Council of the European Union
General Secretariat

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WORKING DOCUMENT

From:	Presidency
To:	Working Party on Technical Harmonisation (Measuring instruments)
Subject:	Directive amending Directive on measuring instruments (2014/32/EU) : MS comments on PCY (partial) compromise proposal ST 6789/25

Directive amending Directive on measuring instruments (2014/32/EU) Deadline: ***2 April 2025***

From: AT, CZ, DE, DK, FI, IT, LT, NL, SE, SI **Updated: 16/04/2025 12:53**

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Guidelines to be followed

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Drafting suggestions: you may use '**track changes**' or formatting (for example **bold-underline** for additions and ~~strike-through~~ for deletions, **where necessary, in a different colour**).

Name of document: please add the **two initials** of your delegation's country followed by a space (to the MS Word document name), followed by any optional text, for example, for Austria: **AT comments on … .docx**

Thank you for your cooperation!

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
General comments	AT (Comments): We thank the Presidency for the partial compromise text, which indeed already addresses a number of concerns. With regard to recitals and Annexes III and IV, please refer to our comment of 20 February (enclosed). Our preference for handling EVSE was communicated as option 1 on 25 March. The CZ proposal for Annex III (Annex V of MID) is supported as a basis for further discussion of electricity meters, which should be further developed. For us, it seems very clear and transparent and an excellent approach to make MID more future-proof in the field of smart metering of electrical energy.

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	LT (Comments) : We appreciate that our comments on the transposition and entry into force deadlines (Article 3) and on the metrologically controlled channel (Annex I, point 10.6) have been taken into account. We would like to inform you that we have no comments or suggestions for the revised proposal (doc. 6789/25) at this stage
Proposal for a	
DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL	
amending Directive 2014/32/EU as regards electric vehicle supply equipment, compressed gas dispensers, and electricity, gas and thermal energy meters	
(Text with EEA relevance)	

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,	
Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,	
Having regard to the proposal from the European Commission,	
After transmission of the draft legislative act to the national Parliaments,	
Having regard to the opinion of the European Economic and Social Committee[1],	
Acting in accordance with the ordinary legislative procedure,	
Whereas:	
[Recitals are not covered in this first Presidency compromise proposal]	

[1] OJ C , , p. .

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
Article 1	
Directive 2014/32/EU is amended as follows:	
(1) in Article 2, paragraph 1 is replaced by the following:	
'1. This Directive applies to the measuring instruments defined in the instrument-specific Annexes III to XII ('instrument-specific Annexes') concerning water meters (MI-001), gas meters**,** ~~and~~ conversion devices **and gas calorific value determining devices** (MI-002), active electrical energy meters (MI-003), measuring systems for electric vehicle supply equipment (MI-003a), thermal energy meters (MI-004), measuring systems for continuous and dynamic measurement of quantities of liquids other than water (MI-005), measuring systems for compressed gas dispensers (MI-005a), automatic weighing instruments (MI-006), taximeters (MI-007), material measures (MI-008), dimensional measuring instruments (MI-009) and exhaust gas analysers (MI-010).'; CZ (Drafting suggestions): '1. This Directive applies to the measuring instruments defined in the instrument-specific Annexes III to XII ('instrument-specific Annexes') concerning water meters (MI-001), gas meters**,** ~~and~~ conversion devices **and gas calorific value determining devices** (MI-002), ~~active~~ electrical energy meters (MI-003), measuring systems for electric vehicle supply equipment (MI-003a), thermal energy meters (MI-004), measuring systems for continuous and dynamic measurement of quantities of liquids other than water (MI-005), measuring systems for compressed gas dispensers (MI-005a), automatic weighing instruments (MI-006), taximeters (MI-007), material measures (MI-008), dimensional measuring instruments (MI-009) and exhaust gas analysers (MI-010).' CZ (Comments): This comment relates to CZ comment on Annex III (that is not included in the Presidency partial compromise proposal) to cover also reactive component of the electrical energy. Scope of Directive (this paragraph 1) as well as Annex V (MI-003) to Directive should be amended (see CZ proposal) to take account of the

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	rollout of smart electricity meters which include function of reactive energy meters (this is a condition for dynamic measurement of electricity transmission). Measurement of the reactive component of electrical energy is part of the electrical energy measurement in new electricity market, which will be the subject of new conditions for its functioning (EPaR Regulation 2024/1747). Therefore, we believe that our proposal is in line with mandate for technical change of the Directive. Reactive (AC) electrical energy meters are 4-quadrant electrical energy meters to measure also the reactive power. Absence of reactive (AC) electrical energy meters is a major barrier to free movement of smart electrical energy meters across the Single Market. Next to that, their inclusion in the scope of Directive would result in substantial savings for manufacturers. Note: Situation in the Czech Republic: the current share of small-scale electricity business customers that require measurement of the reactive component of electricity is about 35% - 45% total electricity consumption. NL (Drafting suggestions): ...gas meters~~,~~ ~~and~~ **and** conversion devices ~~**and gas calorific value determining devices**~~ (MI-002)... NL (Comments): A calorific value determining device is an associated measuring instrument. It should not be mentioned in the title.

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	Associated measuring instruments are also used in Annex VII and Annex VIIa. See also drafting suggestion and comments on compromise proposal annexes.
(2) Annex I is amended in accordance with Annex I to this Directive;	
(3) Annex IV is amended in accordance with Annex II to this Directive;	
(4) Annex V is amended in accordance with Annex III to this Directive;	
(5) Annex Va is inserted as set out in Annex IV to this Directive;	
(6) Annex VI is amended in accordance with Annex V to this Directive;	
(7) Annex VIIa is inserted as set out in Annex VI to this Directive.	

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Article 2	
1. By way of derogation from Article 7(2) of Directive 2014/32/EU, Member States shall not impede the making available on the market and putting into use of measuring instruments that are in conformity with Directive 2014/32/EU in the version in force on [*OP please insert the date = the date of 1 day before of entry into force of this Directive*] and that have been placed on the market before [*OP please insert the date = [24 months] after the date of entry into force of this Directive*].	AT (Drafting suggestions): 1. … Directive 2014/32/EU in the version in force on [*OP please insert the date = the date of 1 day before of entry into force of this Directive*] and that have been placed on the market before [*OP please insert the date = [~~24~~ **27** months] after the date of entry into force of this Directive*]. AT (Comments): Align with point 3 DE (Drafting suggestions): By way of derogation from Article 7(2) of Directive 2014/32/EU, Member States shall not impede the making available on the market and putting into use of measuring instruments that are in conformity with Directive 2014/32/EU in the version in force on [*OP please insert the date = the date of 1 day before of entry into force of this Directive*] and that have been placed on the market before [*OP please insert the date = [~~24~~ 27 months] after the date of entry into force of this Directive*]. DE (Comments): Corresponding to change in Art. 3

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	SE (Comments): We understand this provision as follows: An instrument conforming with current MID can be made available and put into use 24 months after the date of entry into force.
	IT (Drafting suggestions): "Member States shall ensure that only active electricity meters that comply with the requirements set out in the Annexes to this Directive are placed on the market and put into operation as part of electric vehicle charging infrastructure."
2. By way of derogation from Article 7(2) of Directive 2014/32/EU, certificates issued under Directive 2014/32/EU **in the version in force on** and national certificates, covering measuring instruments that fall in the scope of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*] ~~and that have been placed on the market before [*OP please insert the date = 24 months after the date of entry into force of this Directive*]~~, shall remain valid until the expiry of their validity, and in any case no longer than until [*OP please insert the date = 12 years from the date of entry into force of this Directive*].	AT (Drafting suggestions): 2. By way of derogation from Article 7(2) of Directive 2014/32/EU, certificates issued under Directive 2014/32/EU **in the version in force on [*OP please insert the date = the date of 1 day before of entry into force of this Directive*]** and national certificates, covering measuring instruments that fall in the scope of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*] shall remain valid until the expiry of their validity, and in any case no longer than until [*OP please insert the date = 12 years from the date of entry into force of this Directive*]. **Member States shall permit, for measurement tasks for which they have prescribed the use of a legally controlled measuring instrument, the placing on the market and putting into use of measuring**

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	instruments that satisfy the national rules applicable before [*OP please insert the date = 24 months after the date of entry into force of this Directive]* **until the expiry of the validity of the type approval of those measuring instruments or, in the case of a type approval of indefinite validity, for a period of a maximum of ten years from [***OP please insert the date = 24 months after the date of entry into force of this Directive]***)** AT (Comments): The situation is for EVCS, compressed gases, cooling meters, energy conversion and caloric value determining devices the same as in 2004 with the instruments of the entire scope. We therefore suggest the same transitional provisions. We presume that the validity of certificates only will not be sufficient for placing products on the market. DE (Drafting suggestions): By way of derogation from Article 7(2) of Directive 2014/32/EU, Member States shall permit, for measurement tasks for which they have prescribed the use of a legally controlled measuring instrument falling in the scope of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*], but not having fallen in the scope before that date, the placing on the market and putting into use of measuring instruments that satisfy the rules applicable before [*OP please insert the date = 24 months after the date of entry into force of this Directive*]~~certificates issued under Directive 2014/32/EU~~ **~~in the version in force on~~** ~~and national certificates, covering measuring instruments that~~

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	~~fall in the scope of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*] and that have been placed on the market before [*OP please insert the date = 24 months after the date of entry into force of this Directive*], shall remain valid~~ until the expiry of the~~ir~~ validity of the national certifivate, and in any case no longer than until [*OP please insert the date = 12 years from the date of entry into force of this Directive*]. DE (Comments): It is still unclear whether those certificates can be used to place MIs on the market after the entry into force of the amendment using these certificates. DK (Drafting suggestions): **By way of derogation from Article 7(2) of Directive 2014/32/EU, Member States shall permit the placing on the market and putting into use of measuring instruments that fall in the scope and satisfy the rules of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*] until the expiry of the validity of the type approval of those measuring instruments or, in case of a type approval of indefinite validity, for a period of maximum 12 years from [*OP please insert the date = date of entry into force of this Directive*].**

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	DK (Comments): The wording 'in the version in force on' is unclear to us. Is this necessary to include it? We believe that the wording of the compromise proposal is ambiguous. Inspired by wording of previous amendments to the MID (2004/22/EC), we propose the following wording. FI (Comments): Does this proposed text mean that measuring instruments that have a valid national certificate can still be made available on the market for a duration of the transition period? If so, this is a welcome change, but could maybe benefit from some clarification. Many companies have invested on getting national approvals for measuring instruments for applications that have previously been out of MID scope. This investment would be of not much value, if the companies are not able to make these instruments available on the market and put into use. IT (Drafting suggestions):

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	Do not modify the second subparagraph SE (Comments): We understand this provision as follows: Instruments in the scope of the amended MID having a certificate, be it according to current MID or any national regulation, can be made available on the market and put into use during its validity and 12 years from the date of entry into force at the latest. SI (Drafting suggestions): By way of derogation from Article 7(2) of Directive 2014/32/EU, certificates issued under Directive 2014/32/EU in the version in force on ***[OP please insert the date = the date of 1 day before of entry into force of this Directive]*** and national certificates, covering measuring instruments that fall in the scope of Directive 2014/32/EU from [*OP please insert the date = date of entry into force of this Directive*], shall remain valid until the expiry of their validity, and in any case no longer than until [*OP please insert the date = 12 years* ***and 3 months*** *from the date of entry into force of this Directive*].

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	Member States shall not impede the making available on the market and putting into use of measuring instruments that are in conformity with the above mentioned certificates until their expiration date, but in any case, no longer than 12 years and 3 months from the date of entry into force of the new Directive. SI (Comments): 1. It is necessary to define the applicable version of Directive 2014/32/EU. 2. It is necessary to consider a transitional period from Article 3, which has been prolonged for 3 months. 3. In order to avoid different interpretations, it needs to be clearly stated that the instruments with valid certificates can be made available on the market and put into use.
	IT (Drafting suggestions): 'The framework for the certification of remote metering solutions in EVSE is provided in Annex Va of this Directive'. 'The regulatory framework governing third party software and service providers who process subject measurement data on behalf of consumers,

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	in accordance with this Directive, and integrate such data into their services for display or other purposes, is set out in Annex Va to this Directive'.
Article 3	
1. Member States shall adopt and publish, by *[Note to PO: insert exact date – [~~12~~ **15** months] after entry into force of this Directive]* ~~at the latest~~, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions.	AT (Comments): We welcome the proposed extension of the transposition deadline DK (Comments): We can accept the new deadline. NL (Comments): 15 months is an acceptable period
They shall apply those provisions from *[Note to PO: insert exact date – [~~24~~ **27** months] after entry into force of this Directive]*.	DK (Comments): We can accept the new deadline. IT (Drafting suggestions):

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	They shall apply those provisions from [Note to PO: insert exact date – [~~24~~ **36** months] after entry into force of this Directive]. NL (Comments): 27 months is an acceptable period
When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.	
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.	
Article 4	
This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.	
Article 5	
This Directive is addressed to the Member States.	

Directive amending Directive on measuring instruments (2014/32/EU) Deadline: ***2 April 2025***

From: AT, CZ, DE, DK, FI, IT, LT, NL, SE, SI **Updated: 16/04/2025 12:53**

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Directive amending Directive on measuring instruments (2014/32/EU) Deadline: ***2 April 2025***

From: AT, CZ, DE, DK, ES, FI, IT, LU, NL, SE, SI **Updated: 16/04/2025 12:45**

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Name of document: please add the **two initials** of your delegation's country followed by a space (to the MS Word document name), followed by any optional text, for example, for Austria: **AT comments on … .docx**

Thank you for your cooperation!

PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
ANNEX I	
Annex I to Directive 2014/32/EU is amended as follows:	
(1) in part '**DEFINITIONS**', in the **table,** seventh row**, second column** ~~of the table~~, **~~in~~** ~~the definition of 'Direct sales' is replaced by the following~~ **~~sentence is added at the end of~~ the third indent is replaced by the following**:	SI (Comments): It is not clear, which part of text is added and which part is deleted. A part of the text is both underlined and striked through.
~~'A trading transaction is direct sales if:~~	
~~— the measurement result serves as the basis for the price to pay; and~~	DK (Drafting suggestions): **— the measurement result serves as the basis for the price to pay; and** DK (Comments):

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	We believe this sentence should be kept in the Annex as it ensures a higher level of consumer protection by clarifying what the basis of the price to pay is. Not clarifying the basis of the price to pay potentially opens for ambiguous understandings of how to establish the price, which we believe is not apropriate for a directive-wide definition.
~~— at least one of the parties involved in the transaction related to measurement is a consumer or any other party requiring a similar level of protection; and~~	
~~—~~**‘— all the parties in the transaction accept the measurement result at that time and place. For measuring systems for compressed gas dispensers and for measuring systems for electric vehicle supply equipment,** all the parties in the transaction accept the measurement result at the time the measurement is concluded**.**.’;	AT (Comments): We welcome the restriction of the amendment to compressed gases and EVSE, as the main application for this amendment is indeed likely to be required there. It would also make sense to add measuring systems for liquids other than water as there are already a number of self-service arrangements where only the customer is present. We believe it is important that the specific annexes consistently require permanent proof of the transaction for the consumer. The original wording implies parties in direct (face-to-face) interaction. The omission of ‘and place’ no longer implies that the parties communicate directly with each other in any form. There is a need for further clarification here. CZ (Drafting suggestions): **‘— all the parties in the transaction accept the measurement result at that time and place. For measuring systems for fuel dispensers and compressed gas**

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	dispensers and for measuring systems for electric vehicle supply equipment, all the parties in the transaction accept the measurement result at the time the measurement is concluded**.**.' CZ (Comments): Not clear why this condition is set for *"**compressed gas dispensers and measuring systems for electric vehicle supply equipment**"* only. Also fuel dispensers in scope of Annex VII (MI-005) should be included. There is no reason to distinguish between "new" and "traditional" fuel/gas/power supply equipment. DE (Comments): Clearly state that Annex I 11.1 and 11.2 is **not** impacted by this change, i.e. a record by durable means and durable proof are still necessary requirements. FI (Comments): We support this change. SE (Comments): Appreciated. Limits the change to the scope of the amendment. However, the term 'direct sales' is only used in 10.4 and in annex VII and VIIa. The derogation from 10.4 for EVSE and CNG dispensers means that the definition is of no consequence for EVSE. See comments and proposal on 10.7 and 10.8.

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(2) ~~point 10.2. is replaced by the following:~~	
~~'10.2. The indication of any result shall be clear and unambiguous, protected against accidental deletion, and accompanied by such marks and inscriptions necessary to inform the user of the significance of the result. Easy reading of the presented result shall be permitted under normal conditions of use. Additional indications may be shown provided they cannot be confused with the metrologically controlled indications.';~~	DE (Comments): Consumer protection requires clear indication of the relevant data, therefore keep this requirement. FI (Comments): We welcome this proposal. SE (Comments): Appreciated. Limits the change to the scope of the amendment.
(3) the following points ~~10.6., 10.7., and 10.8.~~ are added:	SE (Comments): The terms used in 10.6-10.8 are now harmonised; much appreciated.
'10.6. By way of derogation from points 10.1. and 10.5., for gas **meters** and electricity meters, measuring systems for electric vehicle supply equipment ('EVSE') and measuring systems for compressed gas dispensers the following shall apply:	AT (Drafting suggestions): 10.6. By way of derogation from points 10.1. and 10.5., ~~for~~ gas **meters** and electricity meters shall **make the cumulated consuption available to the consumer immediately upon completion of the measurement process. Other measurement results relevant**

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	for the price to pay shall be made available either via the the meter or via other metrologically secured facilities For measuring systems for electric vehicle supply equipment ('EVSE') and measuring systems for compressed gas dispensers the following shall apply: AT (Comments): In Austria, the nationwide implementation of smart meters for measuring power consumption is almost complete. According to current knowledge, all well-known network operators have designed their systems in such a way that (almost) real-time consumption values can only be accessed via the display of the smart meter. In principle, the possibility of providing consumption values via interfaces and corresponding hardware/software is not viewed negatively as an additional function. It can be assumed that a number of consumers use this additional information channel for individual reasons. Measuring devices without a connected display would probably inevitably lead to the need for extra hardware in order to be able to read their own consumption. These costs are ultimately to be borne by consumers, which would be a further burden, especially for consumers who are worthy of protection or low-income consumers. The current national and EU legal requirements, in particular the EU Directives 2009/72/EC and 2019/944, aim at consumers wanting to read their energy consumption at any time in a simple, non-discriminatory manner in a timely manner. Should there be

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	a decision on the part of the smart meter manufacturers not to integrate displays, this might be interpreted to be contrary to the existing legal requirements in the field of power supply. Furthermore, the amendment is also rejected from an economic point of view. In the electricity sector, there will be considerable cost increases in the coming years due to unavoidable grid expansions. The dismantling of gas infrastructure and the associated expansion of district heating networks will also lead to further immense costs in the energy sector. Further cost increases must therefore must be prevented in any case. In this regard, reference is also made to the European Commission's 'Affordable Energy Action Plan'. Eliminating the obligation to install visual fields on meters would probably run counter to the goals of 'providing affordable energy in Europe'. Network and Energy providers inform that communication with a smart meter is subject to high security requirements. In the future, no communication via the customer Internet is planned or permitted here. W-Lan adapters or external displays would have to be provided by the customer. There are high costs for customer support to be assumed if this solution does not work. CZ (Drafting suggestions): *Option a)*

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	‘10.6. By way of derogation from points 10.1. and 10.5., for water meters, thermal energy meters, gas **meters** and electricity meters, measuring systems for electric vehicle supply equipment (‘EVSE’) and measuring systems for **fuel dispensers and** compressed gas dispensers the following shall apply: *OR* *Option b)* ‘10.6. By way of derogation from points 10.1. and 10.5., for ~~gas meters and electricity meters,~~ measuring instruments and measuring systems ~~for electric vehicle supply equipment (‘EVSE’) and measuring systems for compressed gas dispensers~~ where applicable option of indication exists the following shall apply: CZ (Comments): *Option a)* All measuring instruments having the character of smart meters, i.e. also water meters, thermal energy meters for cooling and heating should be included in par. 10.6. Remote reading and smart metering requirement concerning these instruments is included in Directive (EU) 2023/1791 on energy efficiency.

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	Not clear why this condition is set for "***compressed gas dispensers and measuring systems for electric vehicle supply equipment***" only. Also fuel dispensers in scope of Annex VII (MI-005) should be included. *OR* *Option b)* Or, simply, not list any type of measuring instrument/ system explicitly and so not restrict requirements for indication (taking into account material measures), i.e. enable the "applicable option". SE (Comments): Wording in 10.6 is now more in line with current wording in MID and stems from the principles of the New Approach and NLF; much appreciated.
Indication of ~~The measuring instruments shall use one or more of the following technical solutions to indicate~~ the measurement result **and other relevant data** s**hall be accessible without tools by one or more of the following means**:	DE (Comments): What is "other relevant data"? Please specify.
(a) ~~be fitted with~~ a metrologically controlled **local** display, ~~readout and/or~~ print **or** e**record** ~~accessible without tools to present the relevant data~~;	CZ (Comments): Which types of "record"? Is it the same "record" as in point 10.1? Should be explained (examples). DE

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	(Comments): How can a record be accessed without a tool? DK (Comments): We are unsure whether Directive (EU) 2019/882 on the accesiblity of products and services is relevant to take into account regarding requirements for displays in this amendment. If taking into account 2019/882/EU is not within the scope of this targeted amendment, we believe that it is important to make sure that the MID is aligned with accesiblity requirements in a full, future revision of the MID. Furthermore, ahead of a full revision and when drafting an impact assessment, the instruments within the scope of this targeted amendment should be included in the assessment – including whether these are in conformity with relevant accesibility requirements. FI (Comments): We welcome this proposal. It is no longer technologically restricted what kind of solution can be used as a local display or a record. SE

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	(Comments): Appreciated. Given that "readout" is equivalent to the "hard copy" in 10.3 in the meaning of a registration of data available for transmission. Aligns with current MID (annex I, 10.1 and 10.3). There could be a need of a local display for utility meters, see SE comment and proposal on this issue in *wk03411.en25 MS comments.* The reasons being consumer protection, availability and maintaining energy infrastructure in crises. SI (Comments): The term "record" could not be fully appropriate. It could mean also an locally stored electronic digital record, which can not directly serve as an indication.
(b) ~~present the relevant data on~~ a remote display ~~accessible without tools~~ or ~~on~~ a device of the consumer or end-user.	CZ (Comments): Note: Consumer protection must be ensured. DE (Comments): The device of the end-user is a tool. Alternatively, any application needed to access the data on the device is a tool. DK (Drafting suggestions):

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	~~present the relevant data on~~ a remote display ~~accessible without tools~~ or ~~on~~ a device of the consumer or end-user **under metrological control**. DK (Comments): We believe that a remote display or device used to display measurement results should be under metrological control. Hence, we believe that a local display under metrological control should be a requirement and the option for a remote display can be used in addition. FI (Comments): We support this proposal. NL (Drafting suggestions): ~~b) present the relevant data on~~ a remote display ~~accessible without tools~~ or ~~on~~ a device of the consumer or end-user **and in one commonly available format that is easily accessible during conformity evaluation**. NL (Comments):

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
	Suggestion meant to make the demands for testability more explicit by adding "and in one commonly available format that is easily accessible during conformity evaluation." SE (Comments): Appreciated.
The presented **measurement** results shall be traceable to the measuring instrument under metrological control. Security measures shall provide evidence of tampering.	CZ (Comments): To be traceable to the measuring instrument means to be comparable to transaction record logged in the measuring instrument? In practice this means that measuring instrument has, e.g. sufficient recording function, memory etc. (?) DE (Drafting suggestions): The presented **measurement** result~~s~~ … DE (Comments): Use either singular or plural consistently. ES (Comments): Spain undertand that "Security measures shall provide evidence of tampering" implie that the software in the devices of the consumer or end-use need to be evaluated and extensions of transmission of data, data storage too. SE (Comments):

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	Appreciated. SI (Comments): In general, an indicating device is a constituent element of a measuring instrument. With option b), a device of the consumer or end-user becomes part of the measuring instrument. Is that correct interpretation?
The **presented** measurement result ~~presented by the respective technical solution~~ shall serve as the basis for the price to pay, when applicable.	DE (Drafting suggestions): …shall serve as the basis for the price to pay, ~~when~~ if applicable. DE (Comments): The price to pay is a condition, therefore "if" is required. SE (Comments): Appreciated.
~~The data may be made available, in addition, by means of metrologically controlled remote channel.~~	FI (Comments): We support this proposal. SE (Comments): Appreciated.
10.7. By way of derogation from point 10.4., for measuring systems for EVSE and measuring systems for compressed	CZ (Drafting suggestions):

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
gas dispensers, the measurement **results and other relevant** data shall be ~~fully established in a device or a system so that it can be immediately presented to the consumer~~**securely stored and made available to the consumer immediately upon completion of the measurement process**.	*Option a)* a) By way of derogation from point 10.4., for measuring systems for EVSE, **measuring systems for fuel dispensers** and measuring systems for compressed gas dispensers, the measurement **results and other relevant** data shall be ~~fully established in a device or a system so that it can be immediately presented to the consumer~~**securely stored and made available to the consumer immediately upon completion of the measurement process.** *OR* *Option b)* By way of derogation from point 10.4., for measuring **systems where applicable option of indication exists** ~~for EVSE and measuring systems for compressed gas dispensers~~, the measurement **results and other relevant** data shall be ~~fully established in a device or a system so that it can be immediately presented to the consumer~~ **securely stored and made available to the consumer immediately upon completion of the measurement process**. CZ (Comments): This point relates to direct sale. *Option a)* a) Also measuring systems for fuel dispensers should be included.

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	OR *Option b)* All measuring instrument where applicable option of indication exists should be included. Note: More flexible. DE (Drafting suggestions): …, the measurement **result~~s~~ and other relevant** data shall be ~~fully established in a device or a system so that it can be immediately presented to the consumer~~**securely stored and made available to the consumer immediately upon completion of the measurement process** DE (Comments): Use either singular or plural consistently. FI

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	(Comments): What is the problem this point is trying to resolve, that is not already covered by points 8.4, 10.4 and 11 of Annex I? It would be helpful if this was clarified in the provisions, otherwise this point feels redundant. Secure storing of the data is already regulated by Annex I point 8.4 that already applies to all measuring instruments under the scope of the MID. This requirement seems to mean that the buyer only sees the measurement result after the transaction is completed and not during the measuring event during the transaction. Making the measurement result available to the consumer immediately upon completion of the measurement process is an important requirement for consumer protection. However, it is open for interpretation what this requirement means in practical applications for measuring instruments without a local display (10.6 option b). For example, how should the measurement result be made available to the consumer or end user in case there are connection disturbances or what is the allowed latence of showing measurement result before the selling transaction can be finished. This could potentially lengthen the transaction time before the measuring instrument is ready to close an open transaction and begin another for the next customer. Provinding evidence for the customer of the measurement is already covered by annex I point 11.

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	If this point is needed to reflect requirements of AFIR or EMD, it would be helpful to establish clearly in the provisions what requirements are meant to be regulated by the MID, AFIR or EMD and how they are aligned. IT (Drafting suggestions): "Measurement data must be stored in at least one of the following means: locally on the EVSE or through cloud-based technologies." SE (Drafting suggestions): remove SE (Comments): Agree with NL, FR comments in doc. wk03411.en25. It is not clear what problem the requirement is solving. p10.6 puts requirements on the indication itself p10.4, if applicable, solves for “made available to the consumer” p8.4 on protection of measurements data solves for “securely” in ‘securely stored’. p11 on further processing of data solves for the requirement of storing and availability of data.

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	The derogation from 10.4 is then not needed. If removed the definition on direct sales will be applicable also for EVSE. This will also mean that the second sentence in 10.4 will be applicable which was not the inention of COM when proposing 10.7 and 10.8. If the intention is to have a derogation to the second sentence than it could be instroduced for EVSE and CNG dispensers. The term "immediately" could be interpreted as making the remote display (10.6b) practically impossible. SI (Drafting suggestions): By way of derogation from point 10.4., for measuring systems for EVSE and measuring systems for compressed gas dispensers, the measurement results and other relevant data shall be securely stored and made available to the consumer ~~immediately upon completion of the measurement process~~ **at the time the measurement is concluded**. SI (Comments): Update the text of 10.7 with the changed part of definition of direct sales to the public appliucable to compressed gas dispensers and measuring systems for electric vehicle supply equipment.
10.8. By way of derogation from point 10.4., measuring systems for EVSE shall be designed to present the measurement result to all parties in the transaction when installed as intended.'.	CZ (Drafting suggestions): ~~10.8 By way of derogation from point 10.4., measuring systems for EVSE shall be designed to present the measurement result to all parties in the transaction when installed as intended.~~ delete CZ

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	(Comments): Point 10.4 is applicable. DE (Drafting suggestions): 10.8. By way of derogation from point 10.4., measuring systems for EVSE shall be designed to ~~present~~ make available the measurement result to all parties in the transaction when installed as intended.'. DE (Comments): Ensure consistency with AFIR Article 5 for recharging points with a power output of less than 50 kW. FI (Comments): What is the problem this point is trying to resolve, that is not already covered by point 10.4? This point seems redundant. SE (Drafting suggestions): remove SE (Comments): There are two parties in the transaction which then is the same as 10.4 where "both" is stated instead of "all".

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
ANNEX II	
Annex IV to Directive 2014/32/EU is amended as follows:	
(1) the title is replaced by the following:	
'**GAS METERS, ~~AND~~ CONVERSION DEVICES AND GAS CALORIFIC VALUE DETERMINING DEVICES (MI-002)**';	NL (Drafting suggestions): GAS METERS, AND CONVERSION DEVICES ~~AND GAS CALORIFIC VALUE DETERMINING DEVICES~~ (MI-002) NL (Comments): A gas calorific value device is an associated measuring device which is a part of a sub-assembly which is a part of a gas meter, therefore it should not be in the title of this annex. See picture on the left. Associated measuring instruments are not new. They are used in Annex VII and Annex VIIa
(2) the first paragraph is replaced by the following:	
'The relevant requirements of Annex I, the specific requirements of this Annex and the conformity assessment	ES (Comments):

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
procedures listed in this Annex apply to gas meters and conversion devices defined in this Annex, intended for residential, commercial and light industrial use.’;	The term light industry is ambiguous and should be defined. The definition of light industry, at least in Spain, is causing problems regarding what is subject to metrological control and what is not. This term also appears on electricity meters and water meters and also causes problems of interpretation. To solve this problem in Spain, with respect to gas meters, the following was introduced through national legislation: “For these purposes, residential, commercial or light industry use shall be understood as that whose gas meter has a maximum flow rate equal to or less than 250 m³/h or equivalent mass flow rate.” Later, “and is not located in a transport network with a pressure equal to or greater than 1.6 MPa” was added.
(3) in part ‘**DEFINITIONS**’, the table is amended as follows:	
(a) in the first row, the ~~definition of ‘Gas meter’~~**wording in the second column** is replaced by the following:	
‘An instrument designed to measure, ~~memorise and display~~ the quantity of fuel gas (volume or mass) and~~/or~~**, if applicable, the quantity of** energy of that gas that has passed **through** it**, and to ensure the recording and display of those quantities that have passed through it**.’;	DE (Drafting suggestions): ‘An instrument designed to measure, ~~memorise and display~~ memorise and display the quantity of fuel gas (volume or mass) and~~/or~~**, if applicable, the quantity of** energy of that gas that has passed **through** it**, and to ensure the recording and display of those quantities that have passed through it**.’; DE

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
	(Comments): Do not change this part of definition. NL (Drafting suggestions): An instrument designed to measure, ~~memorise and display~~ the quantity of fuel gas (volume or mass) ~~and~~/**or**, if applicable, the quantity of energy of that gas that has passed through it, and to ensure the recording and display of those quantities that have passed through it. NL (Comments): In order to avoid confusion only one quantity should be displayed in normal mode. One cubic metre of natural gas contains much more energy than one cubic metre of hydrogen, making displaying volume a pointless matter, for those countries where hydrogen, or hydrogen mixtures are traded. SE (Comments): Removing “memorise and display” harmonises with annex V and adjusts to provisions in 10.6. The introduction of “ensure the recording and display” we understand as still enabling the 10.6b on remote display.

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
(b) in the second row, **the wording in the** first column~~, the term 'Conversion device'~~ is replaced by the following:		
'Volume conversion device';		
(c) the following rows are added:		NL (Drafting suggestions): Add definition: '**Associated measuring instrument**' '**An instrument connected to the calculator for measuring certain quantities, which are characteristic of the gas, with a view to make a correction and/or conversion.'** NL (Comments): The associated measuring instrument is introduced in the definition 'Gas calorific value determining device'. In consistency with Annex VII and Annex VIIa it should be defined in this Annex. It also underlines that the term 'GAS CALORIFIC VALUE DETERMINING DEVICES' does not belong in the title.
'Gas calorific value determining device	An associated measuring instrument for determining the calorific value of gas that has passed it.	IT (Drafting suggestions): An associated and/or, if applicable, integrated measuring instrument for determining the calorific value of gas that has passed it.

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
Energy conversion device	A device which calculates, integrates and displays energy using the mass or the volume at base conditions, and the superior / gross calorific value.	SE (Drafting suggestions): A device ~~which calculates, integrates and displays~~ **that converts the quantity measured to** energy using the mass or volume at base conditions, and the superior / gross calorific value. SE (Comments): Align with the wording on volume conversion device where 'calculates, integrate and display' is not mentioned.
Superior/gross calorific value	Amount of heat that would be released by the complete combustion with oxygen of a specified quantity of gas, in such a way that the pressure, p_1, at which the reaction takes place remains constant, and all the products of combustion are returned to the same specified temperature, t_1, equal to that of the reactants, all of those products being in the gaseous state except for water, which	

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
is condensed to the liquid state at t_1.’;	
(4) Part I is amended as follows:	
(a) point 1.1. is replaced by the following:	
‘The flowrate range of the gas shall fulfil at least the following conditions:	
Class | Q_{max}/Q_{min} | Q_{max}/Q_t | Q_r/Q_{max}	
1,5 | ≥ 150 | ≥ 10 | 1,2	
1,0 | ≥ 10 | ≥ 5 | 1,2	
If a gas meter has multiple gas application-dependent flow rate ranges, all ~~of those~~**such flow rate ranges** shall be inscribed on the meter, accompanied by a clear description of the gas application.’;	
(b) ~~the introductory sentence of~~ **in** point 3.1.1.**, the introductory sentence** is replaced by the following:	
‘The effect of an electromagnetic disturbance on a gas meter, conversion device or gas calorific value determining device shall be such that:’;	
(c) in point 6, the following paragraph is added :	

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
'Quantity of energy shall be displayed in joules or in watt-hours.';	DE (Drafting suggestions): 'Quantity of energy shall be displayed in joules or in watt-hours or the decimal multiples thereof.' DE (Comments): The units joule or Wh are too small for large amounts of energy. ES (Drafting suggestions): 'Quantity of energy shall be displayed in joules or in watt-hours **or their multiplies**.'; ES (Comments): Or their multiples LU (Comments): Not realistic, as not all information is provided towards the meter (f. ex calorific value, pressure etc….). In LU the energy is calculated in the central system and every customer can see it by end of the month.
(5) Part II is amended as follows:	
(a) the title is replaced by the following:	
'SPECIFIC REQUIREMENTS	

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
CONVERSION DEVICES';	ES (Comments): In our opinion, it needs a thorough review. The MEPs are consistent with OIML R140 and EN 12405-1:2023, however, in our opinion, it presents interpretation problems: *8. Maximum permissible error — 0.5% at an ambient temperature of 20 °C ± 3 °C, an ambient humidity of 60% ± 15%, and with the nominal values for the energy supply;* We understand that it is about the volume indication calculated on the volumetric conversion device. *— 0.7% for temperature conversion devices under nominal operating conditions;* We understand that it is only temperature and does not include pressure. *— 1% for other conversion devices under nominal operating conditions.* It seems that the MEP is higher for a converter that can contemplate more corrections than just temperature 1% versus 0.7%. According to EN 12405, a P or PTZ converter under nominal operating conditions has a mep of 1% and a T converter of 0.7%. This does not seem coherent.

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
	On the other hand, if it is a subset, how is the integration and sealing of the converter parts that influence the measurement in the gas meter, such as the temperature probe and pressure sensor, guaranteed? Nor is it being taken into account that the sealing should be able to guarantee in-service verifications, without having to break seals. Nor is it being considered who is responsible for doing this sealing.
(b) the first **and second** paragraph**s** ~~and the introductory sentence of the second paragraph~~ are replaced by the following:	
'A conversion device constitutes a sub-assembly when it is together with a measuring instrument with which it is compatible.	
For a conversion device, the essential requirements for the gas meter shall apply, if applicable. **In addition, the following requirements shall apply:**';	
(c) point 8 is amended as follows:	
(i) the title is replaced by the following:	
'**MPE for volume conversions devices**';	

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
(ii) the note to point 8 is replaced by the following:	
'Note:	
The errors of the gas meter and, if applicable, of the gas calorific value determining device are not taken into account.	
The conversion device shall not exploit the MPEs or systematically favour any party.';	
(d) the following point is inserted:	
'8a. MPE for energy conversion devices	
The MPE, positive or negative, of the conversion calculation of energy, is equal to 0,05%.';	LU (Comments): Not relevant for LU, as energy is only calculated in central system. NL (Drafting suggestions): The MPE~~, positive or negative,~~ of the conversion calculation of energy, is equal to 0,05%.'; NL (Comments): 'positive or negative' is redundant. MPE is defined as positive or negative. SI

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
	(Drafting suggestions): The MPE, positive or negative, of the conversion calculation of energy, is equal to **0,05 %**. SI (Comments): Editorial. A space between 0,05 and % is needed.
(6) the following Part IIa is inserted:	
‘**PART IIa**	
SPECIFIC REQUIREMENTS	
GAS CALORIFIC VALUE DETERMINING DEVICES	ES (Comments): If it is a subset, how is the integration and sealing of the converter parts that influence the measurement in the gas meter, such as the temperature probe and pressure sensor, guaranteed? Nor is it being taken into account that the sealing should be able to guarantee in-service verifications, without having to break seals. Nor is it being considered who is responsible for doing this sealing. **Clarifications of the comment:**

PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
	The converters use to have a pressure temperature, … probe. When the manufacture integrated the converter with the counter must to install these probe in the pipe or in the counter. In our opinion there must be a seal in the points of conection of the probes with the counter or pipes to avoid that someone could manipulated these probe and remove these and put in other place with at adventages condicion for some of the the parties involved in the transaction. But these seals could be a problems in verifications, because to do the peridocis verifications should be broken to check the probes. Cheking some module B certificate of volume conversion devices there aren't rinformation about seals between probes and counter. We wan`t avoid this for gas calorific value determining devices. In the clause 6.2.3 of standard EN 12405-2:2012 is a requirement to seals all the probes with the counter as the same in clusele 6.1.3 of EN 12405-1:2005+A2:2010. Spain suggest include a requiremet about seals between probes of yhe converter and counter or pipes.

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
A gas calorific value determining device is either of the following:	
(a) it is locally installed and sends signals directly to the energy conversion device; **or**	
(b) it is not locally installed and is considered as an external transducer.	
For a gas calorific value determining device, the essential requirements for the gas meter shall apply, where applicable. In addition, the following requirements shall apply:	
9a. Base conditions ~~for converted quantities~~	
The manufacturer shall specify the following:	
– the range for gas chemical composition;	
– the base conditions for calorific value and **relevant** ~~converted~~ quantities.	NL (Drafting suggestions): the base conditions for calorific value and ~~relevant~~ **converted** quantities NL (Comments): Not OK. Intention is to state to which conditions the quantities have been converted
9b. MPE	ES (Comments):

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PCY (partial) compromise proposal (ST 6789/25)			**Drafting suggestions and Comments**
			The definition of classes 0.5 and 1 is proposed They are not consistent with the classification of classes in EN 12405-2 Classes A, B and C with errors of 0.8%, 1.5% and 1.7% under reference conditions and 1%, 2% and 2.5% under nominal operating conditions. The proposed errors are difficult to interpret, as it already happen in the case of volumetric converters, regulated in the original Directive 2014/32/UE
Class	0,5	1,0	
MPE	0,5 %	1 %	NL (Drafting suggestions): 1**,0** % NL (Comments): For consistency with OIML
The gas calorific value determining device shall not exploit the MPEs or systematically favour any party.			
9c. Permissible effect of disturbances			

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
The critical change value is the greater of the two following values:	
– one fifth of the magnitude of the MPE for the calorific value;	
– two scale intervals of the gas calorific value determining device.	
9d. Durability	
After an appropriate test, taking into account the period of time estimated by the manufacturer, has been performed, the following two criteria shall be satisfied:	
– the variation of the measurement result after the durability test when compared with the initial measurement result shall not exceed half of the magnitude of the MPE; **and**	
– the error of indication after the durability test shall not exceed the MPE.	
9e. Suitability	
A gas calorific value determining device shall be capable of detecting when it is operating outside the operating ranges stated by the manufacturer for parameters that shall be registered for measurement accuracy. In such a case, the gas	

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
calorific value determining device shall register the following:	
(a) that the gas calorific value is not relevant;	
(b) that the gas calorific value determining device operates outside the operating range.	
9f. Units	
Calorific value shall be displayed in joules and/or watt-hours per unit of mass or volume at base conditions.'.	DE (Drafting suggestions): Calorific value shall be displayed in joules and/or watt-hours per unit of mass or volume at base conditions or the decimal ,utliples thereof.' DE (Comments): The units joule or Wh are too small for large amounts of energy. ES (Drafting suggestions): Calorific value shall be displayed in joules and/or watt-hours, **or their multiples**, per unit of mass or volume at base conditions.' ES (Comments): Or their multiples

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PCY (partial) compromise proposal (ST 6789/25)	Drafting suggestions and Comments
[Annexes III and IV are not part of this Presidency compromise proposal.]	AT (Comments): Please refer to our comment of 20 February (enclosed). Our preference for handling EVSE was communicated as option 1 on 25 March. The CZ proposal for Annex III (Annex V of MID) is supported as a basis for further discussion of electricity meters, which should be further developed. For us, it seems very clear and transparent and an excellent idea to make MID more future-proof in the field of smart metering of electrical energy.
ANNEX V	
Annex VI to Directive 2014/32/EU is amended as follows:	
(1) the part '**DEFINITIONS**' is amended as follows:	
(a) the first paragraph is replaced by the following:	
'A thermal energy meter is an instrument designed to measure the energy which in a heat-exchange circuit is absorbed (cooling) and/or given up (heating) by a liquid called the thermal energy-conveying liquid.';	
(b) in the table, the fourth row is replaced by the following:	

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
‘$\Delta\theta$ =	the temperature difference θ_{in} - θ_{out} with $\Delta\theta > 0$ for heating and $\Delta\theta < 0$ for cooling’;	FI (Drafting suggestions): the temperature difference θin - θout with $\Delta\theta \geq 0$ for heating and $\Delta\theta \leq 0$ for cooling’ FI (Comments): To keep the requirements as in current MID and minimise changes made. SE (Drafting suggestions): the temperature difference θ_{in} - θ_{out} with $\Delta\theta \geq 0$ for heating and $\Delta\theta \leq 0$ for cooling’ SE (Comments): To keep the requirements as in current MID. Current annex VI covers the case $\Delta\theta = 0$ This is important whenever the heating/cooling is switched off that this situation also is covered. Compare with ‘no load’ in annex V.
(2) point 1.1. is replaced by the following:		
‘1.1. For the temperature of the liquid: θ_{max}, θ_{min},		
— for the temperature differences: $\Delta\theta_{max}$, $\Delta\theta_{min}$, subject to the following restrictions:		
$\Delta\theta_{max} / \Delta\theta_{min} \geq 10$ with the exception of cooling applications;		
$\Delta\theta_{min}$ is a whole number in the range of 1 K and 10 K’;		

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
(3) point 1.3. is replaced by the following:	
'1.3. For the flow rates of the liquid: q_s, q_p, q_i, where the values of q_p and q_i are subject to the following restriction: $q_p / ~~p~~q_i \geq 5$.	
ANNEX VI	
'ANNEX VIIa	DE (Comments): To avoid unnecessary confusion, change to MI-011.
MEASURING SYSTEMS FOR COMPRESSED GAS DISPENSERS (MI-005a)	DE (Comments): What is a measuring system for a compressed gas dispenser, exactly? Compressed gas dispenser is defined as "a measuring system…". Therefore, what is a measuring system for a measuring system? Does this mean, more than the dispenser itself is regulated? This is still very unclear and will certainly lead to different interpretations. NL (Drafting suggestions): ~~MEASURING SYSTEMS FOR~~ COMPRESSED GAS DISPENSERS (MI-005a)

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PCY (partial) compromise proposal (ST 6789/25)	**Drafting suggestions and Comments**
	NL (Comments): "MEASURING SYSTEMS FOR" is in fact redundant and can be removed. However, we prefer not to restrict the annex to just CG Dispensers. Our preference is: 'MEASURING SYSTEMS FOR COMPRESSED GAS'
The relevant requirements of Annex I, the specific requirements of this Annex and the conformity assessment procedures listed in this Annex apply to measuring systems intended for the continuous and dynamic measurement of quantities (mass ~~or~~ **and, if applicable,** energy) of compressed gas.	DE (Comments): Does this mean more than the dispenser itself? If not, why not state this clearly? NL (Drafting suggestions): The relevant requirements of Annex I, the specific requirements of this Annex and the conformity assessment procedures listed in this Annex apply to measuring systems intended for the continuous and dynamic measurement of quantities (mass **or** ~~and,~~ if applicable, energy) of compressed gas. NL (Comments): Must be 'or' instead of 'and'. Having more than 1 displayed value at the same time can create confusion

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~~However, by way of derogation from Annex I, s~~**S**uch measuring systems shall not be considered as utility measuring instruments **as defined in Annex I**.		
DEFINITIONS		
Meter	An instrument designed to measure continuously, memorise and display the quantity at metering conditions of gas flowing through the measurement transducer in a closed, fully charged conduit.	SE (Drafting suggestions): An instrument designed to measure continuously, ~~memorise and display~~ the quantity at metering conditions of gas flowing through the measurement transducer in a closed, fully charged conduit. SE (Comments): Align with annex IV, V and provisions in annex I. The record and display functions should be handled in annex I.
Calculator	A part of a meter that receives the output signals from the measurement transducers and possibly, from associated measuring instruments and displays the measurement results.	
Associated measuring instrument	An instrument connected to the calculator for measuring certain quantities, which are characteristic of the gas, with a view to make a correction and/or conversion.	

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
Conversion device	A part of the calculator, which by taking into account the characteristics of the gas, automatically converts the mass of the gas into the amount of energy delivered or received.	
Measuring system	A system that comprises, in addition to the meter itself, a transfer point, gas piping and all devices required to ensure correct measurement or intended to facilitate the measuring operations.	DE (Comments): So what else is regulated in this Annex? Why is ist called “measuring systems for CG dispensers”?
Compressed gas (‘CG’) dispenser	A measuring system intended for the fuelling of ~~road~~ **motor** vehicles, rail engines, boats, vessels and aircraft with compressed gaseous fuel.	DE (Comments): So what else is regulated in this Annex? Why is ist called “measuring systems for CG dispensers”?
Transfer point	Physical location at which the gas is defined as being delivered or received.	
~~Self-service arrangement~~	~~An arrangement that allows customers to use a measuring system for the purpose of obtaining gas for their own use.~~	AT (Drafting suggestions): Keep the COM proposal and add: **A self-service device constitutes a sub-assembly when it is together with a measuring instrument with which it is compatible.** AT

PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
		(Comments): Keep the definition. These are components, that might serve as remote displays acc. to Annex I. Usually there is more than one dispenser connected to a self-service device (SSD). In case one dispenser is replaced by a new one, the complete measuring systems would have to be checked. This problem can be mitigated or solved by a sub-assembly approach. DE (Drafting suggestions): Keep definition. DE (Comments): Self-Service devices are an essential part of dispensers. Self-service (including selling at a point-of-sale) is mandatory for most gas dispensers and cannot operate without. It is in harsh contrast with the OIML R139, which is the base document for ALL gas dispensers. DK (Drafting suggestions): **Self-service arrangement:**

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
		<u>An arrangement that allows customers to use a measuring system for the purpose of obtaining gas for their own use.</u> DK (Comments): We believe that the definitions of 'self-service arrangement' and 'self-service decive' should be kept in the annex as services like these are in use today. NL (Drafting suggestions): **Self-service arrangement |** **An arrangement that allows customers to use a measuring system for the purpose of obtaining gas for their own use.** NL (Comments): In practice, CG Self-service arrangements can be combined with fuel dispenser self-service arrangement MI-005). For consistency, use the same terminology. SE (Comments): Appreciated. The term is not used and therefore redundant.
~~Self-service device~~	~~A specific device that is part of a self-service arrangement and which allows one or more measuring systems to perform in that self-service arrangement.~~	DE (Drafting suggestions): <u>Keep definition.</u> DE

PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
		(Comments): Self-Service devices are an essential part of dispensers. Self-service (including selling at a point-of-sale) is mandatory for most gas dispensers and cannot operate without. It is in harsh contrast with the OIML R139, which is the base document for ALL gas dispensers. DK (Drafting suggestions): **Self-service device:** **A specific device that is part of a self-service arrangement and which allows one or more measuring systems to perform in that self-service arrangement.** NL (Drafting suggestions): **Self-service device |** **A specific device that is part of a self-service arrangement and which allows one or more measuring systems to perform in that self-service arrangement.** NL (Comments): In practice, CG self-service devices can be combined with fuel dispenser self-service devices (MI-005). For consistency, use the same terminology. SE

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
		(Comments): Appreciated. The term is not used and therefore redundant.
Minimum measured quantity ('MMQ')	The smallest quantity of gas for which the measurement is metrologically acceptable for the measuring system.	
Direct indication	The indication of mass ~~or~~**and, if applicable,** energy, corresponding to the measure and that the meter is physically capable of measuring. Note: The direct indication may be converted into another quantity using a conversion device.	NL (Drafting suggestions): The indication of mass **or** ~~and~~, if applicable, energy, corresponding to the measure and that the meter is physically capable of measuring. Note: The direct indication may be converted into another quantity using a conversion device. NL (Comments): Must be or instead of and. Having more than 1 displayed value at the same time can create confusion.
Interruptible	A measuring system is considered as interruptible when the gas flow can be stopped easily and rapidly.	
Non-interruptible	A measuring system is considered as non-interruptible when the gas flow cannot be stopped easily and rapidly.	

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PCY (partial) compromise proposal (ST 6789/25)		**Drafting suggestions and Comments**
Flowrate range	The range between the minimum flowrate (Q_{min}) and maximum flowrate (Q_{max}).	
SPECIFIC REQUIREMENTS		
1. Rated operating conditions		
The manufacturer shall specify the rated operating conditions for the instrument, in particular:		
1.1. The flowrate range		
The flowrate range is subject to the following conditions:		
(a) the flowrate range of a measuring system shall be within the flowrate range of each of its elements, in particular the meter**; and**		
(b) ~~for CG dispensers,~~ the ratio between the minimum and maximum flow rate shall be no less than 10.		DE (Comments): This seems to suggest that only CG dispensers (and no other measuring systems) are covered by this Annex. Please specify this clearly in the title and definition.
1.2. The properties of the gas to be measured by the instrument by specifying the name, the type or the following relevant characteristics of that gas**,** such as:		
(a) temperature range;		
(b) pressure range;		
(c) **the calorific value of the gas;**~~heating value of the gas~~;		

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(d) the nature and characteristics of the gas to be measured.		
1.3. The nominal value of the AC voltage supply and/or limits of the DC voltage supply.		
2. Accuracy classification and MPEs		
2.1. The MPE on the indication of measured or converted amounts transferred at the transfer point is set out in Table 1.		
Table 1		
Type of compressed gas measuring systems	Accuracy Class (MPE [% of measured value])	DE (Comments): Are these measuring system different from the CG dispenser?
Compressed hydrogen measuring systems	2	DE (Comments): Are these measuring system different from the CG dispenser? NL (Drafting suggestions): 2,**0** NL (Comments): For consistency with OIML

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Other compressed gas measuring systems	1,5	DE (Comments): Are these measuring system different from the CG dispenser?
The MPE on the MMQ equals twice the value stated in Table 1.		
2.2. The MMQ of a measuring system shall have the form 1 × 10n, 2 × 10n, or 5 × 10n authorised units of mass or energy, where n is a positive or negative whole number, or zero.		DE (Comments): Is this measuring system different from the CG dispenser?
The MMQ shall satisfy the conditions of use of the measuring system; except in exceptional cases, the measuring system shall not be used for measuring quantities less than that MMQ.		
2.3. The measuring system shall not exploit the MPEs or systematically favour any party.		
3. Maximum permissible effect of disturbances		
3.1. The effect of an electromagnetic disturbance on a measuring system shall be one of the following:		
(a) the change in the measurement result is not greater than the critical change value pursuant to point 3.2;		
(b) the indication of the measurement result shows a momentary variation that cannot be interpreted, memorised or transmitted as a		DE (Drafting suggestions):

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measurement result; furthermore, in the case of an interruptible system, that can also mean the impossibility to perform any measurement; **or**	Delete "or" for consistency. DE (Comments): "shall be one of the following:" already specifies that these are alternatives..
(c) the change in the measurement result is greater than the critical change value pursuant to point 3.2, in which case the measuring system shall permit the retrieval of the measurement result just before the critical change value occurred and cut off the flow.	
3.2. The critical change value is the greater of the following values:	
— one tenth of the MPE;	
— three times the MMQ divided by 100; in the case of a failure of the main power source, the critical change value shall be increased by 5 % of the MMQ.	
4. Durability	
For systems fitted with meters with moving parts, after an appropriate test, taking into account the period of time estimated by the manufacturer, has been performed, the following criterion shall be satisfied:	
The variation of the measurement result after the durability test, when compared with the initial measurement result, shall not exceed two fifths of the MPE.	

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5. Suitability	
5.1. For any measured quantity relating to the same measurement, the indications and, if applicable, printouts provided by ~~various devices~~**measuring system** shall have the same scale interval and the results shall not deviate one from another.	DE (Drafting suggestions): provided by ~~various devices~~ the **measuring system** DE (Comments): Is this measuring system different from the CG dispenser? SE (Drafting suggestions): For any measured quantity relating to the same measurement, the indications and, if applicable, printouts provided by **the** measuring system shall have the same scale interval and the results shall not deviate one from another. SE (Comments): Appreciated.
The scale interval of a CG measuring system shall not exceed one and a half times the MMQ divided by 100.	DE (Comments): Is this measuring system different from the CG dispenser?
5.2. It shall not be possible to divert the measured quantity in normal conditions of use unless it is readily apparent.	
5.3. During the warm-up time of the CG measuring system, no measurements shall take place.	DE (Comments):

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	Is this measuring system different from the CG dispenser?
5.4. ***Instruments for direct sales***	
5.4.1. A measuring system for direct sales shall be provided with means for resetting the display to zero.	DE (Comments): Is this measuring system different from the CG dispenser?
It shall not be possible to divert measured gas downstream of the meter during a filling operation.	
5.4.2. The display of the quantity on which the transaction is based shall be permanent until all parties in the transaction have accepted the measurement result.	DE (Comments): How does this relate to the new definition of direct sales, if CG dispensers are included in the application of the new definition? Please clarify!
5.4.3. Measuring systems for direct sales shall be interruptible.	DE (Comments): Is this measuring system different from the CG dispenser?
5.4.4. Measuring systems for direct sales shall display either in units of mass ~~or~~ **and, if applicable,** energy.	DE (Comments): Is this measuring system different from the CG dispenser? NL (Drafting suggestions): Measuring systems for direct sales shall display either in units of mass **or** ~~and,~~ if applicable, energy NL

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	(Comments): Must be 'or' instead of 'and'. Having more than 1 displayed value at the same time can create confusion
5.5. ~~***CG Dispensers***~~***Additional requirements for the display***	
5.5.1. It shall not be possible to reset displays on CG dispensers to zero during a measurement.	
5.5.2. The start of a new measurement shall be inhibited until the display has been reset to zero.	
5.5.3. Where a measuring system is fitted with a price display, the difference between the indicated price and the price calculated from the unit price and the indicated quantity shall not exceed the smallest currency unit. However, that difference need not be less than the smallest monetary value.	DE (Comments): Is this measuring system different from the CG dispenser?
6. Power supply failure	
A measuring system shall either be provided with an emergency power supply device that will safeguard all measuring functions during the failure of the main power supply device or be equipped with means to save and display the data present in order to permit the conclusion of the transaction in progress and with means to stop the flow of gas at the moment of failure of the main power supply device.	DE (Comments): Is this measuring system different from the CG dispenser?
7. Units of measurement	

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The metered quantity shall be displayed in grams, kilograms, **and, if applicable, in** kilojoules, megajoules or kilowatt-hours.	NL (Drafting suggestions): The metered quantity shall be displayed in grams, kilograms, or ~~**and,**~~ if applicable, in kilojoules, megajoules or kilowatt-hours NL (Comments): Must be 'or' instead of 'and'. More than 1 displayed value at the same time could create confusion
CONFORMITY ASSESSMENT	
The conformity assessment procedures referred to in Article 17 that the manufacturer can choose between are: B + F or B + D or H1 or G.'.	