











Prime movers' group on Gas Quality and H₂ handling

#4 meeting, 17th December 2020 (10:00 – 13:30 CET)

Disclaimer

The information included in this presentation is subject to changes. The proposals are presented for informative purposes only since the work is still in progress.

The organisation is not liable for any consequence resulting from the reliance and/or the use of any information hereby provided.

Housekeeping



General:

- Please mute your microphone during the session
- Please do not use the webcam function since this can affect the stability of call
- Please do not connect via multiple devices, as this will overload the Microsoft Teams tool
- If you dialled into the meeting, please press *6 to mute/unmute

Posing questions/interventions:

- For questions, please use the chat box
- Use the raise hand feature to ask for interventions
- When questions are left unanswered, the meeting organisers will answer by email

Agenda

Agenda

| 10:00 – 10:20 |
|---------------|
| 10:20 – 11:00 |
| 11:00 – 12:10 |
| 12:10 – 12:20 |
| 12:20 – 13:25 |
| |

13:25 - 13:30

Closure & next meetings

Take-aways from last meeting

Take-aways



Depending on the application, **gas quality fluctuations can have very different consequences**: changes in the end-product characteristics, efficiency and emissions. It is **not easy to predict** what these consequences might be.



Grid-level measures could help to minimize local gas quality fluctuations. Offering 'blending-as-a-service' could be a potential mitigation measure to manage gas quality in the future



Enabling controls for use of hydrogen needs to be addressed to ensure an effective roll out of H2 applications



Current **boilers could handle 20% - 30% vol. H2**. Beyond that, different platforms may be needed (e.g., different burners, combustion control, safety measures, etc.)



Key to synchronise the roll-out of compatible appliances with the production and distribution of decarbonised and renewable gases in the grid



The **TRL of the membrane process is 9**, however uncertainties in membrane separation behavior and membrane stability are to be examined. Membrane systems for gas processing from 100 - 300,000 m³/h already exist (TRL 9)

Stakeholders' presentations in a nutshell

- Small changes in gas quality can result in great changes in end-product, for instance
- Importance of NCV (net calorific value) changes
- On-site gas quality measurement equipment in combination with advanced combustion control could be effective but costly

Glass industry*

Control manufacturers

- Getting ready for H2 (blends and dedicated)
- Certification for controls is key
- Currently working on leakage, flame proving, adaptive combustion control and detecting incomplete combustion

*Case study presented by GWI

- Securing that boilers are adaptable to changing blends could be feasible at limited cost
- Standardisation work ongoing
- Key to develop technical rules defining the interaction between new gases and heaters to roll-out compatible appliances with the production and distribution of renewable gases

Heating industry

System operators

- Gas quality data provision creates great added value to the whole energy value chain
- Open dialogue and exchange of information with up- and downstream is key
- Flexibility in the standards within the system is key to enhance transition of gas and ensure security of supply

"Not everything that is faced can be changed. But nothing can be changed until it is faced" - James Baldwin

Way forward

Presentation of feedback received

Feedback received - Participants























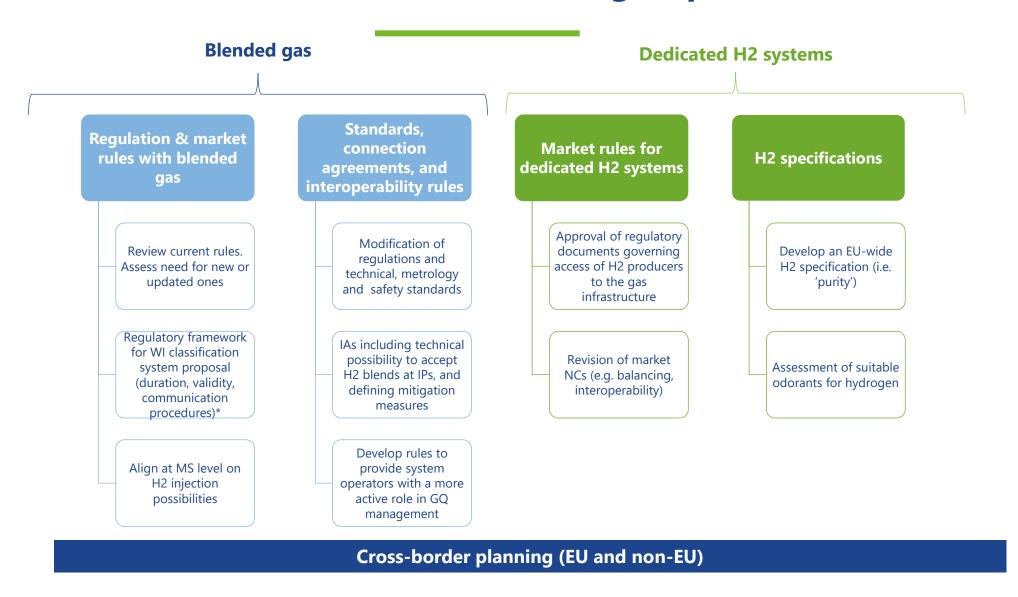








Identified 'Cross-cutting' topics



Feedback - 'Cross-cutting' topics

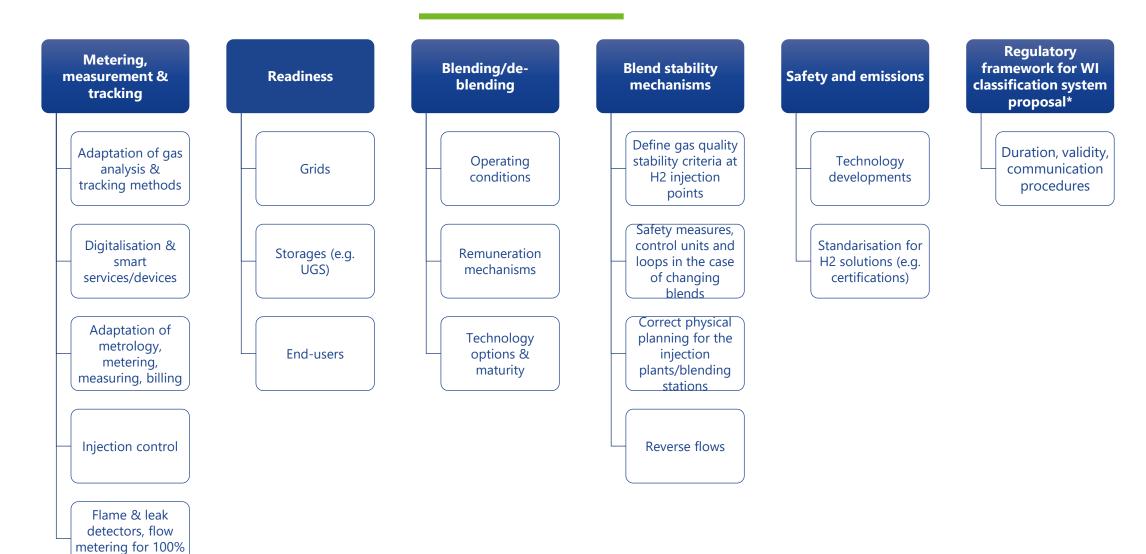
- These are issues that we do **not consider as being technical enough to be automatically in the focus** of this prime movers' group. However, they are relevant and might need to be addressed as well.
- 3.1. Do you agree with the statement above?
 - Mostly yes
- 3.2. What is **realistically possible** to be tackled within this group?
- An estimation of the conversion/retrofitting/adaptation costs
- Identify or evaluate which **rules could be directly transferable** to the future situation and where recommendations can be made
- Regulatory framework for WI classification
- Identify what is missing and provide an overview/recommendations of the **main issues to be tackled by future EC** proposals
- The amount of work should be kept at a realistic level and build on already ongoing activities, without creating additional burdens

Feedback – 'Cross-cutting' topics

Other comments

- Provide guidance about which options can be practically implemented. Overview of barriers, impacts
- Focus on more political topics
- Some of the issues are already under the scope of other organizations (CEN-CENELEC, Marcogaz, EASEE-gas, GERG)
- Some of them are **not mature enough**, or require work of other groups/at other levels
- Without "Modification of regulations and technical, metrology and safety standards" H2 blending will not be possible
- For blending, a common understanding on the current rules and what would need to be reviewed is important. As well as get knowledge of MSs plans for injection of H2
- The legal framework is responsible for cross-border issues in the first place. At this point the cross-border implications would be the most important (incl. cost sharing, potentially odourisation)

Proposal: Sub-groups examples



H2

^{*}Although it is a regulatory topic, this group seems to be the appropriate set up to start this work. An ad-hoc sub-group could be created for that purpose

Feedback - Proposal for "sub-groups"

- 4.1. Is the **scope** of the proposed sub-groups defined appropriately?
- 4.2. And the **issues** to be tackled by each of them?
- Mixed answers
- More clarity is needed, specially about how to liaise with ongoing work of other associations (CEN-CENELEC, Marcogaz, EASEE-gas, GERG, EU funded projects, etc)

- 4.3. How many **groups** would you see as manageable or necessary?
- Manageable
- 2-5 groups
- Maximum with < 10 people each
- Ensure that a variety of views is present in each group

Feedback - Proposal for "sub-groups"

- 4.4. What could be **improved** from this proposal?
- Establish specific assignments, scope and time frames from the beginning, which could be adjusted from group to group
- Leave open the option to include more 'issues' in the future, if needed
- The aspect of 'converting' is not taken in account
- For readiness and standardisation co-operation with other associations should be started from the beginning
- Each sub-group should provide an analysis or assessment of costs
- For the sub-groups, **additional representatives** with the right expertise should be authorized
- Readiness as a sub-group is not relevant as such; it is more the result expected from the PMG: to show the readiness of the whole gas value chain to handle green gases
- The aspect of adequate/resistant materials is important and could be tackled
- Make sub-groups reflecting the main interfaces identified in the Excel sheet (e.g., DSO-end-use; TSO-end-use)
- Prioritize the activities and organize work with respect to time
- Readiness and blending/ deblending are topics that may contain the relevant regulatory issues

Feedback - Governance of potential "sub-groups"

- 5.1. Who should **guide and facilitate** the discussions in the sub-groups?
 - Most answers suggest to have a 'lead expert organization' on the topic chairing each sub-group, while others suggest to appoint an independent stakeholder, such as JRC
- 5.2. How should these sub-groups **inform** each other?
 - Most answers suggest that ENTSOG and DSOs as chairs of the PMG can facilitate the cooperation and information flow between the sub-groups, in close cooperation with the chair of each sub-group
 - For efficient governance a project coordinator could be appointed, to structure the topics to be discussed by the groups and ensure that the relevant people with the right knowledge remain available to take part in different discussions
 - Briefing from each sub-group during the PMG meetings, to report on progress, areas where some issues arise, etc.

Solution template proposal

- For each issue or cluster of related issues, the following questions should be answered by the sub-group in charge:
 - 1. Which is the issue and why it is important? (impact, consequences)
 - 2. Did it exist before or is it a consequence of introducing renewable gases (biomethane, H2, syngas, etc)?
 - 3. Stakeholders directly impacted
 - 4. How immediate should it be tackled? (in years)
 - 5. Is there any project or initiative already addressing this issue? If yes, which one and when would the deliverable be ready?
 - **6. Which solutions or mitigation options already exist? Which are the associated costs?** (knowledge sharing of how this issue is currently being tackled in different countries or in other processes but could be extrapolated)
 - 7. Is there a solution that could be widely applicable in most cases?
 - 8. If yes, what would be needed to make it widely available and applicable? If not, why? (is it lack technical experience, regulatory framework, market rules? At EU or national level? Go deeper into the specifics)
 - 9. Is there any solution/idea that should be further investigated? (field tests, knowledge gaps, etc)
 - **10. Final decision or recommendation** (is the issue already addressed and analysed? Should the prime movers' group work on this specific topic? Or should this issue be tackled in another organization or level?)

Feedback - Solution template proposal

- 6.1. Is this proposal useful?
 - Mostly yes, but a simplified version would be preferrable
- 6.2. Would it help to achieve our **goal**?
 - Yes, for many stakeholders as a 'guideline' to kick-off and structure sub-group work. For some others, the goal is not clear
- 6.3 Are we **missing** relevant questions?
 - Include which stakeholders have been involved in the sub-group and a 'free comments' box
- 6.4. How many meetings do you estimate that the sub-group would need to complete it?
 - 3-4 likely, but to evaluate it the group should provide a planning after the first subgroup meeting depending on current knowledge on the topic
- Other comments:
 - Draft a first answer to the template questions before the start of the subgroup to facilitate discussion
 - Map/list topics that should be covered by the template and prioritize them
 - Differentiate between 100% hydrogen and blending to natural gas
 - Provide guidance about what **kind of deliverable and/or documentation** is expected from the sub-group to deliver
 - Ensure that the pre-proposals developed are **retraceable and reasoned** also for third parties
 - The representatives of the group shall further design the needs

Suggestions

- How would you suggest to move forward?
 - Each organization should appoint people to work in the different sub-groups. People attending PMG cannot do all
 - Propose a plan for the sub-groups and clearly identify the goal, scope and results
 - Kick off sub-groups work in January 2021
 - A short description of expectations/scopes should be circulated with a call for experts and priority setting
 - First map out what is already being done in other associations and based on that find the priorities to be addressed
 - Narrow the scope to 100% H2 and H2 blending, without biomethane, syngas, etc.
 - Aim for at least 1 physical meeting for each sub-group
 - Assumptions on the future design of the system may be needed as common framework for upcoming discussions, e.g.,
 whether separate systems are to be included for pure hydrogen and for blended gas and how they interact, common quality standards system or quality adjustment equipment at IPs, etc
 - A top-down model, i.e., a role model with the susceptible new operations, or a description of the full value chain focusing on how it changes
 - Make sure that all other information sources are captured early to avoid 'reinventing the wheel'

Suggestions

- Is there any specific task or deliverable you see important to be carried out during 2021?
 - Aim at an overview of solutions for the future, prepare options for the Commission to feed in the upcoming legislative work
 - Visibility of economic and efficient separation processes would be interesting
 - Must have 2021 : regulatory framework for WI classification
 - Deliver a common roadmap from the whole gas value chain of what we can achieve in the short-term, medium-term and long-term. For example, the feasibility of 20% hydrogen blending could be an important deliverable
 - Overview of MSs activities
 - Mapping of areas that should be addressed/modified to allow the use of gases other than natural gas
 - Identify the potential showstoppers and "low hanging fruit"
 - Speed up the progress on the hydrogen standards is important
 - Cooperation with all relevant stakeholders outside Prime Movers group
 - Announce and promote ongoing work

Conclusions

Conclusions

'Cross-cutting' topics

- It is acknowledged that most of them are <u>already being tackled</u> within another groups or associations (CEN/CENELEC,
 Marcogaz, EASEE-gas, GERG, EU funded projects, etc). The rest may need to be tackled at a later stage of the process by the PMG:
 - Regulation & market rules with blended gas (Review current rules. Assess need for new or updated ones; Regulatory framework for WI classification system proposal (duration, validity, communication procedures; Align at MS level on H2 injection possibilities) → not clear which value could PMG bring into the discussion apart from the WI framework one, and eventually H2 injection possibilities
 - Standards, connection agreements, and interoperability rules (Modification of regulations and technical, metrology and safety standards; IAs including technical possibility to accept H2 blends at IPs, and defining mitigation measures; Develop rules to provide system operators with a more active role in GQ management) → CEN-CENELEC, CEN-GERG H2 PNR, TSOs ongoing work
 - Market rules for dedicated H2 systems (Approval of regulatory documents governing access of H2 producers to the gas infrastructure; Revision of market NCs (e.g., balancing, interoperability) → discussions ongoing on other fora. Not to be tackled by PMG at this point
 - H2 specifications (Develop an EU-wide H2 specification; Assessment of suitable odorants for hydrogen) → Some work ongoing:
 EASEE-gas CBP on H2 specifications for repurposed NG grids, CEN TC 234 NWIP, EU projects assessing odorants for H2 (e.g., Hy4heat)
- Most stakeholders ask for the <u>WI regulatory framework</u> to be included within the PMG work
- The PMG could be used for presenting the results of ongoing processes related to these topics and knowledge sharing

Conclusions

Sub-groups

- Priorisation of topics is needed taking into account upcoming EC work and proposals. Further work could be
 done when the most 'urgent' topics are been dealt with
- A limited number of sub-groups will be formed followed by a <u>"call of interest" or "call of experts"</u>. These experts
 do not necessarily need to come from the PMG representatives
- Each sub-group to be chaired by an expert organization in the topic
- 'Project coordinator(s)' should facilitate the coordination and information exchange between all sub-groups and stakeholders in cooperation with the chairs of the different groups. ENTSOG and DSOs are already taking that role
- All stakeholders should ensure that <u>no overlapping</u> with the work from other organisations occurs.
 Representatives from those associations are encouraged to communicate if that is the case. ENTSOG and DSOs could also support this task
- Work from all sub-groups should be started <u>as soon as possible</u> and simultaneously

Q&A

Sub-groups plan

General proposals

General sub-groups proposal

Sub-group 1) WI framework:

- Goal: set up the basic rules and procedures needed for the implementation of the WI exit classification system proposal
- At least, 4 processes should be investigated: Assignation & switching classes; Assessment of sensitives users; Identification & analysis of mitigation measures; Communication & information flows

Sub-group 2) Value chain H2 readiness roadmap:

- Goal: Deliver a common & co-developed roadmap from the whole gas value chain of what could be feasible for the different interfaces in the short-term, medium-term and long-term, and how they could be interlinked
- This sub-group needs the input and participation from all stakeholders (up-, mid-, downstream, manufacturers, etc.) plus other stakeholders who are already working on readiness topics (e.g., Marcogaz, HIGGS and THYGGA projects, TSOs projects, GERG, etc.)

Sub-group 3) Cross-sectoral decarbonisation solutions:

- Goal: Provide guidance about which gas quality and H2 handling options and tools can be practically implemented and how along the different interfaces (cross-sectoral approach)
- The following topics could be covered: blending/de-blending & conversion services; technology options & maturity (including digitalisation, smart services/devices, metering and metrology equipment); blend stability & injection control mechanisms; specifics for reverse flows cases; feasibility of injection points (i.e., location)
- Applicable to 'green gases' blends and/or dedicated H2 systems, depending on the case study

WI regulatory framework sub-group



Sub group plan WI framework to enable WI standardisation

Proposal SFGas GQS

2020-12-17



The proposal for standardisation includes:

- ❖ recommendation for a WI entry range
- ❖ requirement of a WI exit classification incl. permissible deviation
- more information and certainty for end-users
- flexibility to use renewable and decarbonised gases
- acknowledgement of specific steady regional situations (e.g. LNG, national production)
- → European legal/regulatory framework needed; aspects listed in SFGas GQS draft report
- → Trial on WI exit classification in process at Thüga

"The WI entry range should be within 46,44 and 54,00. (phrased as recommendation in the sense of the CEN/CENELEC rules of standard drafting)

Table 1 —SFGas GQS Wobbe Index entry range

| minimum WI | maximum WI |
|----------------------------------|---|
| [15°C/15"; MJ/m³] a ¹ | [15°C/15°; MJ/m³] a, b |
| [25°C/0°C kWh/m³] | [25°C/0°C;kWh/m³] |
| 46.44 MJ/m³ [13,59 kWh/m³] | 54.00 MJ/m ³ [15,8 kWh/m ³] |

The distributed gases shall be classified according to Table 2 (phrased as requirement in the sense of the CEN/CENELEC rules of standard draftina)

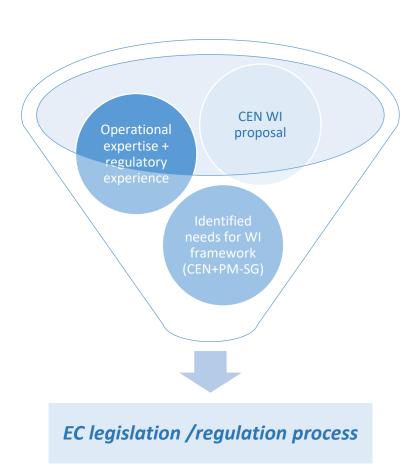
Table 2 - WI exit classification

| Class | Indicated WI range [MJ/m³, 15/15] | Bandwidth of WI of distributed gases at the exit point [MJ/m³, 15/15] (Grey values 25°C/0°C) | Deviation (in percentage) (= Conclusion on percentiles) |
|--------------------|---|---|--|
| Class specified | Lower and upper limit values defined per exit point with an interval of 3,7 MJ/m³ Based on the distributed gas, within the WI range. | The WI of the distributed gases is ≤ 3,7 MJ/m³ [1,08 kWh/m³] within the WI range of 46,44 MJ/m² to 53 MJ/m³ [13,59 kWh/m³ to 15,8 kWh/m³] | The WI of the distributed gas can fall below the lower WI limit value of the range for a maximum of 1% of the duration of the class specification and above the upper WI limit value of the range for another 1% of the time Clarification of the extent/ intensity of deviation and the time distribution of the '1% deviation' is required in the framework discussion. |
| Class extended* | Lower and upper limit values defined per exit point. Based on the distributed gas, within the WI range. Note: This class requires an assessment (due diligence principle) of the presence of sensitive users downstream of the concerned exit point and, if any, the implementation of appropriate mitigating measures. | Any other situation of WI bandwidth and/or of the WI range Steady/experienced situations in class extended could be considered similar to a class specified (e.g. after an initial assessment) and should be framework discussion (need to be addressed in clause 6, framework discussion) | The WI of the distributed gas can fall below the lower WI limit value of the range for a maximum of 1% of the duration of the class specification and above the upper WI limit value of the range for another 1% of the time Clarification of the extent/intensity of deviation and the time distribution of the '1% deviation' in the framework discussion is required. |



EU Prime Mover Process – Subgroup for WI framework discussion

- Reliable WI framework is a must for the proper implementation of the CEN SFGas GQS proposal in the CEN gas quality standard EN 16726
- EC DG Energy expects the Prime Mover Group to provide more concrete input on available options for implementing the CEN WI proposal and possible principles to be included in regulation
- First results are needed as input for revision of the EC gas legislation by March 2021
- → Sub-group kick-off required as soon as possible!
- → SFGas GQS TF1/CAG ready to provide a basic kick-off document and to strengthen the sub-group set-up.



Prime movers' process WI framework discussion Draft concept

Rules and

procedures

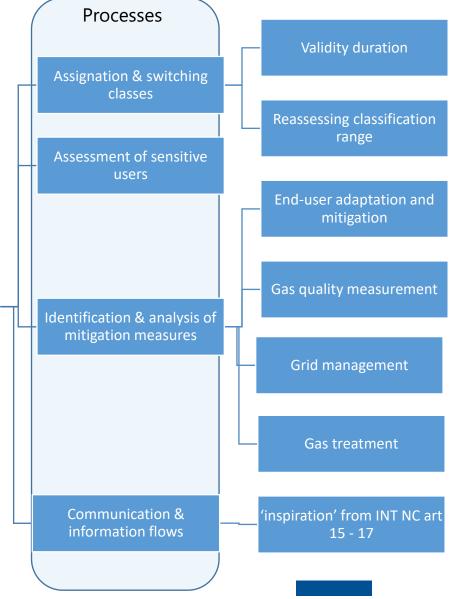
Goal: facilitate the setting of basic rules and procedures (e.g., technical business rules) needed for the implementation of the CEN WI exit classification system proposal

Based on CEN SFGas GQS at least 4 processes should be investigated:

- 1.Assignation + switching of classes
- 2. Assessment of sensitives users
- 3.Identification + analysis of mitigation measures
- 4.Communication + information flows

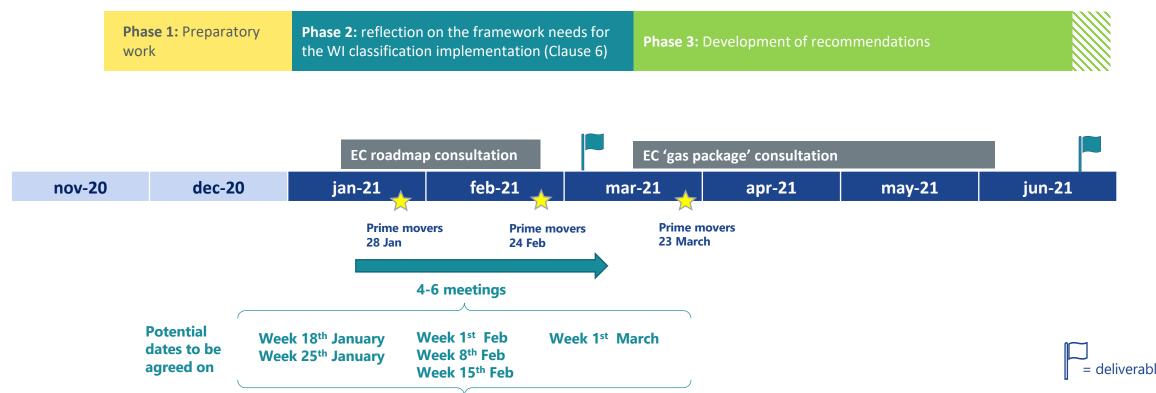
For each process, the following should be identified, as minimum:

- **How** is the process defined? For which aspects European/national framework is needed? (verification of common understanding)
- Who is involved in the process (interfaces, responsibility, liability)
- When is the process carried out (situation, duration, validity)
- **How** is the process implemented (e.g., document the process and methodology used, step-by-step approach)





Prime movers' process WI framework discussion Draft timeline



- Call for experts to PMG Stakeholder for nomination of SG members:
- → Involvement of SFGas GQS experts for continuity
- → Involvement of further experts with related operational expertise
- Appointment of a SG Convenor and possibly Co-Convenor



Solution template proposal Framework for CEN WI proposal

- For each issue or cluster of related issues, the following questions should be answered by the sub-group in charge:
 - 1. Which is the issue and why it is important? (impact, consequences) EC standardisation mandate M/400 requests inclusion of WI aspects in CEN GQ standard; without European framework on procedures, responsibilities and liabilities, standardisation and implementation of the CEN WI proposal is not realistic
 - 2. Did it exist before or is it a consequence of introducing renewable gases (biomethane, H2, syngas, etc)? It existed before, but the introduction increases the necessity of a GQ framework
 - 3. Stakeholders directly impacted? All parties along the gas chain
 - 4. How immediate should it be tackled? (in years) Immediately (2021)
 - 5. Is there any project or initiative already addressing this issue? No (CEN SFGas GQS documented the needs identified during the pre-normative WI studies)
 - 6. Which solutions or mitigation options already exist? Which are the associated costs? (knowledge sharing of how this issue is currently being tackled in different countries or in other processes but could be extrapolated)
 - 7. Is there a solution that could be widely applicable in most cases? Inclusion in legal/regulatory framework
 - 8. If yes, what would be needed to make it widely available and applicable? If not, why? (is it lack technical experience, regulatory framework, market rules? At EU or national level? Go deeper into the specifics)
 - 9. Is there any solution/idea that should be further investigated? (field tests, knowledge gaps, etc)
 - **10. Final decision or recommendation** (is the issue already addressed and analysed? Should the PMG work on this specific topic? Or should this issue be tackled in another organization or level?)



Kris De Wit Chair CEN SFGas GQS WG

+32 478 97 93 84

kris.dewit@gas.be

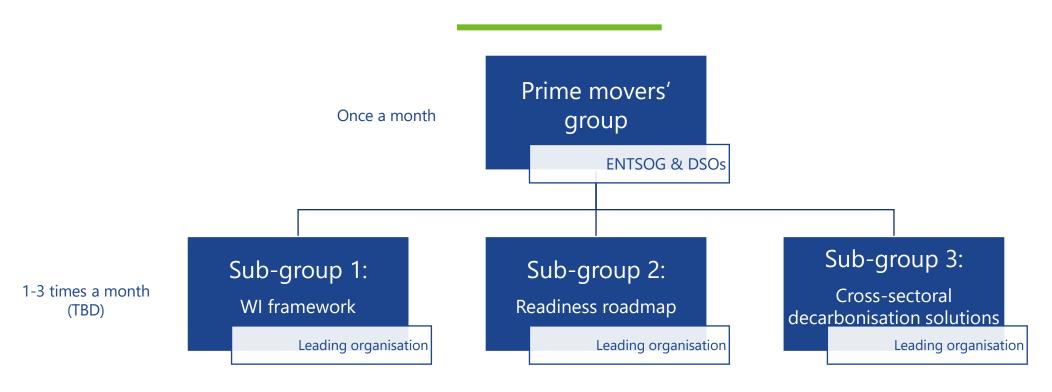
Hiltrud Schülken, Secretary CEN SFGas GQS WG

+49 228 9188 905

schuelken@dvgw.de

For discussion & decision

Sub-groups proposal – For discussion & decision



- Regular exchange between sub-groups chairs and ENTSOG & DSOs could be useful to:
 - prepare the briefing of each sub-group to the PMG
 - identify issues, areas or topics that need further discussion in the PMG
 - coordinate and align efforts
 - ensure an adequate and timely communication between all sub-groups

Sub-groups proposal way of working – For discussion & decision

- Before the first sub-groups meetings:
 - Kick-off meetings in January 2021/beginning February. Thus, a "call for experts" or "call for interest" should be launched before: for participants and for the chair role
 - Stakeholders to provide a draft answer to the 'solution template proposal'
 - ENTSOG & DSOs to draft plan of the goal, scope, deliverable and timeline for each sub-group
- **During** the first sub-group meeting:
 - Chair should be appointed by the whole sub-group
 - Agreement on the plan: goal & scope, deliverable, timeline
 - Agreement on the way of working (e.g., frequency of the meetings, inputs to be provided by different participants, potential liaison with other groups/associations, type and format of deliverable, etc)

Discussion & decision session

2021 goals & deliverables - Proposal

Advisory Panel for Future Gas Grids - Sara Piskor, Director Strategy, Policy and Communication at ENTSOG





Advisory Panel for Future Gas Grids

Summary

Sara Piskor, Director Strategy, Policy and Communication



ENTSOG Action Plan



- Proposal for actions for the Future of Gas Grids
- Proposal for stakeholder engagement



Advisory Panel for the Future Gas Grids

Scope



Scope proposal:

- Coordination & discussion between gas & H2 value chains
- Support gas TSOs, DSOs & stakeholders in identifying practical challenges & solutions in preparing future EU gas grids
- Discuss how to convert and adapt the existing system to future needs, focusing on infrastructure, technical, market design, regulatory and organisational aspects of such transition

Link to ENTSOG 2050 Roadmap Action Plan:

- Infrastructure: H2 backbone development & retrofitting/repurposing of existing gas infrastructure
- Markets: Same market design and regulatory framework for H2 & gas grids
- Technical: Interoperability aspects (role of blending, EU-wide approach for CO2 infrastructure)

Positioning vis a vis other initiatives



Focus on projects & barriers

European Clean Hydrogen Alliance

European Net-zero alliance

Focus on electricity,
 H2, biogas, heating,
 transport, etc



Advisory Panel for Future Gas Grids

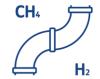
- Focus on coordination & transparency along H2 & gas value chain on how to transition gas grids
- Focus on regulatory, market & technical topics
- Framework umbrella for Prime Movers



 Focus on development & transferability of GOs under the existing & future legal framework Prime Mover
Group on
GOs &
Certificates

External contribution from GfC/EHB, H2GAR, civil society, etc

Prime Mover Group on Gas Quality & H2 Handling



Focus on delivering concrete principles on gas quality & H2 management for benefit of all consumers



Thank you for your attention

Sara Piskor, Director Strategy, Policy and Communication

Sara.Piskor@entsoq.eu

ENTSOG - European Network of Transmission System Operators for Gas Avenue de Cortenbergh 100, 1000 Bruxelles

www.entsog.eu | info@entsog.eu







Proposals for discussion & decision

2021 goal & deliverables – For discussion & decision

Goal: Provide inputs that need to be tackled by future Commission proposals in 'gas market design'

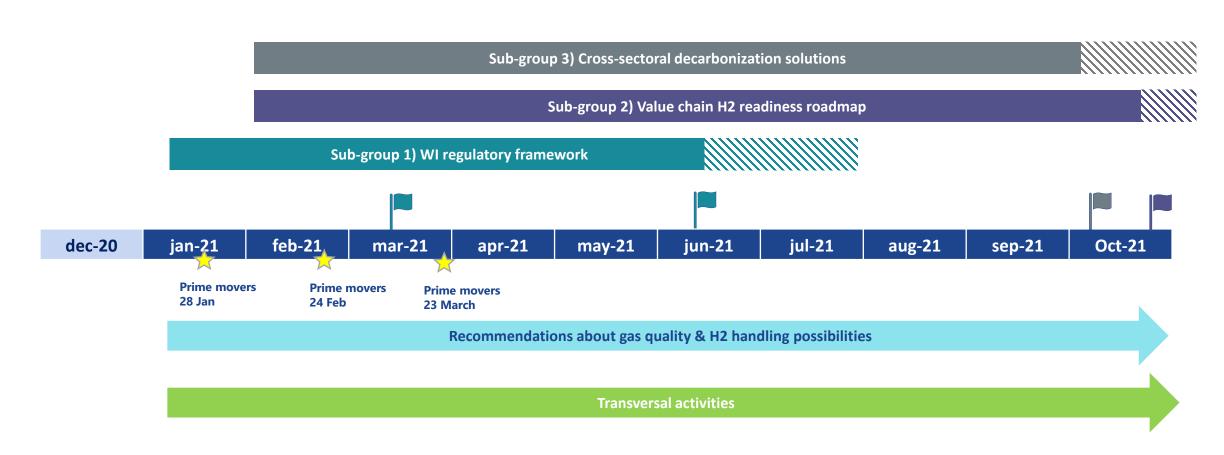
Deliverables proposal & expected times:

- For Q1 and Q2 2021: Regulatory framework for WI classification proposal (Sub-group 1)
- For Q2 / Q3 2021: Fact-based recommendations about which options can be practically implemented for gas quality & H2 management along the different <u>interfaces</u>. (Sub-group 3). Cost assessment is also desirable
- For Q3 2021: A common roadmap from the whole gas value chain of what could be feasible for the different <u>interfaces</u> in the short-term, medium-term and long-term (**Sub-group 2**). Cost assessment is also desirable.
- For Q3 / Q4 2021: Produce general recommendations about gas quality and H2 handling possibilities and best practices at the different interfaces

Transversal activities:

- Promote ongoing work
- Engage with stakeholders outside the prime movers' group
- Ensure a regular exchange on latest gas quality and H2 handling practices and projects (e.g., metering, safety, H2-ready equipment and devices, etc.)
- Coordination and alignment with other associations or WGs work on the topics

2021 timeline proposal – For discussion & decision





Discussion & decision session

Closure & next meetings

Overview of next steps – Wrap up

Sub-groups

- Call for experts/interest for the different sub-groups will be launched (and will be running until mid-January). For <u>participants</u> and <u>chairs</u> roles
- Kick-off meetings expected beginning February
 - Sub-group 1 on WI framework will follow a 'streamline' process. First meeting expected to take place on mid-January
- Before the kick-off meeting:
 - Draft an answer to the 'solution template proposal'
 - Draft plan of the goal, scope, deliverable and timeline
- During the kick-off meeting:
 - Agreement on way of working, goal, scope, deliverable and timeline
 - Identification of synergies between other associations work and potential liaison

Next PMG meeting (28th January)

- Finalise formation of sub-groups based on 'call of experts/interest'
- Finalise agreement and alignment on 2021 goals and deliverables
- Status update on WI framework first discussions (TBC)

Next meetings

Next meeting 28th January from <u>09:30 to 13:00</u> CET



- Proposal for next meetings:
 - 24th February from 09:30 to 13:00 CET
 - 23rd March from 09:30 to 13:00 CET













Thank you for your contributions and Merry Christmas