5. If, in connection with a change of meter-reading method, the Distribution Company adjusts the estimated annual consumption, it must send a base data message stating transaction cause Z04 (Estimated annual consumption adjust-

ed) and the code for updating of estimated annual consumption. The validity start date must be the date of change of meter-reading method. The message must be sent to the Gas Supplier supplying the Metering Point on the validity start date and to the future Gas Supplier, if any.

6. If a change has been made to daily reading, the consumption statements after the change must be submitted pursuant to *BS-206 Information about consumption at a Daily Read Metering Point*. In the case of a switch to non-daily read metering, future statements must be sent as described in *BS-205 Information about consumption at a Non-Daily Read Metering Point*.

Deadlines for change of meter-reading method

Process	Deadline	Explanation
Submission of base data	Not later than one Business Day after decision to change the meter-reading method	Submission to the Gas Supplier of base data stating a change of meter-reading method.
Submission of consumption data for a Non-Daily Read Metering Point	Not later than 20 Business Days after change of meter-reading method.	The Distribution Company submits consumption data for a Non-Daily Read Metering Point to the Gas Supplier.
Submission of base data (updating)	Not later than 1 Business Day after updating of base data	The Distribution Company submits updated base data to the Gas Supplier if these data have been changed.

Data content for change of meter-reading method

The significant data fields involved in the individual data flows are mentioned below. 'Significant data' are data crucial for the professional handling of the business scenario.

Information about base data, Metering Point

- Transaction cause
 - Z07: Change of meter-reading method
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading
- Physical status of Metering Point
- Validity start date (date of change of reading method)
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption

- Consumer party name and possible second consumer party name.

Information about non-daily read consumption

- Metering Point id
- Quantity time interval (end date = date of change of meter-reading method)
- Product code
 - 3002: Total consumption in kWh₀
 - 3004: Total consumption in Nm³ (if conversion equipment available)
 - 3006: Total consumption in m³ (if conversion equipment NOT available)
- Quantity (showing up to three decimals)
- Reason code for reading (9)
- Quantity status
 - 99: Final value, estimated
 - 136: Final value, metered
 - Z01: Manually corrected value

Information about base data, Metering Point

- Transaction cause
 - Z04: Estimated annual consumption changed
- Metering Point id
- Meter location address
- Reading method used at Metering Point
- Date of reading
- Physical status of Metering Point
- Validity start date
- Start date of supply
- Supplier id (particularly in the case of a future Gas Supplier)
- Estimated annual consumption
- Consumer party name and possible second consumer party name.

Identification of scenario and transactions

The unambiguous denominations of the business scenario and the transactions involved are given in the table below.

BS ID	BS-212
BS name	Change of meter-reading method
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-004
BT name	Base data information for Metering Point
BT version	4
BT ID	DK-BT-007
BT name	Consumption for Metering Point, profiled
BT version	4

2.10 BS-213: Submission of market share values

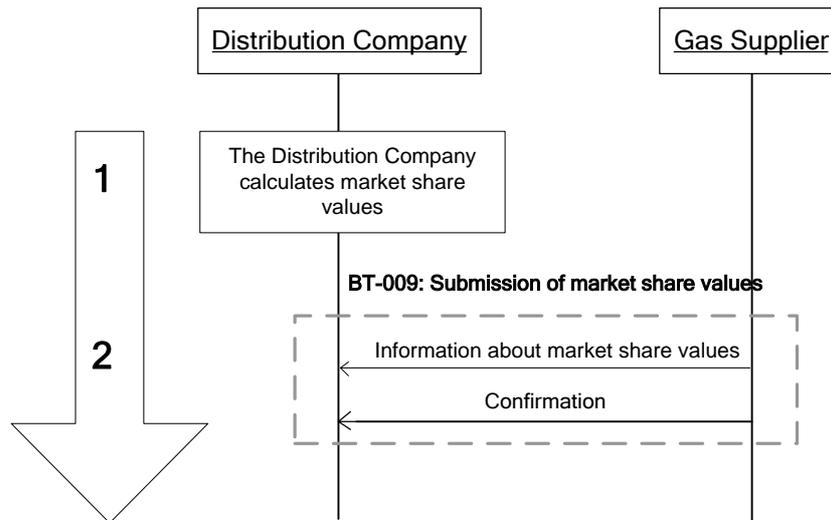


Figure 10: BS-213: Submission of Market Share Values

General

The Distribution Company sends market share values to the Gas Supplier every month. The market share values are made up of the estimated annual consumption of the Gas Supplier's non-daily read consumers and the estimated annual consumption of all non-daily read consumers in the distribution area.

This business scenario consists of one transaction:

- Submission of market share values

Start condition for submission of market share values

The scenario for submission of market share values starts with the Distribution Company calculating the market share values.

Steps in the scenario 'Submission of market share values'

1. The Distribution Company calculates the market share values applying to the 1st day of a month (as at the 1st gas day of the month).

2. The Distribution Company sends the calculated market share values to the Gas Supplier (BT-009).

Deadlines for submission of market share values

Process	Deadline	Explanation
Submission of market share values	Not later than at 16:00 on the 1st Business Day after the change of month.	The Distribution Company sends market share values to the Gas Supplier.

Table 5. Deadlines for submission of market share values

Data content for submission of market share values

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Submission of market share values:

- Message function
 - 9
- Consumer portfolio number (GLN)
- Time period (one-year intervals)
- Product code
 - 3014: Market Share Value of the Gas Supplier in kWh₀ (estimated annual consumption of the Gas Supplier's non-daily read consumers)
 - 3013: Market share value of the distribution area in kWh₀ (estimated annual consumption of all Non-Daily Read consumers in the distribution area)
- Quantity given as one value (up to three decimals)
- Quantity status
 - 31 Estimated annual consumption.

Identification of scenario and transactions

BS ID	BS-213
BS name	Submission of market share values
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-009
BT name	Reconciliation data transmission
BT version	4

2.11 BS-214: Submission of calorific values

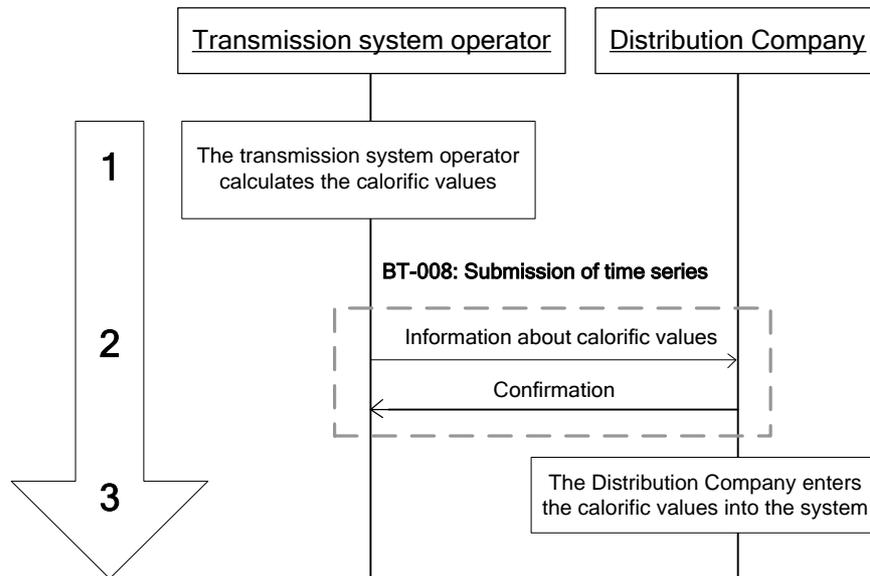


Figure 11: BS-214: Submission of calorific values

General

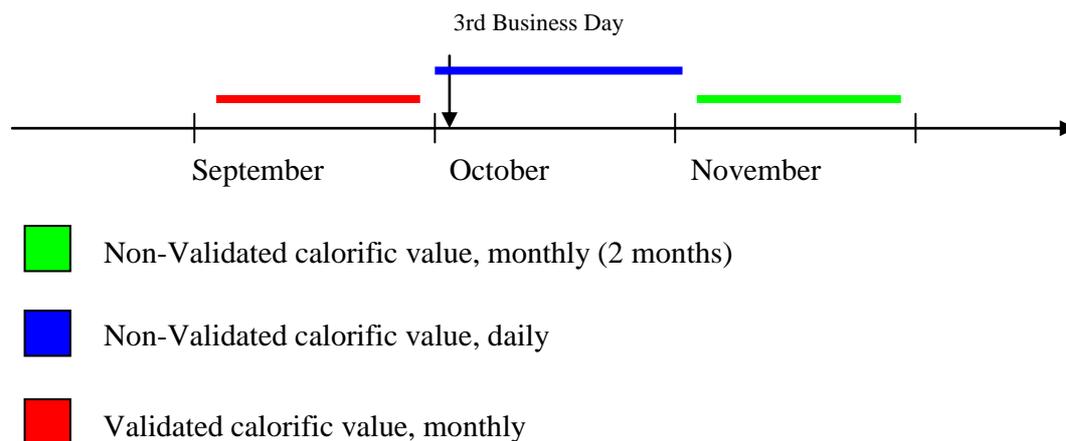
Every month, the transmission system operator assesses the Validated calorific value of the natural gas for each M/R station and submits it in the form of daily values and an average value for the entire past month to the Distribution Companies. The submission of calorific values takes place not later than at 16:00 on the third Business Day of every month.

The transmission system operator assesses the Non-Validated calorific value of the natural gas every day for each M/R station and submits it to the Distribution Companies in the form of Non-Validated daily values for the past gas day. The submission of daily calorific values takes place not later than 08:00.

The Distribution Companies use the average calorific values to:

- assess the Validated consumption for month x
- assess the Non-Validated consumption for month $x+2$ (alternatively, the Validated daily values are used).

The Distribution Companies' use of average calorific values is illustrated in the figure below:



The figure shows, for instance, that on the third Business Day of the month of October, the transmission system operator submits calorific values. These average calorific values are used to assess the Validated consumption for September and possibly also the Non-Validated consumption for November. Furthermore, the daily submission of Non-Validated consumption values is depicted by the blue line, which is an alternative to using the two-month old GCV for continuous data.

This business scenario consists of one transaction:

- Submission of time series

Start condition for submission of calorific values

At the end of the gas day, the transmission system operator assesses the Non-Validated calorific value of the natural gas for each M/R station.

At the end of the month, the transmission system operator assesses the Validated calorific value of the natural gas for each M/R station.

Steps in the scenario 'Submission of calorific values'

1. The transmission system operator calculates the calorific values.
2. The transmission system operator sends the calorific values to the Distribution Company.
 - a. The message contains daily values for the preceding day for each relevant M/R station in the distribution area.
 - b. The message contains daily values and an average value for the preceding month for each relevant M/R station in the distribution area.

3. The Distribution Company enters the calorific values into the system.
4. The Distribution Company acknowledges receipt.

Correction of calorific values submitted

If the transmission system operator detects a significant error in the Validated calorific value previously submitted, the transmission system operator contacts the relevant Distribution Company in order to mutually agree on a correction procedure.

Cancellation of the submitted Validated calorific values must be made manually by telephone.

Deadlines for submission of calorific values

Process	Deadline	Explanation
Submission of calorific values	Not later than at 16:00 on the 3rd Business Day of the following month.	The transmission system operator submits calorific values for the preceding month to the Distribution Company.
Submission of Non-Validated calorific values	Not later than at 08:00 on the following day.	The transmission system operator submits daily Non-Validated calorific values for the preceding day to the Distribution Company.

Table 6. Deadlines for submission of calorific values

Data content for submission of calorific values

The significant data fields involved in the individual data flows are listed below. 'Significant data' are data crucial for the professional handling of the business scenario.

Submission of calorific values

- Message function
 - 9
- M/R station id
- Product code
 - 3007: Calorific daily values in kWh₀/ Nm³ (Validated daily calorific values for each M/R station)
 - 3008: Calorific monthly values in kWh₀/ Nm³ (Validated monthly average consumption for each M/R station)
 - 3009: Calorific daily values in kWh₀/ Nm³ (Non-Validated daily calorific values for each M/R station)
- Quantity time period (24-hour intervals and 1-month intervals)

- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Identification of scenario and transactions

BS ID	BS-214
BS name	Submission of calorific values
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-008
BT name	Time series transmission
BT version	4

2.12 BS-216: Aggregated gas consumption

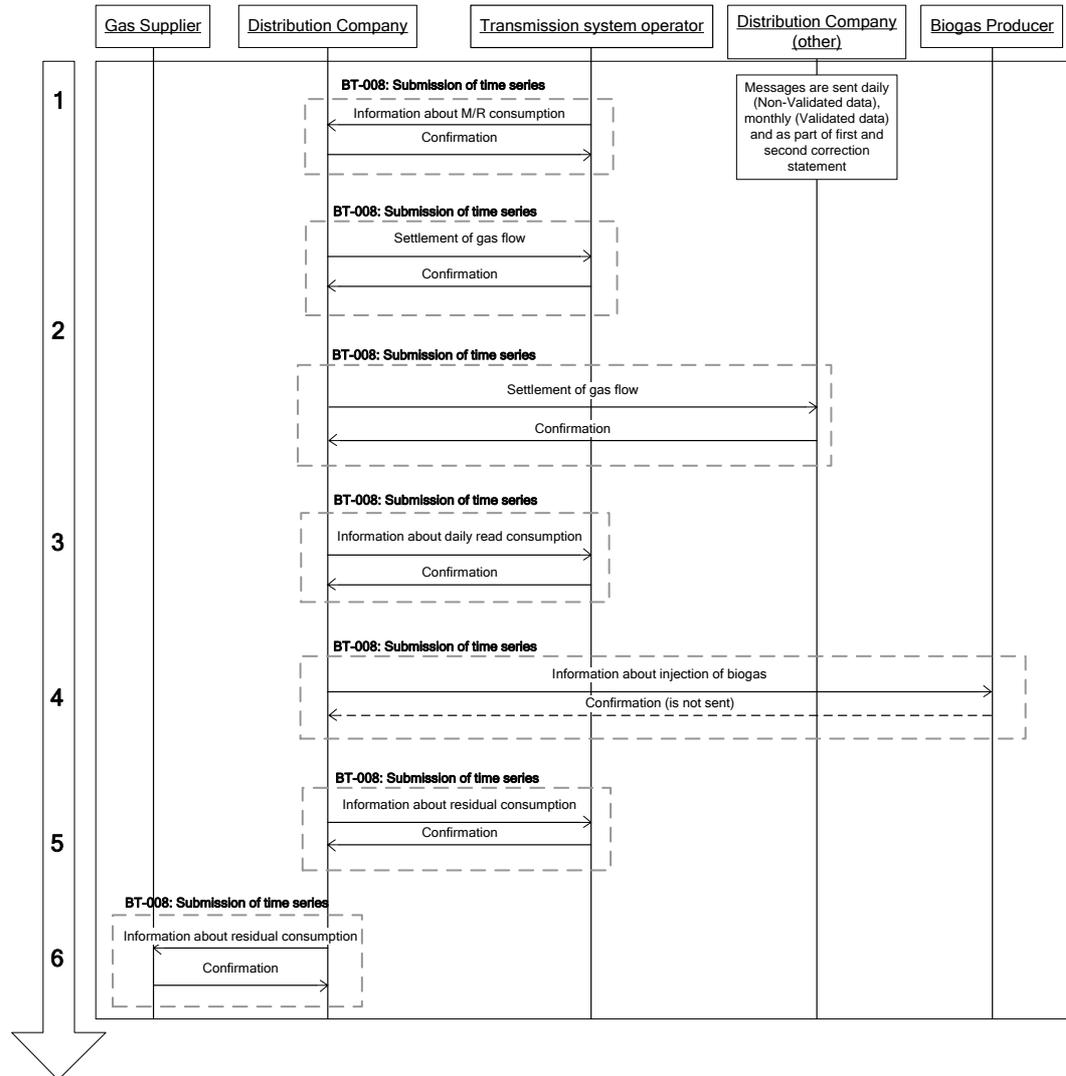


Figure 12: BS-216: Aggregated gas consumption

General

This business scenario concerns the assessment of aggregated gas consumption/production between the Distribution Companies, the biogas producers, the Gas Suppliers and the transmission system operator.

The messages can be divided into daily data exchange, monthly data exchange and correction statement. The daily data exchange consists of all the Non-Validated data for the preceding gas day whereas the corresponding monthly data exchange consists of Validated data for the preceding month. The first and second correction statements constitute a recalculation of the monthly data exchange.

This means, for instance, that data from January 2006 were sent in a first correction statement in May 2006 and in a second correction statement in April 2007.

This business scenario consists of one transaction:

- Submission of time series

Especially for bio natural gas producers there are no requirements for submitting confirmations. There are no requirements for replying with APERAK or CONTROL.

Start condition for submission of aggregated gas consumption data

The assessment of aggregated gas consumption is initiated by the transmission system operator measuring the injection at each M/R station.

Steps in the scenario 'Submission of aggregated gas consumption data'

1. The transmission system operator informs the Distribution Company of the injection at all M/R stations. The transmission system operator differentiates between the messages so that the individual Distribution Companies receive only injection data relating to M/R stations in their own distribution area.

The daily message contains Non-Validated values for the preceding gas day in kWh_g for all M/R stations.

The monthly message contains the total Validated injection data for the preceding month for all M/R stations. The injection data are submitted as the month's hourly values for each M/R station.

In the first and second correction statements, the consumption (at the individual Metering Points) is adjusted, and the monthly consumption values (relating to the consumer portfolios) are recalculated four and 15 months respectively after the month of consumption.

2. The Distribution Company, which acts as Transition Point administrator, meters and submits consumption values for Metering Points measuring the data exchange with another area. The message is sent to the transmission system operator and the Distribution Company in the neighbouring area, if relevant.

The daily message contains Non-Validated values for the relevant Metering Point or M/R station.

The monthly message contains Validated values for the relevant Metering Point or M/R station.

In the first and second correction statements, the monthly values are recalculated four and 15 months respectively after the month of consumption.

3. The Distribution Company sends the aggregated, daily read consumption to the transmission system operator.

The daily message contains the daily read consumption for the preceding gas day. The consumption data are given in the form of a daily aggregated hourly value for each Gas Supplier's portfolio.

The monthly message contains the total daily read consumption for the preceding month. The consumption data are given as a daily aggregated hourly value for each gas day of the preceding month corresponding to each Gas Supplier's portfolio.

In the first and second correction statements, the monthly values are recalculated four and 15 months respectively after the month of consumption.

4. The Distribution Company, which is responsible for assessing the Bio Natural Gas injected into the distribution network, measures and communicates the quantities injected into the BNG Transition Points. The message is sent to the transmission system operator and the bio natural gas producer.

The daily message contains the Non-Validated injection values for the BNG Transition Point.

The monthly message contains Validated injection values for the BNG Transition Point.

In the first and second correction statements, the monthly values are recalculated four and 15 months respectively after the month of consumption.

5. The Distribution Company sends the distributed residual consumption data to the transmission system operator.

The distributed residual consumption is updated on an ongoing basis as a consequence of approved changes of supplier. Updating takes place by allocating the market share values for the relevant Metering Points to the Gas Supplier taking over the supply. Updating may be performed from the time when a new Gas Supplier's cancellation deadline expires up until the Terminal Date, ie the third,

second and first Business Day before the Terminal Date and on the actual Terminal Date.

The daily message contains the distributed residual consumption for the preceding gas day given as a daily aggregated value for each Gas Supplier's portfolio.

The monthly message contains the total distributed residual consumption for the preceding month. The consumption data are given as a daily aggregated value for each day of the preceding month corresponding to each Gas Supplier's portfolio.

In the first and second correction statements, the monthly values are recalculated four and 15 months respectively after the month of consumption.

6. The Distribution Company calculates the distributed residual consumption for the various Gas Suppliers and sends it to all the Gas Suppliers.

The distributed residual consumption is updated on an ongoing basis as a consequence of approved changes of supplier. Updating takes place by allocating the market share values for relevant Metering Points to the Gas Supplier taking over the supply. Updating may be performed from the time when a new Gas Supplier's cancellation deadline expires up until the Terminal Date, ie the third, second and first Business Day before the Terminal Date and on the actual Terminal Date.

The daily message contains the preceding gas day's total distributed residual consumption for the various Gas Suppliers.

The monthly message contains the total distributed residual consumption for the previous month. The consumption is given as a daily aggregated value for the relevant Gas Supplier's portfolio for each day of the previous month.

In the first and second correction statements, the monthly values are recalculated four and 15 months respectively after the month of consumption.

Settlement of gas flow

As can be seen from the above scenario steps, the Distribution Company meters the consumption on a daily as well as a monthly basis and as part of the first and second correction statements. The Distribution Company sends the values to the transmission system operator and to the Distribution Company in the neighbouring area and to the bio natural gas producer, if relevant. This exchange of metered consumption and injection values is necessary if the equation: $M/R \text{ injection} = \text{daily read consumption} + \text{non-daily read consumption per distribution area}$ is to be valid.

The gas flow between two neighbouring distribution areas can either be positive or negative. One of the distribution areas owns the Metering Point or the M/R station at which the gas flow into the other distribution area is measured. The Metering Point administrator must transmit the metered consumption values in kWh_g to the Distribution Company in the other area. The message is always sent by the Metering Point administrator to the Distribution Company that has not metered the consumption.

As regards BNG Transition Points measuring the injection of Bio Natural Gas, the Metering Point administrator must also submit the injection values in kWh_g to the transmission system operator and the bio natural gas producer.

If the natural gas has flowed from the Distribution Company acting as Metering Point administrator to the adjacent Distribution Company, the gas volume measured must be given a positive sign in the EDI message. In such case, the adjacent Distribution Company (which is the recipient of the EDI message) must add the gas volume to its total M/R injection, and the Distribution Company acting as Metering Point administrator must deduct the gas volume from its total M/R injection.

If the natural gas has flowed to the Distribution Company acting as Metering Point administrator from the adjacent Distribution Company, the gas volume measured must be given a negative sign in the EDI message. In this case, the adjacent Distribution Company (which is the recipient of the EDI message) must deduct the stated gas volume from its total M/R injection, and the Distribution Company acting as Metering Point administrator must add the gas volume to its total M/R injection.

In case of the injection of Bio Natural Gas, the gas volume calculated for the BNG Transition Point must be given a negative sign in the EDI message. The Distribution Company receiving and measuring the gas must add the gas volume to its total M/R injection.

A positive and negative gas flow must be indicated by a positive or negative sign respectively. If no sign is given in front of the value, the flow is regarded as positive.

Deadlines for submission of aggregated gas consumption data

Process	Deadline	Explanation
Submission of injection data for M/R stations	Not later than at 08:00 every day.	The transmission system operator sends injection data for M/R stations (daily).
	Not later than at 16:00 on the 3rd Business Day of the following month.	The transmission system operator send injection data for M/R stations, (monthly).

	<p>first correction statement: Not later than at 16:00 on the 7th Business Day of the 4th month following the month of consumption.</p> <p>Second correction statement: Not later than at 16:00 on the 7th Business Day of the 15th month following the month of consumption.</p>	The transmission system operator sends consumption data for M/R stations, first and second correction statements.
Settlement of gas flow	Not later than at 08:30 every day.	The Distribution Company sends consumption data for all Metering Points, daily.
	Not later than at 16:00 on the 4th Business Day of the following month.	The Distribution Company sends consumption data for all Metering Points, monthly.
	<p>First correction statement: Not later than at 16:00 on the 8th Business Day of the fourth month following the month of consumption.</p> <p>Second correction statement: Not later than at 16:00 on the 8th Business Day of the 15th month following the month of consumption.</p>	The Distribution Company sends consumption data for all Metering Points, first and second correction statement.
Submission of daily read consumption data (to the transmission system operator)	Not later than at 11:00 every day.	The Distribution Company sends daily read consumption data to the transmission system operator (daily).
	Not later than at 16:00 on the 6th Business Day of the following month.	The Distribution Company sends daily read consumption data to the transmission system operator (monthly).
	<p>first correction statement: Not later than at 16:00 on the tenth Business Day of the 4th month following the month of consumption.</p> <p>Second correction statement: Not later than at 16:00 on the 10th Business Day of the 15th month following the month of consumption.</p>	The Distribution Company sends daily read consumption data, first and second correction statements.
Submission of injection values for Bio Natural Gas (to transmission system operator and bio natural gas producer)	Not later than at 11:00 every day.	The Distribution Company sends Non-Validated injection values for the BNG Transition Point (daily).
	Not later than at 16:00 on the 6th Business Day of the following month.	The Distribution Company sends Validated injection values for the BNG Transition Point (monthly)

	<p>First correction statement: Not later than at 16:00 on the 10th Business Day of the 4th month following the month of injection.</p> <p>Second correction statement: Not later than at 16:00 on the 10th Business Day of the 15th month following the month of injection.</p>	The Distribution Company sends injection data for the BNG Transition Point, first and second correction statements.
Submission of distributed residual consumption data (to transmission system operator)	Not later than at 11:00 every day.	The Distribution Company sends distributed residual consumption data to the transmission system operator (daily).
	Not later than at 16:00 on the 6th Business Day of the following month.	The Distribution Company sends distributed residual consumption data to the transmission system operator (monthly).
	<p>first correction statement: Not later than at 16:00 on the 10th Business Day of the 4th month following the month of consumption.</p> <p>Second correction statement: Not later than at 16:00 on the 10th Business Day of the 15th month following the month of consumption.</p>	The Distribution Company sends distributed residual consumption data to the transmission system operator, first and second correction statements.
Submission of distributed residual consumption data (to Gas Suppliers)	Not later than at 11:00 every day.	The Distribution Company sends distributed residual consumption data to the Gas Suppliers (daily).
	Not later than at 16:00 on the 6th Business Day of the following month.	The Distribution Company sends distributed residual consumption data to the Gas Suppliers (monthly).
	<p>first correction statement: Not later than at 16:00 on the 10th Business Day of the 4th month following the month of consumption.</p> <p>Second correction statement: Not later than at 16:00 on the 10th Business Day of the 15th month following the month of consumption.</p>	The Distribution Company sends distributed residual consumption data to the Gas Suppliers, first and second correction statements.

Table 7: Deadlines for submission of aggregated gas consumption

Data content for submission of aggregated gas consumption data

The significant data fields involved in the individual data flows are mentioned below. Significant data are data crucial for the professional handling of the business scenario.

Submission of injection data for M/R stations:

- Message function
 - 9
- M/R station id
- Quantity time period (one-hour intervals). The daily message contains 1x24 hourly values, while the monthly message contains 30x24 hourly values.
- Product code:
 - 3030/3031/3032/3033: Injection for each M/R station in kWh_g (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Settlement of gas flow (with positive or negative sign)

- Message function
 - 9
- Metering Point id or M/R station id
- Quantity time period (one-hour intervals). The daily message contains 1x24 hourly values, while the monthly message contains 30x24 hourly values.
- Product code:
 - 3060/3061/3062/3063: Injection for each Metering Point or M/R station in kWh_g (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Submission of daily read consumption data

- Message function
 - 9
- Consumer portfolio number (GSRN)
- Quantity time period (one-hour intervals). The daily message contains 1x24 aggregated hourly values, while the monthly message contains up to 30x24 aggregated hourly values, depending on how many days the consumer portfolio has been reported as being active.
- Product code:

- 3040/3041/3042/3043: Daily read consumption for each Gas Supplier's portfolio (aggregated) in kWh_ø (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Injection of Bio Natural Gas (with negative sign)

- Message function
 - 9
- Bio Natural Gas BNG Transition Point ID (GLN)
- Quantity time period (one-hour intervals). The daily message contains 1x24 aggregated hourly values, while the monthly message contains up to 30x24 aggregated hourly values, depending on how many days the BNG Transition Point has been reported as being active.
- Product code:
 - 3060/3061/3062/3063: Injection for each Gas Supplier's portfolio (aggregated)BNG Transition Point in kWh_ø (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (showing up to three decimals)
- Quantity status
 - 136 Metered value

Submission of distributed residual consumption data (to transmission system operator)

- Message function
 - 9
- Consumer portfolio number (GSRN)
- Quantity time period (24-hour intervals). The daily message contains 1x1 daily values, while the monthly message contains up to 30x1 daily values, depending on how many days the consumer portfolio has been reported as being active.
- Product code:
 - 3050/3051/3052/3053: Distributed residual consumption in kWh_ø (residual consumption (aggregated) for each Gas Supplier) (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (up to three decimals).
- Quantity status
 - 136 Metered value

Submission of distributed residual consumption data (to the Gas Suppliers)

- Message function

- 9
- Distribution area id
- Consumer portfolio no. (GSRN)
- Quantity time period (24-hour intervals). The daily message contains 1x1 daily values, while the monthly message contains 30x1 daily values.
- Product code
 - 3020/3021/3022/3023: Distributed residual consumption in kWh_g (for the various Gas Suppliers) (Non-Validated consumption/Validated consumption/first correction/second correction)
- Quantity (up to three decimals).
- Quantity status
 - 136 Metered value

Identification of scenario and transactions

BS ID	BS-216
BS name	Aggregated gas consumption
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-008
BT name	Time series transmission
BT version	4

2.13 BS-217: Reconciliation statement

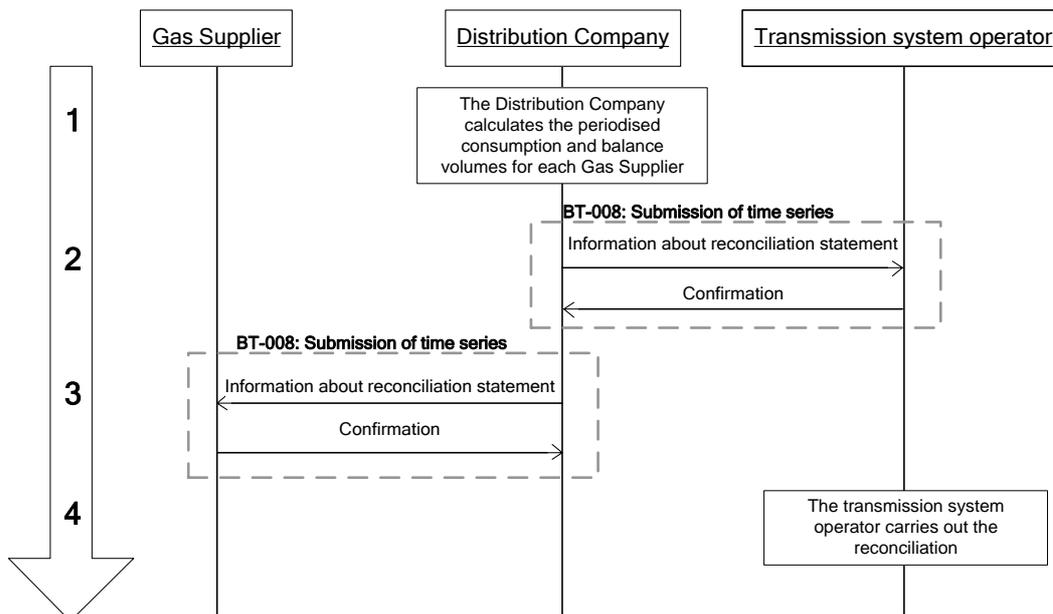


Figure 13: BS-217: Reconciliation statement

General

Once every month, the Distribution Company sends a reconciliation statement to the transmission system operator and the Gas Suppliers. The reconciliation statement is based on the consumption metered 15 months earlier.

This business scenario consists of one transaction:

- Submission of time series

Start condition for submission of reconciliation statement

Immediately after preparing the second correction statement, the Distribution Company computes the periodised consumption and balance volumes (difference between the second correction statement and the periodised consumption) for each Gas Supplier.

Steps in the scenario 'Submission of reconciliation statement'

1. The Distribution Company prepares a statement of the periodised consumption and the balance volumes for each Gas Supplier based on the consumption metered 15 months earlier.

2. The Distribution Company sends a reconciliation statement for each Gas Supplier to the transmission system operator based on the consumption metered 15 months earlier.
3. The Distribution Company sends to each Gas Supplier a reconciliation statement based on the consumption metered 15 months earlier.
4. The transmission system operator carries out the reconciliation.

Deadlines for submission of reconciliation statements

Process	Deadline	Explanation of process
Submission of reconciliation statement to transmission system operator.	Not later than on the 12th Business Day (immediately after the second correction statement) of the 15th month after the month of consumption.	The Distribution Company submits a reconciliation statement to transmission system operator.
Submission of reconciliation statement to Gas Supplier.	Not later than on the 12th Business Day (immediately after the second correction statement) of the 15th month after the month of consumption.	The Distribution Company submits a reconciliation statement to Gas Supplier.

Table 8: Deadlines for submission of reconciliation statements

Data content for submission of reconciliation statements

The significant data fields involved in the individual data flows are mentioned below. 'Significant data' are data crucial for the professional handling of the business scenario.

Reconciliation statement (to transmission system operator)

- Message function
 - 9
- Consumer portfolio number (GSRN)
- Quantity time period (one-month intervals)
- Product code
 - 3011: Reconciliation in kWh₀ (balance volume in relation to residual consumption for each Gas Supplier). One value with a positive or a negative sign.

- 3012: Periodised consumption in kWh_o (Periodised residual consumption for each Gas Supplier). One value.
- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Reconciliation statement (to Gas Supplier)

- Message function
 - 9
- Consumer portfolio number (GSRN)
- Time period (one-month intervals)
- Product code
 - 3011: Reconciliation in kWh_o (balance volume in relation to residual consumption). One value with a positive or a negative sign.
 - 3012: Periodised consumption in kWh_o (periodised residual consumption). One value.
 - 3053: Distributed residual consumption in kWh_o (second correction)
- Quantity (up to three decimals)
- Quantity status
 - 136 Metered value

Identification of scenario and transactions

BS ID	BS-217
BS name	Reconciliation statement
BS version	3
BS release	1
BS date	12 August 2011
EDI transactions:	
BT ID	DK-BT-008
BT name	Time series transmission
BT version	4

2.14 BS-218: Relocation (vacating consumer)

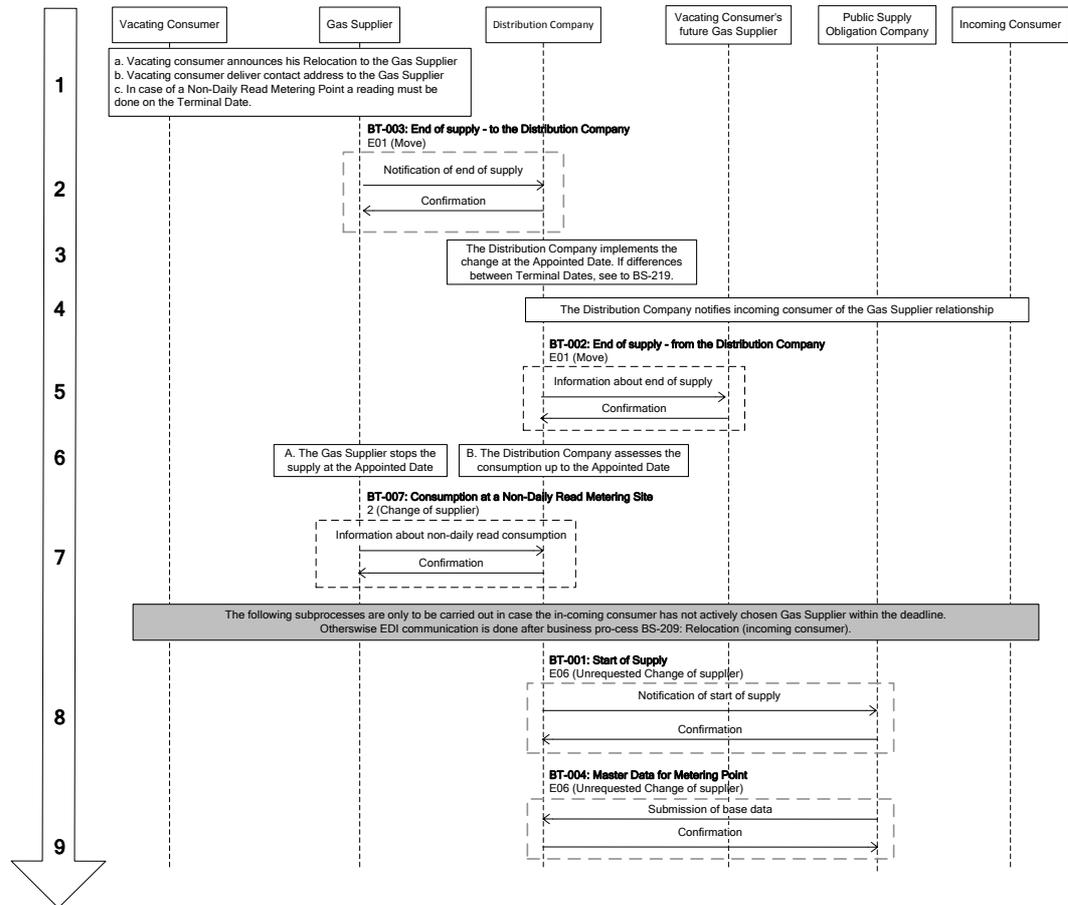


Figure 14: BS-218: Relocation (vacating consumer)

2.12.1 Generally

A Gas Supplier continues to be responsible for a Metering Point until the Gas Supplier notifies the Distribution Company of the Relocation (vacating consumer) and the Distribution Company confirms end of supply.

This business process consists of five transactions:

- End of supply
- End of supply – from the Distribution Company
- Consumption on Non-Daily Read Metering Points
- Start of supply
- Base data for Metering Point

Start condition for Relocation (vacating consumer)

A vacating consumer contacts the Gas Supplier and announces his Relocation.

Process for Relocation (vacating consumer)

1. Vacating consumer announces his Relocation to the Gas Supplier. Vacating Consumer initial contact with the Gas Supplier about a Relocation includes, besides a certain relocation date, also information about vacating consumer's new contact address with regard to the final settlement. In case of a Non-Daily Read Metering Point a reading must be done on the Terminal Date.
2. Gas Supplier announces end of supply to the Distribution Company including Metering Point, related Terminal Date (BT-003) and meter reading. Meter readings of Non-Daily Read Metering Points with conversion equipment are communicated via different communication. On meters with conversion equipment there are more counters and thus more meters All meters are to be used as a basis for the Distribution Company's and the Gas Supplier's final settlement with the vacating consumer.

No meter readings for Non-Daily Read Metering Points are to be submitted seeing as the Distribution Company has the information.

3. For the Metering Points where the acceptance of Relocation (vacating consumer) has been sent, the Distribution Company carries out the change on the Terminal Date. If the Distribution Company determines a different Terminal, please refer to BS-219: Change of Terminal Date.
4. The Distribution Company notifies incoming consumer of the Gas Supplier relationship and the GSRN number and provides other necessary information in order for incoming consumer to choose Gas Supplier.
5. This step is only executed if there is registered a Change of Supplier for the Metering Point after the Terminal Date. The Distribution Company announces the end of supply with transaction cause E01 (Relocation) to vacating consumer's future Gas Supplier.
6.
 - A. The previous Gas Supplier ends supply on the Terminal Date.
 - B. The Distribution Company settles consumption at the Terminal Date.
7. For Non-Daily Read Metering Point the Distribution Company announces consumption at the Terminal Date to the Gas Supplier.

The following subprocesses are only to be carried out in case the incoming consumer has not actively chosen Gas Supplier within the deadline. Otherwise EDI communication is done after business process BS-209: Relocation (incoming consumer).

8. In case there is no approved Start of supply within the deadline after the Terminal Date from another Gas Supplier, the Supplier Company will take over the delivery as per the Terminal Date. The Distribution Company informs about the Start of supply with transaction cause E06 (Transfer to Public Supply Obligation Company) to the Public Supply Obligation Company.
9. The Distribution Company sends a message with Base data for the Metering Point to the Public Supply Obligation Company.

Deadlines for Relocation (vacating consumer)

Process	Deadline	Explanation
Relocation notification from Gas Supplier	No later than the 8th Business Day after the desired Terminal Date	
Submission of consumption of Non-Daily Read Metering Points	No later than the 20th Business Day after the Terminal Date for Relocation.	The Distribution Company submits consumption for Non-Daily Read Metering Points to the previous Gas Supplier.
Start of supply	No later than 6 pm on the 16th Business Day after the Terminal Date.	The Public Supply Obligation Company takes over supply at the Terminal Date.

Data content for Relocation (vacating consumer)

Below the significant data fields, which are part of the individual data streams, are mentioned. Significant means the data that are significant to the business.

Information about end of supply

- Transaction cause:
 - E01 (Relocation)
- Metering Point id
- End date for supply
- Supplier id
- Meter reading
- Contact address

Information about end of supply

- Transaction cause:
 - E01 (Relocation)
- Metering Point id
- End date for supply
- Supplier

Information about Non-Daily Read Metering Points

- Metering Point id
- Period of time of quantity
- Product code
 - 3002: Total consumption kWh₀
 - 3004: Total consumption Nm³ (if conversion equipment is present)
 - 3006: Total consumption i m³ (if conversion equipment is NOT present)
- Quantity
- Reason code for reading:
 - 2 Change of supplier
- Quantity status
 - 99: Estimated value
 - 136: Measured value
 - Z01: Manually corrected value

Announcement of Start of supply

- Transaction cause:
 - E06 (Transfer to Public Supply Obligation Company)
- Metering Point id
- Start date for supply
- Supplier id
- Consumer party name

Confirmation of Start of supply - approval

- Metering Point id
- Start date of supply
- Supplier id

Submission of Base data

- Transaction cause;
 - E06 (Transfer to Public Supply Obligation Company)
- Metering Point id
- Metering Point address
- Metering Point reading form
- Connection status
- Date of validity
- Start date of supply
- Supplier id

- Reading day
- Expected annual consumption
- Contact address

Identification of process and transactions

In this table the precise names of the business process and the applied EDI transactions are stated.

BS ID	BS-218
BS navn	Relocation (vacating consumer)
BS version	3
BS release	1
BS dato	
EDI transaktioner:	
BT ID	DK-BT-003
BT navn	End of supply – to MPA
BT version	
BT ID	DK-BT-002
BT navn	End of supply – from MPA
BT version	4
BT ID	DK-BT-007
BT navn	Consumption for Metering point, profiled
BT version	4
BT ID	DK-BT-001
BT navn	Start of supply
BT version	4
BT ID	DK-BT-004
BT navn	Base data for Metering Point
BT version	4

2.15 BS-219: Change of Terminal Date

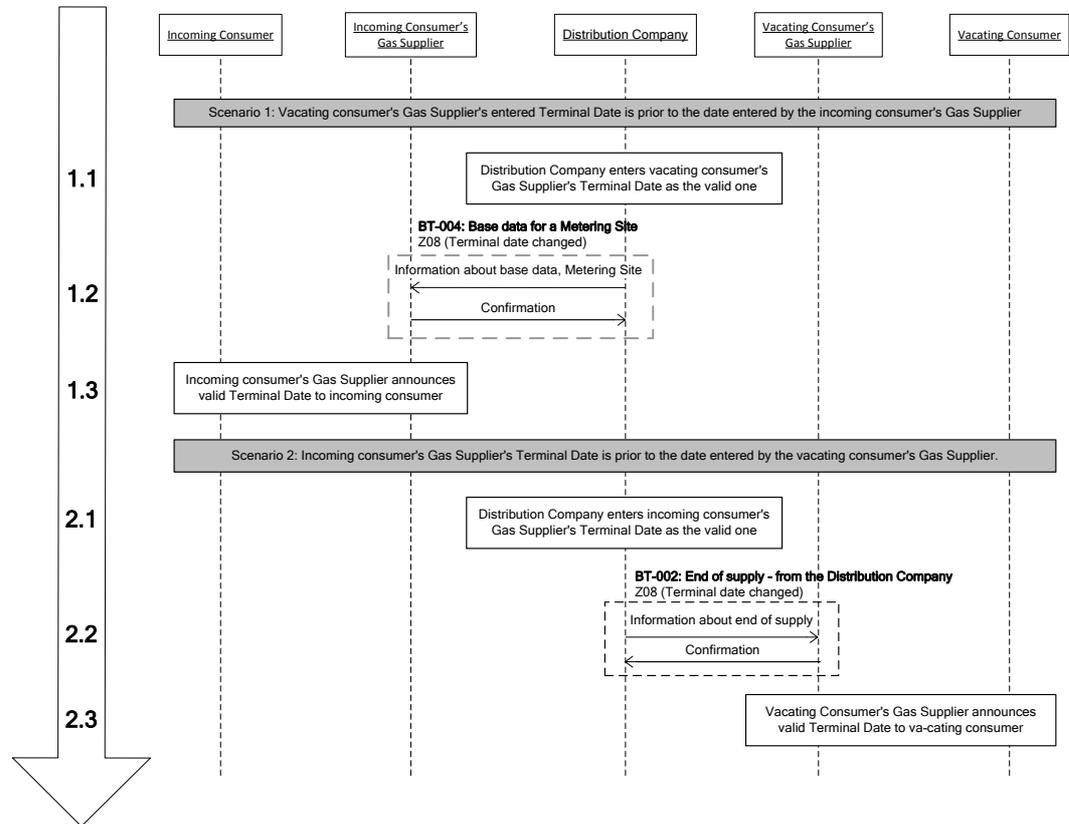


Figure 15: BS-219: Change of Terminal Date

Generally about Change of Terminal Date

The process is only to be applied in case of disagreements between the Terminal Date in connection with Relocation of a vacating consumer.

This business process consists of two transactions:

- End of supply
- Base data

Start condition of Change of Terminal Date

The Distribution Company ascertains discrepancies between the entered Terminal Dates from vacating and incoming consumer's Gas Supplier respectively.

Two scenarios may occur:

1. Vacating consumer's Gas Supplier's entered Terminal Date is prior to the date entered by the incoming consumer's Gas Supplier
2. Incoming consumer's Gas Supplier's Terminal Date is prior to the date entered by the vacating consumer's Gas Supplier.

Steps in the scenario Changes of Terminal Date

Scenario 1:

- 1.1. Distribution Company enters vacating consumer's Gas Supplier's Terminal Date as the valid one.
- 1.2. Distributionsselskabet sends Base data with reason code Z08 (Terminal Date changed) to incoming consumer's Gas Supplier with valid Terminal Date.
- 1.3. Incoming consumer's Gas Supplier announces valid Terminal Date to incoming consumer.

Scenario 2:

- 2.1. Distribution Company enters incoming consumer's Gas Supplier's Terminal Date as the valid one.
- 2.2. Distribution Company sends End of supply with reason code Z08 (Terminal Date changed) to vacating consumer's Gas Supplier with the valid Terminal Date.
- 2.3. Vacating Consumer's Gas Supplier announces valid Terminal Date to vacating consumer.

Deadlines for Change of Terminal Date

Process	Deadline	Explanation
End of supply	No later than 16th Business Days after Terminal Date	Sent to vacating consumer's supplier if he is affected
Base data	No later than 16th Business Days after Terminal Date	Sent to incoming consumer's supplier if he is affected

Data content for Change of Terminal Date

Below the significant data fields, which are part of the individual data streams, are mentioned. Significant means the data that are significant to the business.

Announcement of End of Terminal Date

- Metering Point id
- Reason code:
 - Z08 (Terminal Date changed)
- Scheduled end date
- Supplier id

Announcement about Base data

- Reason code:
 - Z08 (Terminal date changed)
- Metering Point id
- Metering Point address
- Metering Point's reading form
- Connection date
- Scheduled start date of supply
- Supplier id
- Reading day
- Expected annual consumption

Identification of process and transactions

In this table the precise names of the business process and the applied EDI transactions are stated.

BS ID	BS-219
BS navn	Change of Terminal Date
BS version	3
BS release	1
BS dato	
EDI transaktioner:	
BT ID	DK-BT-002
BT navn	End of supply – from MPA
BT version	4
BT ID	DK-BT-004
BT navn	Base data for Metering Point
BT version	4

3 Error handling

The section on *EDI communication (in Regulation F)* describes in detail how the parties should act in the event of errors in the EDI data exchange. Only the three most important principles are mentioned below:

1. The party (A) that has initiated the data exchange by sending the first EDI message to a recipient (B) is responsible for checking that a reply is received within the deadline. If this is not so, and A is certain that B has the correct communication setup, A must contact B in order to clarify the error.
2. If A receives a negative reply, the error must be corrected on the basis of the error report and a new message be submitted. If this is not possible, A must contact B in order to clarify the problem.
3. If B sends a positive reply but A's IT system detects an error in the reply so that an error message is sent to B, B must contact A in order to clarify the error. In this type of situation, B's systems must not automatically cancel the transaction.

4 Fallback procedures

All Distribution Companies in the Danish natural gas market must be able to electronically submit notifications of change of supplier. For situations where this is not possible due to IT system breakdown, a fallback procedure has been developed in the form of a paper form that can be faxed or exchanged by ordinary post between the players. In this way, situations are avoided where a Gas Supplier loses consumers because he is unable to submit the notification of change of supplier to the Distribution Company in time.

If an IT system used for changing supplier breaks down, the Distribution Company evaluates whether it is necessary to use fallback procedures.

If a Gas Supplier does not get a reply to an electronic message, he must check the status of the Distribution Company's system. If the status is offline, and the deadline for notification is about to expire, the Gas Supplier must submit the notification of change of supplier using the fallback procedure.

The Distribution Company may arrange with Gas Suppliers that have used the fallback procedures to resubmit the notifications when the Distribution Company's systems are online again.

The table below shows whether there is an fallback procedure for a given business scenario:

Business scenario	Fallback procedure
BS-201: Change of supplier	Yes
BS-202: End of supply	Yes
BS-203: Submission of base data	No
BS-205: Consumption statement for a Non-Daily Read Metering Point	No
BS-206: Consumption statement for a Daily Read Metering Point	Yes
BS-207: Termination of Metering Point	Yes
	Yes
BS-209: Relocation (incoming consumer)	Yes
BS-210: Disconnection and reconnection of a Metering Point	Yes
BS-212: Change of meter reading method	Yes
BS-213: Submission of market share values	Yes
BS-214: Submission of calorific values	Yes
BS-216: Aggregated gas consumption	Yes
BS-217: Reconciliation statement	Yes
BS-218: Relocation (vacating consumer)	Yes
BS-219: Change of Terminal Date	Yes

Note that some of the fallback procedures are based on a form intended for change of supplier. A copy of the form for Change of Gas Supplier/End of Supply is shown in section 4.1.

All the fallback procedures are based on submission of information by email, post or telefax. The appropriate addresses appear from the common register of players.

BS-201 and BS-202

The Gas Supplier's notification is delivered by email, post or telefax. The Distribution Company returns a copy of the form indicating approval or rejection.

BS-207, , BS-210,BS-212 and BS-219

The Distribution Company sends notifications by email, post or telefax. The recipient must acknowledge receipt by replying to the return address.

BS-209 and BS-218

The Gas Supplier sends notifications by email, post or telefax. The Distribution Company replies indicating approval or rejection.

BS-206 and BS-213-BS-217

Reference is made to the fallback report giving detailed information about the fallback procedures applying to these business scenarios.

The deadlines for the individual fallback procedures are the same as the standard deadlines indicated under the above-mentioned business scenarios (section 2).

4.1 Form for Change of Supplier/End of Supply

This notification of conclusion/termination of agreement on the supply of the Metering Point mentioned below is given pursuant to Rules for Gas Distribution. Unless otherwise indicated, the use of the form involves the payment of a fee.

<p>To:</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <p style="text-align: center;">Distribution Company's name and address</p>	<p>From:</p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <p style="text-align: center;">Gas Supplier's name, address and fax no., if any</p>
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Terminal Date	Change		End	Gas Supplier's GSRN number	
Name, address and email address of Gas Supplier's contact person					
Date and signature			Date and time of receipt		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Metering Point id			Approved		Rejected
Address and postal code for Metering Point			Comment		
Date			Distribution Company's signature		
By way of acknowledging receipt, the Distribution Company returns the completed form not later than five workdays after receipt.					

4.2 Instructions

The form is to be completed by the Gas Supplier and sent by letter to the Distribution Company servicing the Metering Points involved. A form is to be completed for each Terminal Date, and it should be indicated by ticking the appropriate box whether the notification concerns a normal change of supplier in connection with the signing of an agreement, an immediate change of supplier (at short notice) or notification of end of supply. The Gas Supplier is not allowed to fill in the grey fields.

The deadlines for notification of change of supplier (as fallback procedure) are the same as the deadlines for notification of change of supplier through EDI communication as defined in BS-201 (section 2.1.5).

Once the Distribution Company has received the form, the intention is that it be used as typing basis in relation to change of supplier or end of supply. The result for each Metering Point is written direct in the form. If a change of supplier or end of supply is not approved, the reason for the rejection must be indicated in the box marked "Comment".

The Distribution Company returns a signed copy of the form as confirmation not later than on the fifth Business Day after receipt of the form. This should be done by telefax if the Gas Supplier has indicated a fax number. If not, the confirmation is sent by letter, and the Distribution Company carries no responsibility for the postal delivery time.

The Gas Supplier may create his own layout for the form provided that it contains the same fields arranged in the same order. The Gas Supplier may find it relevant to have his own layout if the form is printed by his own IT system. A layout resulting in a form of more than one page is acceptable as long as the number of the page and the total number of pages are indicated on each page.

5 Approval of EDI systems

To participate in EDI communication, the IT systems of the individual players must be approved for error-free exchange of the EDI messages mentioned in this guide.

In connection with the implementation, the elements of the approval process will be laid down in detail, including a specification of how the various system levels (email systems, EDI modules, customer and metering applications, and business scenarios) are to be tested.

The players' systems must be approved by Energinet.dk.