

## Input to GD 4: Financial Security (Art. 19) and Financial Mechanism (Art. 20)

24th Feb 2023

### General input to GD4

GD4 should:

- Help to ensure predictability and acceptable terms for users, balancing risk and profit for parties responsible for transport and storage so CCUS value chains are successfully implemented in Europe
- Emphasize that the starting point for financial security requirements must be that CCS is a recognized climate measure that permanently and safely stores CO<sub>2</sub> in geological formations. Hence, guidelines should allow and encourage quantifying and limiting amounts set aside for financial security, allowing for frequent reassessment of the amounts in accordance with the development of the storage. This may, when done every third year or more frequently, allow for financial instruments such as insurance.
- Ensure optionality in selection of financial instruments and allow for flexibility when it comes to aggregating financial securities over time
- Allowing for probability considerations when determining the amount of financial security to avoid unnecessary excessive costs stopping the development of CO<sub>2</sub> storages.

### Specific proposals to GD4

<b>Reference to text in Guidance Document / general comment:</b>
2.1, page 1 Introduction to the guidelines – an enabling mindset (TBC)
<b>Proposed changes:</b>

As stated in the current 2.1 "The aim of the guidance is to strike the right balance between full coverage of obligations as required under Article 19 while at the same time not overpricing the risks in relation to these obligations for early movers". As this is a challenge for all, the reference to "early movers" should be removed.

Further, the introduction should generally emphasize that the starting point for financial security requirements must be that CCS is a recognized climate measure that permanently stores the CO2 in geological formations. The Guidance document #4 must be based on current experience showing that emissions from a worst-case scenario from a storage facility are low, and that the probability of such emissions is extremely small. Accordingly, the guidelines should allow and encourage "capping" the amount set aside for financial security and allowing for a frequent reassessment of the amount in accordance with the development of the storage. The GD 4 should include some wording on how FS can be covered by "evergreen" financial instruments with short duration.

**Justification:**

Without such a mindset we might end up with a practice where the competent authorities' requirements on financial security leads to unnecessary and extensively high costs on storage companies/operators. To successfully implement CCUS value chains in Europe, we need to ensure predictability and acceptable terms for users and a balance between risk and profit for the operators/owners of storages.

**Reference to text in Guidance Document / general comment:**

Page 2 FS being "valid and effective before commencement of the injection".

**Proposed changes:**

Operator should be given time to build up FS over the life of the asset.

**Justification:**

This is a demanding requirement to meet prior to any injection or any income. As the risk is initially risk low, the operator should be allowed to build up the financial security over the life of the asset.

**Reference to text in Guidance Document / general comment:**

Section 2.2 (b) (i) & (ii) "Options and Criteria for “any other equivalent”, page 7 (as marked in the document) - The Guidance Notes should contain more details and a specific section on 'self/related party guarantees' which can be 'an equivalent' to a financial security' and is likely to be considered as a solution by CCS operators.

**Proposed changes:**

Further guidance on how CA may determine acceptability of 'self/related party guarantees'

**Justification:** 'self/related party guarantees' are likely to be considered as a solution by many CCS operators

**Reference to text in Guidance Document / general comment:**

2.3, Table 1, 5.B and 3.2, page 43 Calculating Financial security

**Proposed changes:**

Financial contribution should not be included in the calculation of financial security.

**Justification:**

Art. 19 of the CCS-Directive is not clear that the FS should also cover the ability to make FC available. That could be considered as "double-counting" as the FS will no longer be required when FC is made, it would then be wrong to also calculate value of FC into the FS.

Under FS the intention should be that sufficient security is in place in case the operator cannot fulfill its obligations, whereas the FC under Article 20 is to be put in place for the responsibility to be transferred to the CA. There is then no longer a primary obligation on the operator, but rather, the operator should provide a financial contribution for the CA to take on this responsibility. Several of the instruments discussed for FS is therefore not suitable. Further, the risk should be much lower with regards to leakage/irregularities, as injection has stopped, and a monitoring period indicating that the CO<sub>2</sub> is permanently trapped has lapsed.

**Reference to text in Guidance Document / general comment:**

On the selection of financial instruments.

**Proposed changes:**

'Important to ensure "optionality".

**Justification:**

So that solutions/tools to be selected are sufficiently low cost to enable a low margin CO2-storage investments.

**Reference to text in Guidance Document / general comment:**

2.4 Page 11. Phased FS. MS may want to consider allowing operators to provide FS in phases."

**Proposed changes:**

A "softer" implementation: 1) FS will be subject to frequent updates to allow for financial instruments such as insurance. FS for the early phasis should reflect the very low risk in the beginning of operation (low volumes and no removal costs). Over time as one gain experience from the storage, e.g. no leakage issues, one reassess the FS. 2) Both initially and when FS is increased interpretation of "adequate FS" should give operator some time to build reserves for FS, provided that operator can share a robust business plan with capacity both to cover operating cost (Monitoring) and building reserves.

**Justification:**

'It is very demanding to provide full cover for FS prior to any income. There is a strong need for a "softer" implementation.

**Reference to text in Guidance Document / general comment:**

Section 2.4 (B) "Principles for Determining Amounts of FS for Each Obligation or Combination of Obligations" page 12 lines 1-3 " Amounts should be sufficient for the CA and/or its agent (e.g., contractor) to perform the obligation (often termed "third-

party costs”) and should include necessary costs of CA overheads, oversight, and support services;”

**Proposed changes:**

It is proposed to delete this section.

**Justification:**

It is objectionable that CA overhead should be included.

**Reference to text in Guidance Document / general comment:**

2.4 Amounts of FS, page 11, bullet 2: 'Amounts should not be adjusted by multiplying with an estimated probability to calculate an expected value" (see also comment on 2.4 c) iii)

**Proposed changes:**

The guidance documents should open this strict limitation and allowing for considering the likelihood of events when setting financial security across multiple projects. All stakeholders involved, MS, CA and operators, should enable and facilitate cooperation across multiple projects.

**Justification:**

Without allowing for considering the likelihood of unlikely misconducts, investment in storages might be stopped by excessive costs. The development of solutions that works across multiple projects might allow for probability adjustments. Once the aggregated FS across project is large enough to cover a correction of a significant leak FS for individual project can be reduced.

Allowing for this might fit better with Art. 19 (2) which states that "The financial security shall be periodically adjusted to take account of changes to the assessed risk of leakage and the estimated costs of all obligations...".

Expected value techniques are commonly used for uncertain / contingent liabilities. Requesting the FS to cover a worst-case scenario will be an onerous requirement on the operator that would prevent the deployment of the CCS industry. Probabilistic risk assessment is commonly used by both Industry and Governments as a

practical/reasonable way to allocate scarce resources to tackle risks where most appropriate without which human activities would be severely constrained.

**Reference to text in Guidance Document / general comment:**

2.4 b) Amounts of FS, page 12 page 12 lines 7-8 - 'A bottom-line contingency of at least 25% should be required.

**Proposed changes:**

Do not require a contingency of 25 % to cover uncertainties.

**Justification:**

The Guidance Document should not be so prescriptive as to state that the contingency must be 25%. A guidance could be that contingency could be agreed between Operator & Competent Authority should be based on scientific data.

A bottom-line contingency of at least 25% is likely to worsen an unreasonable burden. As a detailed evaluation of the risks must be done it would be inappropriate to require a contingency of 25 % to cover uncertainties. Arguably, the exposure represented by FS would add significantly costs to the storage project and the actual cost of providing the FS would be a significant fraction of the overall cost of the project.

**Reference to text in Guidance Document / general comment:**

2.4 Amounts of FS page 13 'The amount of monitoring FS needed will depend on whether the CA intends to close the storage site or intends to temporarily continue injection until a new permit is issued.

**Proposed changes:**

There should not be a disadvantage to the operator in terms of level of FS based on uncertainty on what the CA decides to do on whether closing or issuing new permit, as this is outside the operator's control.

**Justification:**

Keep the cost of FS to a minimum.

**Reference to text in Guidance Document / general comment:**

2.4 Amounts of FS, page 15. CA. Article 18(1)(b) refers to a minimum period of at least 20 years prior to transfer of responsibility to the CA; but the minimum period may be shorter than 20 years if the CA is convinced that the criterion in Article 18(1)(a) has been complied with before the end of that period. Nevertheless, for calculating the amount of FS, this GD recommends using a 20-year post-closure monitoring period as a default because the actual length of the post-closure period cannot be predicted in advance.

**Proposed changes:**

Should reconsider having the 20 year period as a minimum if it is likely that this time period will in fact be shorter.

**Justification:**

A very long duration of FS in addition to the uncertainty of having the responsibility for such a long period is a hinder for CCS activities. Generally, it seems that the GD approach is to require a very extensive FS covering all possibilities, which will drive the cost of the FS up. This may not be appropriate, and the level of FS should rather be risk based. (Ref. comments on 2.4).

This also needs to be aligned across the other GDs (for example GD3, point 1, second bullet).

**Reference to text in Guidance Document / general comment:**

2.4 c) iii “The amount of the FS for this obligation can be based on the potential total tons of emissions, including due to leakages, multiplied by the market cost of purchasing an equivalent amount of allowances.”

**Proposed changes:**

Amount of FS should be based on site characterization and a probabilistic risk assessment.

**Justification:**

Ongoing updates of the FS according to emission allowances prices without any cap on both price and allowances would be a very onerous requirement on operators. A

reasonable compromise is to have both the operator and the CA authority to share CCS liabilities. This may also reduce the cost of the necessary FS and FC that otherwise had to be provided for the operator. Such arrangement should be dealt with and agreed between the operator and CA before final investment decision is made. By sharing or capping liability, the MS takes on the residual liability.

**Reference to text in Guidance Document / general comment:**

2.4, page 24 The Guidance recommends using FS options that are simple, established, and low risk.

**Proposed changes:**

Should also add low cost to the extent possible.

**Justification:**

Underline the importance of minimizing costs.

**Reference to text in Guidance Document / general comment:**

2.5, table 3. haring of liability/reducing costs - On buying EU allowances

**Proposed changes:**

Would it be possible for EU - through the EU ETS market mechanism (etc) to keep some allowances available for potential leakages to be used for volumes expanding the cap of financial security and/or to limit the size of the FS? This to avoid unnecessary costs by limiting the responsibilities for the storage company. CO2 storage is part of the climate solution for EU member states and EU should have interest in keeping the storage costs down.

**Justification:**

Reducing the costs of FS and increasing the likely hood of successfully developing a CCS value chain.

**Reference to text in Guidance Document / general comment:**

Section 2.5 table 3 - AD - limiting liabilities/role of member states.

**Proposed changes:**

The operator should be able to offer emission allowances as security if they wish to do so. GD4 could also underline that, in case of leakage, the operator will be able to use the emission allowances it already has (if any) rather than having necessarily to purchase new allowances to cover its liability.

**Justification:**

Reducing the costs of FS and increasing the likely hood of successfully developing a CCS value chain.

**Reference to text in Guidance Document / general comment:**

Section 2.7 (c)(i) "Review and Approval/Disapproval of FS in Storage Permit Applications" page 35 line 22. "Both FS instruments and FS amounts should be reviewed and approved by the CA."

General comment: This goes slightly beyond the wording of Article 19 of the CCS directive which does not say that the financial security must be approved by the Competent Authority (CA).

**Proposed changes:**

As a minimum, the language could be softened by adding that the approval cannot be unreasonably withheld or delayed if the criteria are met. However, it is requested that the text is revised to align more closely with the wording of the CCS Directive.

**Justification:**

The guidance document should more closely align with the CCS Directive on this to minimize conflict between operators and CA and delay to implementation of storage sites.

**Reference to text in Guidance Document / general comment:**

2.7 Page 38 allowing the CA to draw funds from an instrument prior to its cancellation, termination, on-renewal, voiding, or suspension if the operator does not timely produce an approved substitute instrument.

**Proposed changes:**

Specify that this might not be applicable for all instruments

**Justification:**

'This may not be possible if the FS is an insurance

**Reference to text in Guidance Document / general comment:**

page 37 boxed text "Changes in Wording of FS Instruments" lines 1-5

**Proposed changes:**

The Guidance notes should clarify that approval of changes by the CA should not be unreasonably withheld or delayed.

**Justification:**

The proposed change is consistent with contractual obligations typical of the upstream oil & gas industry where most CCS operators derive their experience.

**Reference to text in Guidance Document / general comment:**

Section 3: " Article 20: Financial Mechanism"

General comment: Some guidance on the use of collective funding system (financed by CO2 store owners - in proportion to storage capacity, number of operated sites- or using a risk-based approach) to fund an operator's contribution to the post-transfer financial mechanism under Article 20 would be helpful.

**Proposed changes:**

None at this stage, but the guidance should include the Commission's thoughts on collective funding systems.

**Justification:**

Such collective schemes will receive more and more attention from CCS operators as CCS becomes an established Industrial activity.

**Reference to text in Guidance Document / general comment:**

3.2, page 43 All of the discussion in Part 2 of this Guidance about FS instruments is applicable to assuring the FC except for material specific to closure and to temporary continuation of operations after permit withdrawal

**Proposed changes:**

Discussions on FS are not applicable to FC

**Justification:**

Under FS the intention should be that sufficient security is in place in case the operator cannot fulfill its obligations, whereas the FC under Article 20 is to be put in place for the responsibility to be transferred to the CA. There is no longer a primary obligation on the operator, but rather, the operator should provide a financial contribution for the CA to take on this responsibility. Several of the instruments discussed for FS is therefore not suitable. Further, the risk should be much lower with regards to leakage/irregularities, as injection has stopped, and a monitoring period indicating that the CO<sub>2</sub> is permanently trapped has lapsed.