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New market rules: first drafts

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Agenda



- 1. Legal aspects: Natural Gas Act 2011
- 2. GMM Ord.: Network access and capacity management
- 3. GMM Ord.: Balancing, clearing and settlement
- 4. GMM Ord.: Tyrol and Vorarlberg market areas
- 5. General Terms and Conditions and Gas Market Code
- 6. Supplier switching and enabling new connections
- 7. Smart metering
- 8. Service quality
- 9. Next steps





1. Legal aspects: Natural Gas Act 2011

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- Section 41 Natural Gas Act authorises the regulatory authority to issue ordinances with separate rules for each market area to achieve efficient network access as well as harmonised rules for all market participants and to attain the aims of the Act, considering:
 - The requirement of safe and reliable system operation
 - The need to balance the interests of market participants
 - The network codes adopted in accordance with Article 6
 Regulation 715/2009 and the guidelines pursuant to Article 23
 Regulation 715/2009



Rules may refer to

- Capacity calculation pursuant to section 34 and measures to increase announced capacity
- The balancing regime and balancing services in the market area
- The establishment and operation of the online platform pursuant to section 39 and the procedures for offering capacity through such platform
- Nomination and renomination deadlines and scheduling
- The contents of interconnection point agreements and system access contracts
- The conditions for the provision of balancing services at transmission level mainly through the virtual trading point



- Structure of the ordinance:
 - Title 1: Scope and definitions
 - Title 2: Rules governing the eastern market area
 - Part 1: Access to the network and capacity management
 - Part 2: Balancing, clearing and settlement
 - Title 3: Tyrol and Vorarlberg market areas



- Large parts of general terms and conditions now contained in the ordinance
- Consideration of imminent amendment of annex I of Regulation 715/2009





2. Gas Market Model Ordinance: Network access and capacity management

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Transmission network access 1/5



Capacity offers (section 3)

- o Goal: maximise firm decoupled capacity on offer
- o Evaluation of measures to increase announced firm decoupled capacity
 - Flow commitments
 - Allocation restrictions, e.g. capacity whose allocability is restricted to different degrees
- o Optional oversubscription and buy-back regime
- o Capacity expansion: standardised binding open season procedure, coordinated with the neighbouring SO

Transmission network access 2/5



Capacity products (sections 4 and 5)

- o **Goal:** reduce transaction costs for system users by introducing capacity products that facilitate cross-border trading
- o Bundling of entry and exit capacity at borders with other market areas (only for contracts concluded after 31/12/2013)
- Joining of several interconnection points between the eastern market area and one neighbouring market area into one zone
- o Obligation to coordinate at the borders

Transmission network access 3/5



Capacity allocation (sections 6 to 8)

- o **Goal:** market-based, transparent and non-discriminatory capacity allocation
- o Firm capacity auctions from 1/1/2013 through the online platform
- o Interruptible and within-day capacity allocated on a FCFS basis
- Optional splitting of interruptible capacity into categories that reflect interruption probability
- o Exemption for entries/exits regarding distribution level, storage, consumers or production

Contract duration (section 9)

- o **Goal:** Capacity offer with different contract durations that adequately responds to demand
- o 20% of technical capacity reserved for short-term contracts (<1 year)
- o 65% of technical capacity may be allocated to contracts with durations >4 years
- o Obligation to coordinate at the borders
- o Interruptible capacity contracts with maximum durations of 1 year

Transmission network access 4/5



Online platform for capacity offers (sections 10 to 13)

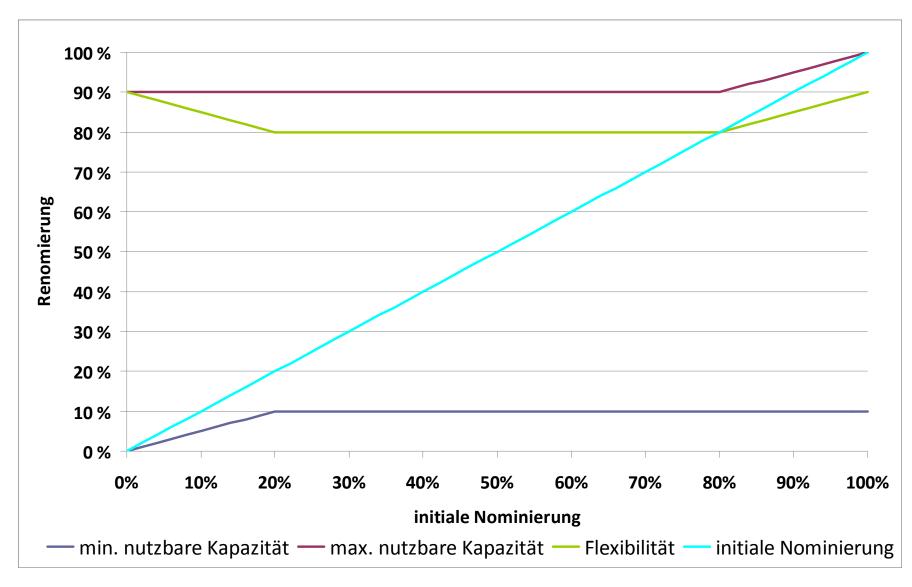
- Goal: reduce transaction costs for network users by enabling automated primary and secondary capacity purchases on a suitable scale for general business
- o Primary and secondary capacity platform
- o Capacity trading procedures
 - o Auction procedure
 - o Buy-it-now procedure
 - o Keyed procedure
 - o Search procedure

Day-ahead UIOLI (section 14)

- Goal: prevent capacity hoarding and incentivise system users to book capacity as needed
- o Part of capacity not nominated on D-1 is lost (s. figure on next slide)
- o Protection of small system users (reduced the portfolio effect)
- Applies to all contracts (incl. existing ones)

Day-ahead UIOLI





Transmission network access 5/5



Long-term UIOLI (section 15)

- o Goal: prevent capacity hoarding
- o Partial or full withdrawal of systematically underutilised firm capacity
- o System users may object by immediately providing a convincing statement of the reasons for underutilisation

Distribution network access 1/3



Application for system access (section 16)

- o **Goal:** enshrine requirements and processes for system access applications
- o Rights and obligations
- o Deadlines
- Content of applications (annex 1 to the ordinance)

Application for admission to the system (section 17)

- Goal: enshrine requirements and processes for applications for admission to the system
- o Rights and obligations
- o Deadlines
- Content of applications (annex 1 to the ordinance)
- o Minimum requirements for cost estimates (annex 1 to the ordinance)

Distribution network access 2/3



Capacity expansion (section 18)

- o Goal: enshrine requirements and processes for capacity expansion
- o Rights and obligations
- o Deadlines
- o Content of applications (annex 1 to the ordinance)

Distribution network access 3/3



Capacity management at distribution level (sections 19 to 21)

- Goal: ensure that the interface between transmission and distribution level in the market area is free of congestion
- o Obligation for the DAM to book firm capacity into the distribution area in accordance with the capacity needs from the approved LTP
- o Obligation for TSOs to reserve the firm capacity booked by the DAM in one year for the next year
- o Obligation for the DAM to implement a market area free of congestion
- Prohibition of capacity management and congestion management at balance group level at the interface between the market area's transmission and distribution networks
- o Responsibility of the DAM for marketing capacity at entry/exit points at market area borders in the distribution network (small cross-border)

System access for storage system operators and producers of natural or biogenic gas



Contractually agreed capacity (sections 22 and 23)

- Goal: uniform rules for setting the contractual capacity from which the system utilisation charge pursuant to sections 73 and 74 Natural Gas Act 2011 is derived
- Capacity agreed with the system operator to whose system a facility is or is to be connected once a year for the following calendar year
 - Maximum capacity to be reserved by the SO for injection into and withdrawal from storage
 - o Reduction only possible insofar as the SO can market the capacity elsewhere
 - Increase possible by way of system access applications pursuant to section 16





3. Gas Market Model Ordinance: Balancing, clearing and settlement

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Basic principles (section 24)



- Gas day in the market area: from 6 to 6 hrs
- Balancing period is the gas day exception: balancing period for consumers with a contractual capacity beyond 50,000 kWh/h continues to be one hour
- Balancing and clearing in the market area is executed by the MAM together with the CSA – exception: consumer imbalances are handled by the CSA
- 2 hours lead time for schedules and nominations in the market area
- Trade and transfer of gas only at the VTP
- Balancing energy procured mainly through the gas exchange at the VTP

Registration (section 25)



- Centralised at the MAM as first contact point
- MAM acts as one-stop shop for BRP and is authorised to conclude contracts on behalf and for account of the VTP operator, CSA and DAM
- Possibility to conclude contracts through the MAM's online platform
- Credit check and any collateral to be addressed in the contract partners' GTC
- MAM conducts communication dry run with BRP
- When all contracts have been concluded, MAM informs E-Control that BRP conditions are met

Balancing and clearing in the market area (section 32) (excl. consumer imbalances)



- Clearing relies on confirmed nominations >> nominated = allocated
- Deviations of metered values from nominations offset by way of OBAs between the SOs
- MAM cooperates with CSA to check daily position of BGs and purchases gas at the VTP on behalf and for account of the BRPs to eliminate imbalances
- MAM cooperates with CSA to calculate hourly market area position and eliminates any hourly imbalances in the transmission network, first through linepack, then by purchasing gas at the VTP
- MAM collects balancing incentive markup for hourly imbalances of BGs;
 markup is calculated from within-day balancing costs at transmission level

Balancing and clearing of consumers (section 33)



- Hourly for consumers with contracted capacities beyond 50,000 kWh/h, daily for all other consumers
- Supply to consumers with daily balancing to be constant throughout the day
- Variations to be covered mainly through linepack (distribution and transmission level)
- Costs for consumption imbalances socialised in the network offset by expected increase in competition, particularly for consumers with SLPs
- DAM procures balancing energy on behalf and for account of the CSA, mainly through the VTP but if needed also through the MOL
- MOL is retained as balancing instrument >> for temporal and locational products and for instances of insufficient liquidity at the VTP

Balancing and clearing of consumers (section 33) and handling of SLPs (section 34)



- VGM cooperates with DSOs to forecast consumption of SLP consumers; forecasts are sent to BGs
- BRPs use forecasts for notifying consumption volumes and are settled according to them
- SLP inaccuracies are born by the network, i.e. by those that have drawn up the SLPs and SLP forecasts
- Meter readings used in 2nd clearing

Interconnection point agreements and linepack (section 35)



- IPAs ensure efficient use of linepack as control energy
- TSOs send MAM hourly information on the available linepack
- MAM uses transmission linepack to balance the network until its purchases at the VTP become physically available
- DAM can use distribution linepack and, after coordinating with MAM, also transmission linepack
- No remuneration for the availability and deployment of control energy (use of linepack), neither between the SOs nor from MAM or DAM

Imbalance prices (section 38) for consumer balancing



Balancing energy may be purchased

- a) By the DAM at the VTP ... DT
- b) By the DAM from the MOL ... DM
- 1. Imbalance prices for consumers >50,000 kWh/h
 - Volume-weighted average hourly price calculated from all DT and DM purchases
- 2. Imbalance prices for consumers <50,000 kWh/h
 - DT purchases considered at marginal prices each gas day
 - DM purchases considered at a volume-weighted daily average price
 - Positive and negative imbalance prices for each day calculated by weighting:

Case 1: Price = $(DT \times 0.6) + (DM \times 0.4)$

Case 2: Price = DT x 1 or DM x 1

Further rules modelled on the current system



- Membership of balance groups (section 26)
 - Consumers
 - Natural gas undertakings
 - Producers
- Tasks and obligations in the relation between BRP and BG members (section 27)
 - Administration of entry/exit capacity entered into a BG (section 29)
- Compensation and remuneration of BRPs (section 28)
 - Now includes balancing incentive markup at transmission level
- Special BG for determining system losses and own consumption (section 30)
- Prerequisites for balancing energy providers (section 36)
- Merit order list (section 37)





4. Gas Market Model Ordinance: Tyrol and Vorarlberg market areas

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Goals of the network access and balancing regime



- No differences between the two western market areas
- Use of synergies between existing institutions for DAM and CSA functions
- BG gain direct access to the NCG VTP (cf. the eastern market area)
- Rules issued under Austrian law pursuant to section 41 Natural Gas Act
- Implementation deadline 1/10/2013

Legal basis



Section 12 para. 6 Natural Gas Act 2011

Where this is conducive to attaining the European internal energy market, <u>systems</u> or parts thereof <u>may form a market area with the systems of adjoining system operators</u> in other member states. To attain the European internal energy market, the <u>operational coordination</u> of systems or parts thereof in a <u>market area</u> which <u>fully</u> relies on <u>supplies from a neighbouring member state</u> and for which <u>no separate balancing energy market</u> exists with the adjoining system operator of that neighbouring member state shall <u>enable partial or full supply</u> from the adjoining market area of the member state. Forming a joint market area with system operators in other member states shall be subject to approval by the regulatory authority.

- Stipulations from the Natural Gas Act 2011
 - In any case: operational coordination that enables partial or full supply from the adjoining market area
 - Optional: forming a market area with the systems of adjoining system operators in other member states

Capacity at interconnection points



- DAM books exit capacity at interconnection points from NCG into Tyrol and Vorarlberg (cost cascaded into Tyrol and Vorarlberg system charges, relieving energy prices)
- Direct access of supplier to NCG VTP by way of nominations, no separate capacity booking in NCG market area necessary (cf. the eastern market area)

Management of balance groups



- To supply consumers in Tyrol or Vorarlberg, suppliers must be members of a BG registered in Austria (Natural Gas Act)
- Each BG in Tyrol and Vorarlberg has a corresponding BG in the NCG market area:
 - BRP of an existing BG X in Tyrol/Vorarlberg registers as balancing group manager (BGM) in the NCG MA and establishes a BG X ⇒ access to NCG VTP enabled
 - BGM of an existing BG Y in the NCG MA registers as BRP in Tyrol/Vorarlberg and establishes a BG Y ⇒ supply to consumers in Tyrol/Vorarlberg enabled
 - Trade and transfer exclusively in the NCG VTP, no longer at the flange at the cross-border point (as in the eastern MA)

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Nominations

- BRP in Tyrol/Vorarlberg sends consumer schedules (hourly values) to DAM, reflecting forecast consumption of consumers in the BG.
- BGMs in the NCG MA take the aggregate hourly volumes notified in the consumer schedules for Tyrol and Vorarlberg into account when procuring energy for the corresponding BG in the NCG MA, making use of all procurement options at their disposal in the NCG MA (OTC and exchange trading at the NCG, storage, own entry capacity into the NCG MA etc.)
- DAM sends aggregate time series from the consumer schedules of each Austrian BG to the NCG MGV in the form of an exit allocation of the corresponding BG in the NCG MA ⇒
 - No imbalances for BG in the NCG MA for supplies to Tyrol and Vorarlberg if procurement equals the volumes allocated as exits (= aggregate consumer schedules of the BG)
 - No balancing and control energy cost arises in NCG MA
 - No structuring charges in the NCG MA

Management of physical balancing energy



- Balancing in compliance with Natural Gas Act, as in eastern distribution area:
 - 1. Use of the (limited) linepack in the distribution networks of Tyrol and Vorarlberg
 - 2. Offset short-term (within-day) physical imbalances by way of an OBA with the upstream system operator in Germany
 - Within-day procurement of balancing energy at VTP by the DAM (on behalf and for account of the CSA) at market prices with the aim to offset any deviations of meter readings from aggregate schedules at cross-border points by the end of each gas day
 - OBA with tolerances OBA positions within the tolerances at the end of the gas day transferred to the next day
 - Financial settlement of OBA positions beyond the tolerances at the end of the gas day (exceptionally!) and differences resulting from corrections of the meter readings for the calorific value at the cross-border point (monthly invoices of TSO/NCG to CSA for daily intervals, based on average daily buy and sell prices for balancing energy at NCG)
- ⇒ Cost-based imbalance prices for clearing BGs in Tyrol and Vorarlberg!

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Clearing

- Clearing of gas supplied to Tyrol and Vorarlberg and settling of imbalance charges by the CSA in accordance with Austrian market rules (1st and 2nd clearing)
 - Compensation for settlement differences in the NCG MA
- CSA calculates and settles BGs in Tyrol and Vorarlberg for balancing energy, based on
 - Deviation of actual consumption (meter readings received from the DSO) from consumer schedules – aggregating values for Tyrol and Vorarlberg admissible
 - Expenses and revenues from balancing energy procurement of DAM at the NCG VTP and expenses and revenues from the financial settlement of imbalances on the OBA account beyond the tolerances

 market-based clearing price!
- Correcting for the calorific value at cross-border points
 - Meter readings corrected ex post, when the calorific value for settlement has been determined, and settled financially (cf. pt 5)
 - Expenses/revenues included in calculation of imbalance prices ⇒ charged on by CSA

Next steps for rules regarding Tyrol and Vorarlberg



- Draft ordinance pursuant to section 41 circulated by
 17 February
- Market participants are invited to discuss the draft further on 24 February in Vienna
- First discussions with NCG, Bayernets, GVS-Netz and BNetzA and Tigas, VEG, EVA, Stw. Bregenz, BKO, VGM and E-Control on the implementation of the contractual agreements for OBAs and a cooperation agreement





5. General Terms and Conditions and Gas Market Code

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GTC for the distribution network - 1



- Parts of the GTC distribution will be part of the GMM Ord.
 in future
- Service quality, switching, supplier of last resort, smart metering and load profiles will be dealt with in a separate ordinance each
- Harmonisation with the GTC electricity distribution where possible
- New rules regarding consumers

GTC for the distribution network - 2



Structure

System access application and concluding a system access contract

Connection to the distribution system (system admission)

Changes in the connected capacity

Rules for the service connection branch

Pressure controllers

Technical facility beyond the end of the connection line

Operation of the technical facility beyond the end of the connection line; access rights

Process for notifying technical disturbances and their repair

System services

Infeed and takeoff

Metering

Load profile

Processes for switching supplier or balance group and for enabling new connections

Service quality

Operational information obligations

Data protection, confidentiality

Data transmission and administration

System charges

Billing and invoicing

Payment and payment delays

Partial payments, advance payments, collateral

Metering and calculation faults

Contract duration

Termination with notice of contracts with indefinite periods

Contract termination for good reasons

Suspension of contract execution; disconnection

Change of circumstances and of the GTC distribution

Severability clause, force majeure

Succession in title

Liability, indemnification and holding harmless

Place of jurisdiction

GTC of the distribution network - 3



New provisions

- Process for notifying technical disturbances and their repair
- Metering
 - Load profile meters taken from chapter 4
 - Smart meters included
 - Bills and consumption information with and without smart meters
- Switching of supplier and balance group

GTC of the distribution network - 4



New provisions

- Service quality
- Billing and invoicing, payment and payment delays
 - Minimum requirements for bills and invoices
 - Payment reminders
- Supplier of last resort
- Suspension / disconnection
 - 2-stage reminder procedure



- Parts of the GTC CSA or its annexes will be part of the GMM Ord. in future (e.g. stipulations on registration, formation of imbalance prices, MOL, balancing energy providers)
- Rules such as details on collateral and credit checks remain in the GTC
- Structure modelled on current GTC

GTC BRP



- Rules on BG membership, representation, actions to be authorised by BG members, compensation and remuneration will be part of the GMM Ord. in future
- Rules regarding the details of how to establish BGs and the termination of membership remain in the GTC
- Structure modelled on current GTC, but shortened

GTC of VTP operator



- GTC modelled on structure and contents of the current "code of conduct"
- Contents will include, among others:
 - Description of hub services
 - Operative rules for nomination and matching processes
 - Fees, billing and invoicing
 - Registration, credit limits and collateral

GTC MAM-BRP



- Rules for the MAM included in the GMM Ord.
- Contents will be, among others, details about
 - Allocating and nominating
 - Balancing obligation of the BRP and clearing
 - Balancing obligation of the MAM
 - Information obligations of MAM and BRP
 - Calculation of the balancing incentive markup

GTC transmission



- Based on the GTC for cross-border transports
- Parts of the GTC for cross-border transports (and their annexes) will be part of the GMM Ord. in future, such as
 - Transport services
 - Use of unused capacity
 - Nomination and allocation principles

GTC DAM-BRP



- Based on the current GTC CAM-BRP
- Parts of the GTC CAM-BRP will be addressed at a general level in the GMM Ord. in future
 - Network access and capacity management
 - Parts of scheduling and balancing energy management
- To be completed with rules e.g. for balancing energy purchases at the VTP and possibly flow commitments

GTC DAM-network



- Based on the current GTC CAM-network
- Parts of the GTC CAM-network will be addressed at a general level in the GMM Ord. in future
 - Network access and capacity
 - Parts of data and information exchange
- To be completed with rules e.g. for the nomination obligation of producers and SSOs and for the provision of consumption time series to enable forecasting

Correspondence table: current market code → new market rules



- Chapter 1: Definitions
- Chapter 2: Relations between market participants
- Chapter 3: Schedules
- Chapter 4: Load profile meters, meter readings and data formats
- Chapter 5: Special balance groups
- Chapter 6: Technical rules
- Chapter 7: Capacity, network access
- Chapter 8: Electronic billing

- >> Section 2 GMM Ord. and GTC distr.
- >> Section 31 GMM Ord. and annex 3
- >> GMM Ord. annex 6
- >> GTC distribution and GMM Ord. annex 6
- >> Section 30 GMM Ord.
- >> GMM Ord. annex 2
- >> GMM Ord. annex 1 and Switching Ord.
- >> New as gas market code





6. Supplier switching and enabling new connections Current discussions

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Supplier switching and new connections - framework



- Section123 Natural Gas Act new rules for supplier or BG switching and enabling new connections
- Switching cannot take more than 3 weeks
- Termination for consumers and small businesses with 2-week notice period
- Data exchange through a platform operated by the CSA
- Same processes as for electricity

State of discussions



- Development of a concept for new supplier switching process with electricity and gas industry since September 2011
- Gas industry represented by:
 - Natural Gas and District Heat Association (FGW)
 - Industry representatives: Lower Austria, Vienna, Upper Austria, Carinthia, Styria
- Industry workshops
- Regular high-level coordination meetings (with FGW)
- Preparation of a draft for electricity and gas for official assessment by the end of February

Main processes



- Preliminary, optional processes:
 - Identification of MP/consumer
 - Verification of minimum contract terms and notice periods
- Switch as such includes transmission of consumption data
- → Switch can be initiated on any working day
- → No fixed switching dates, new supplier may take over on any day
- → Entire switch must be completed within 12 working days

Supplier switching and new connections - background



- All communication between SO, old and new supplier through the switching platform (SP)
- Data exchange
 - Currently: non-secured e-mail communication
 - In future: signed and encrypted, either through SP, e-mail or e-client
 - MSCONS format maintained
- Processes mostly automated
- Ordinance sets deadlines
- Option for electronic termination through the SP
- Last switches according to the current system on 1/12/2012
- From 1 January 2013 switching according to the new process; no other option because of introduction of new market model

Supplier switching and new connections – establishing a new connection



- Similar to current process (chapter 7 GMC)
- For active and inactive connections
- Communication through the platform
- Deadlines mostly maintained

Balance group switching



- Very rare; rules maintained until further notice
- Communication optionally through the platform





7. Smart metering

Current discussions

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Technical minimum requirements for gas smart meters - 1



- Ministry of Economy may issue ordinance on rollout of gas smart meters. Electricity rules currently under official assessment.
- E-Control issues ordinance on technical minimum requirements
- Discussion paper on revised market rules included first proposals for minimum requirements
 - Feedback from 4 market participants (incl. FGW) received
- Requests by the Data Protection Commission (e.g. on retaining data) must be addressed

Technical minimum requirements for gas smart meters - 2



- Enabled for bidirectional communication
- Access and specification of interfaces to be harmonised when meters are used for several types of energy
- Metering accounts for gas temperature
- Data to reach SO no later than noon same deadline as for electricity to provide consumers with consumption data at equal times
- Battery life to be maximised to correspond with calibration cycle
- Deactivation function not mandatory

Technical minimum requirements for gas smart meters - 3



- Differentiation between meters with and without internal memory
 - With internal memory: hourly and daily reading with time stamp; separate display and saving in the meter for up to 60 days; daily transmission with time stamp
 - Without internal memory: daily transmission of meter readings with time stamp
- Smart meters must comply with metering and calibration stipulations as well as data protection provisions foreseen by law, as well as the state of the art (e.g. mandate M/441)





8. Service quality

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Service quality



- Ordinance may be issued pursuant to section 30 Natural Gas Act 2011
- Setting
 - Standards for SOs regarding safety, reliability and quality of the services rendered
 - Indicators for monitoring compliance with the standards
- Examples for standards as given in the Natural Gas Act
- Dimensions of service quality
 - Commercial quality (complaint handling, compliance with deadlines, customer satisfaction, correction of bills, customer information)
 - Technical quality (compliance with the state of the art)
 - Reliability (interruptions)

Service quality (II)



- Individual annual notification of indicators to the regulatory authority
 - Regarding compliance with the standards
 - Reasons for complaints and corrections of bills
 - Results of customer survey
- Introduction of penalties/compensation payments possible however, first focus on customer satisfaction
- Where relevant for consumers, standards must be included in GTC

Service quality (III)



- Ordinance continues from standards in current GTC distribution
- Consistency with other ordinances secured
- Coordination meeting with FGW representatives
- Presentation of first draft for consumer representatives
- Continuous exchange of views
- Envisaged entry into force: end of Q2 2012





9. Next steps

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Next steps



- Until 9/3/2012: comments and further discussions and adjustments
- By 30/3/2012: completion of draft market rules for official assessment
- 2/4/2012: submission of market rules to official assessment
- 27/4/2012: end of official assessment period
- Subsequent two-week consideration in the Regulatory Advisory Council
- 18/5/2012: publication and entry into force of new market rules



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