Europe Economics

Financial incentives for electricity and natural gas distribution in the regulatory period from 2025

Responses to points raised by stakeholders

December 2023

Europe Economics
330 High Holborn
London
WC1V 7QH

Tel: (0) 20 3862 9252

www.europe-economics.com

Contents

1 Introduction

This note sets out our response to the points raised by stakeholders at the two online stakeholder workshops and to the feedback provided on our draft report submitted to VREG on 13 October 2023.

The remainder of the note is structured as follows:

- Chapter 2 sets out our response to the points raised by stakeholders at the online stakeholder workshops held on 6 July 2023 and 26 September 2023; and
- Chapter 3 provides our response to the feedback received on our draft report submitted to VREG on 13 October 2023.

Our final report submitted to VREG on 24 November 2023 takes account of the feedback received from stakeholders.

2 Response to Points Raised by Stakeholders

This chapter provides our response to the points raised by stakeholders at the two workshops held on 6 July 2023 and 26 September 2023.

Stakeholder workshop 1: Framework for financial incentives

Table 1 below summarises the feedback from stakeholders relating to the framework for financial incentives, objectives and deliverables and Europe Economics' response to these points (including any changes to the framework, objectives or deliverables where applicable).

Table 1: Stakeholder comments and responses relating to the framework for financial incentives, objectives and deliverables

Comment	Europe Economics response
Noted that Fluvius is not fully accountable for all of the proposed deliverables.	We added an additional question ("Is the objective largely within control of Fluvius?") to our decision tree to reflect this point. If an objective is largely outside Fluvius' control, then it would not be appropriate for Fluvius to be held accountable for performance in relation to the objective and deliverables or for it to receive financial penalties or rewards for outcomes that were not a direct result of its actions.
Argued that the objectives were too broad and that further detail was needed for the deliverables associated with these objectives.	We provided further detail on the deliverables for the five financial incentives during Phase 2 of the project.
Raised various questions about measuring objectives and deliverables e.g. measuring protecting customers or encouraging innovation.	As set out above, we provided further detail on the deliverables for the five financial incentives during Phase 2 of the project.
Queried whether the objectives should be set for all DSOs or for Fluvius as the asset manager for DSOs.	We recommend that financial incentives should be implemented through each DSO's allowed revenue. In addition, performance for each DSO should be reported separately (where possible) to allow benchmarking of performance with a view to determining reference values and other relevant parameters for financial incentives.
Argued that the objectives needed to be SMART (specific, measurable, achievable, relevant, and time-bound) which meant that objectives based on expert panel assessment were not appropriate.	For financial incentives, our preference is for quantifiable deliverables and measures. Nonetheless, expert panel assessment can play a role in cases in which it is important to incentivise an objective but quantitative measures are not available. In addition, there is regulatory precedent (e.g. Ofgem, CRU) for using expert panels for financial incentives.
Argued that in the absence of data expert panel judgement was not the right solution as it left them open to arbitrariness and discussions.	Please refer to our response above regarding the suitability of expert panel assessments.
Noted that reputational incentives should not lead to a proliferation of questions.	Our decision tree considers the relative costs and benefits of additional (reputational) incentives under the question: "Is measuring or assessing performance unduly burdensome?"

Suggested that gas decommissioning should be added to list of objectives.	We disagree with this suggestion for the following reasons: • Gas decommissioning is a matter of government policy; • The gas network could be repurposed (e.g. for hydrogen); and • In our view it is not clear how such an incentive might work as it would be counter-intuitive to reward companies with more money for carrying out fewer activities. Overall, if gas decommissioning is deemed important as an objective, a mandatory requirement could be better suited as a mechanism to deliver this.
Commented that Fluvius needed to do more on data management.	As part of our framework we considered data management as a candidate objective and provided a recommendation regarding a suitable incentive mechanism for this.
Suggested the following two additional KPIs for Fluvius: • length of time in which Fluvius must process new PV installations; and • date by which new PV or RE is actually taken into service.	We added these metrics as potential deliverables under the "providing good connections service" objective. Our recommendation is a reputational incentive for these metrics as the time required to connect large generation connections is likely to be bespoke.
Recommended that Fluvius designates a single point of contact for clients/files for the customer engagement objective.	This is a decision for Fluvius to make.
Noted a possible duplication relating to the "reducing in-house carbon footprint" objective as this already forms part of the Fluvius' obligations under the Corporate Sustainability Reporting Directive (CRSD).	The recommendation from our decision tree is that "reducing in-house carbon footprint" should be covered by a reputational incentive. If Fluvius is already reporting its carbon footprint, then we would agree that this reputational incentive is already in place.

Table 2 below summarises the feedback from stakeholders relating to the framework for financial incentive mechanisms and Europe Economics' response to these points (including any changes to the incentive mechanisms where applicable).

Table 2: Stakeholder comments and responses relating to the framework for financial incentive mechanisms

Comment	Europe Economics response
Suggested that relative mechanism can still be used with a single DSO e.g. using international benchmark can be used to assess performance.	In theory international benchmarks for relative incentive mechanisms could be used, but in practice the lack of comparability between the specific deliverables and measures used in different jurisdictions (e.g. due to different definitions of deliverables) would pose significant challenges for the use of such benchmarks.
Noted that the rate of technological change could make it challenging to set stretching targets for absolute incentives.	In our view, this shows the need for appropriate assumptions to be applied for improvements in performance over time.
Noted a potential challenge in setting reference values for new objectives where there is no historical basis for setting reference values.	Cognisant of this challenge, our decision tree only recommends a quantitative measure when good quality historical data are available to set the relevant parameters for a deliverable.

Commented that as all DSOs in Flanders are owned by Fluvius, the incentives would not work because penalties for some DSOs would be offset by rewards for other DSOs.	We recommend that VREG switches to an absolute incentive regime where Fluvius as a whole has the potential to receive penalties or rewards based on DSOs' performance.
Raised queries regarding the use of upper quartile (and not upper decile) reference values and top down approach over bottom up (WTP) for incentive rates.	As explained during the workshop, there are different possible approaches to setting reference values e.g. using the best performing DSO as the baseline to force other DSOs to catch up before they earn any rewards. Nonetheless, there might be objective reasons why some DSOs may perform better or worse than others in relation to some objectives. While the choice between the upper quartile and other reference values (e.g. upper decile) (along with an assumption for further ongoing improvements) involves some degree of judgement, regulators often use the upper quartile as a rule of thumb to set stretching targets, meaning that there is a regulatory precedent for using the upper quartile in setting the reference value. In terms of setting rewards/penalties based on bottom-up or top-down assessments, a bottom-up approach using WTP analysis is theoretically attractive, but possibly not feasible due to the lack of WTP estimates in the existing literature that would be appropriate for the objectives relevant to VREG.
Argued that where DSOs fail a target, additional resources might be needed and not a negative incentive.	We strongly disagree with this proposal as the provision of additional funds in the event of underperformance goes against sound regulatory principles and would lead to perverse incentives for the regulated firm. Reference values are set on the basis that these could be achieved from DSOs' allowed income for endogenous costs.
Noted that the rewards/ penalties received by the DSO should not undermine its financial health.	We take account of financeability considerations when we assess the total revenue at risk under the five financial incentives in Phase 2 of the project.

Stakeholder workshop 2: Early results from detailed development of five financial incentives

Table 3 below summarises the feedback from stakeholders relating to the revenue at risk for the five financial incentives and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 3: Stakeholder comments and responses relating to revenue at risk

Comment	Europe Economics response
Queried whether the 5 per cent revenue at risk referred to total costs (including exogenous costs) or only endogenous costs.	We confirm that we recommend setting the percentage of allowed revenue at risk as a percentage of allowed income for endogenous costs.
Queried whether the total allowed revenue takes into account the exogenous and endogenous cost, or only the endogenous cost. Noted that it would like to see the basis for the calculation and whether this is the operational endogenous cost for the grid (excluding financial costs and fair remuneration).	In line with our response above, we confirm that we recommend setting the percentage of allowed revenue at risk as a percentage of allowed income for endogenous costs (i.e. excluding exogenous costs). However, this should reflect all elements of endogenous costs (operating costs, depreciation and return on capital) rather than just operating costs, in line with regulatory precedents.
Asked whether the weights given to each financial incentive were comparable with the approach	Our proposed weights are broadly informed by research into the approach taken by regulators in other European jurisdictions, which are more relevant for Flanders than lessons from the US.

taken by other regulators (e.g. in the US) with more experience of financial incentive schemes.	
Asked whether the percentage of revenue at risk for electricity and gas should be the same. Commented that Fluvius uses a 'keep it running' scenario for the gas distribution network, in which expansions are out of the question.	Following the stakeholder workshop we revised our emerging thinking and amended the percentage of revenue at risk for the gas sector to 2.25 per cent for the draft report. Our final recommendation is that up to 2.25 per cent of total revenue is an appropriate weight to give the upside of the incentives package for gas, and up to 1.75 per cent is an appropriate downside. (The downside is lower due to the incentive relating to "innovation grid management to facilitate the energy transition" being reward only.)
Noted that the percentage of revenue at risk seemed quite low for some of the incentives and therefore it was not sure whether DSOs would change their behaviour as a result of an incentive mechanism equal to 0.5 per cent of allowed revenue (i.e. in the case of the smart metering and innovative grid management incentive).	As noted above, our proposed weights are broadly informed by research into the approach taken by regulators in other European jurisdictions, which suggest that these weights of this magnitude were considered sufficient to incentivise DSOs to change their behaviour.
Argued that the 50 per cent weight on the interruptions incentive for electricity seems too high.	We note that the majority of views expressed on this point came from certain types of stakeholder (organisations with a focus on environmental and sustainability objectives as well as from the regulated firm itself), and therefore may not necessarily represent the views of consumers regarding the importance of interruptions. In addition, regulatory precedent supports placing this relative weight to electricity interruptions within the incentive package (e.g. in the case of CRU 49 per cent of the total revenue at risk is allocated to electricity interruptions, which rises to 57 per cent in the case of Ofgem). In the case of gas interruptions, we revised the revenue at risk to be 0.25 per cent of allowed income, reflecting regulatory precedent and the fact that gas interruptions are already very low.
Argued that the allowed revenue at revenue risk for interruptions should be reduced to 1.75 per cent which would mean that the allowed revenue at risk for 'connections' can therefore be increased proportionally to 1.5 per cent.	As noted above, we consider that our recommendation regarding the relative weight attached to electricity interruptions (expressed as a percentage of allowed revenue at risk) remains consistent with regulatory precedent. Similarly, we disagree with the suggestion that the relative weight attached to the connections incentive should be increased (for either the electricity or gas sector) in the absence of evidence suggesting that these are equally important to customers.
Suggested that areas of performance other than interruptions (particularly connections) will be at least as important to the industry, and should be weighted accordingly.	Please refer to our response above regarding the relative weight attached to the interruptions and connections incentives.
Proposed to have the same ratio for gas and electricity, at least for the 'interruptions' incentive. A gas interruption is equally important, and holds some extra safety aspects/risks.	As explained in our report, there are three considerations which suggest a lower weight for gas interruptions compared with electricity interruptions. • First, regulatory precedents place a lower relative weight on gas interruptions than electricity interruptions. • Secondly, as the energy transition progresses in Flanders and electrification increases, it is likely to be more important that Fluvius makes efforts to reduce interruptions in the electricity grid than in the gas grid, so the relative financial incentives should be higher for the electricity interruptions incentive mechanism. • Finally, the historical data indicates that interruptions are already very low in gas, with some DSOs having zero interruptions in some years.
Commented that the proposed weight for the	As the incentive relating to "innovative grid management to facilitate the energy transition" is a new incentive under

innovative grid management incentive seemed low.	which Fluvius does not face any penalties (i.e. it is a reward-only mechanism), we recommend that a relatively lower weight is attached to this.
Proposed to have a larger portion for 'Innovative grid management'.	Please refer to our response above regarding the weight attached to the incentive on "innovative grid management to facilitate the energy transition".
Commented that the prospect of a relatively small reward may deter Fluvius from undertaking innovative activities.	Fluvius currently does not get any rewards for undertaking innovative activities under a financial incentive mechanism (although such activities may lead to cost efficiencies or additional benefits for Fluvius), meaning that a financial incentive with a reward of up to 0.5 per cent of allowed revenue will provide additional rewards to Fluvius compared with the status quo. We also note that the incentive relating to "innovative grid management to facilitate the energy transition" is not a funding mechanism for innovation activities — funding for innovation should come from Fluvius' allowed income for endogenous costs.

Table 4 below summarises the feedback from stakeholders relating to the proposed deliverables, reference values, caps and collars for the five financial incentives and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 4: Stakeholder comments and responses relating to the approach to reference values, caps and collars

Comment	Europe Economics response
Commented that care should be taken with trend analysis, as thought needs to be given to the drivers of the historical trends and if such drivers will continue in the future.	We note that VREG's overall framework is based on the extrapolation of historical trends. Any trend improvement(s) in quality performance observed in the historical data *a priori* suggests that DSOs should be able to improve their quality performance in future within their endogenous revenue allowance.
For interruptions and connections, argued that targets should be set by customer segment[1] or voltage level, with the lowest scoring group defining the level of achievement. Noted that using a total figure has the risk that some customer segments that are small in number (but might be high in value) are deprioritized to achieve the overall target.	Where data is available, we recommend incentivising performance through separate deliverables for both low and medium voltage/pressure interruptions and low, high and very high power/pressure connection levels for (demand) connections. Our recommendation regarding the weights attached to each of these incentives and deliverables have been developed with the aim of reflecting their relative importance to customers.
Proposed determining the reference value for the incentives relating to "providing a good connections service" and "enhancing customer satisfaction" incentives using average performance during the period covered by the current tariff methodology (2021 – 2024).	We disagree with this proposal as in our view weight should not be put on years where performance deteriorated.

[1] The suggested segments are: low voltage (230/400 kV), medium voltage (10-15 kV) and high voltage (30-36 kV).

Table 5 below summarises the feedback from stakeholders relating to the "ensuring security of supply" incentive and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 5: Stakeholder comments and responses relating to the "ensuring security of supply" incentive

Comment	Europe Economics response
For interruptions, suggested determining ex post a reward/penalty for Fluvius based on an annual report on the number of installations that have been switched off more or less than 5 per cent for technical flexibility or possibly bilateral commercial flexibility.	This is not part of the five financial incentives agreed with VREG,
Argued that there can be no distinction between planned and unplanned interruptions.	To ensure that the historical data available can be used to objectively determine the relevant parameters of this incentive scheme, the definition of interruptions needs to be kept the same as under the current q-factor (defined in section 3.1.1 of Appendix 9 of the current tariff methodology).[2] Further, we note that planned interruptions are necessary for Fluvius to be able to carry out work to maintain and improve the grid.
Argued that voltage drops should be treated like interruptions. Interruptions should also include moments in which there is not full use of the connection capacity.	Please refer to our response above regarding the need to keep the definition the same as under the current q-factor.
Queried whether the data includes planned and unplanned interruptions.	As set out in section 9.1.1 of our report, we recommend that, in line with the current tariff methodology, the deliverables for power interruptions include all interruptions with the exceptions of the interruptions listed in Appendix 9 of the current tariff methodology. The exceptions include "planned power outages on the power grid infrastructure that are communicated in advance to the respective distribution grid users". In addition, please refer to our response above regarding the need to keep the definition the same as under the current q-factor.
Queried whether the definition of interruptions takes into account the interruptions caused by third parties, which DSOs cannot influence. Argued that the increasing number of roadworks in the coming years could have a significant impact and that these are often out of Fluvius' control.	Please refer to our response above regarding the need to keep the definition the same as under the current q-factor.
Queried whether the data includes interruptions caused by legislative initiatives, e.g. roll-out of smart metering causing more planned interventions.	Please refer to our response above regarding the need to keep the definition the same as under the current q-factor. We note again that the current definition excludes "planned power outages on the power grid infrastructure that are communicated in advance to the respective distribution grid users".
Argued for more ambitious targets for electricity	The reference values and other parameters for the incentives are determined using our framework developed in Phase

[2] Section 3.1.1 of VREG (2020) "Tariff methodology regulatory period 2021-2024: Appendix 9: The quality incentive" [online].

interruption duration due to its growing importance.	I of the project which was designed to set stretching targets for Flemish DSOs.
Queried which comparators were used for the 'industry upper quartile level' reference value for interruptions. Noted that at the stakeholder workshop five European DSOs were mentioned, and asked for the actual comparators in order to find the exact values for these DSOs, because according to Fluvius' information, the proposed values are even better than the best-in-class DSOs in Europe.	Our calculations are based on data from DSOs operating in Flanders, therefore the industry upper quartile level refers to upper quartile performance among Flemish DSOs. For reasons explained in section 6.1 of our report, we do not consider it appropriate, or indeed possible, to compare DSO performance in relation to interruptions (or other measures) internationally.
Noted that applying a trend to reference values for interruptions for electricity might not be appropriate, as DSOs' performance in terms of security of supply is considered to be good and interruptions might increase in the next regulatory period as a result of increased electrification.	The historical data show that (for some of the measures) Fluvius can achieve improvements in terms of interruptions over time. If this improvement over time is not taken into account, then (as explained in Chapter 6 of our report) reference values which may appear to be stretching at the time the price control is set may turn out to be too easy for the DSOs to outperform by the end of the price control period, leading to high financial rewards for DSOs at the expense of customers. In terms of electrification impacting interruptions, we note that electrification has already started to happen in recent years (e.g. the growth of electric vehicles) and therefore the impact on interruptions will already be reflected in the historical data to some extent. To the extent that grid reinforcement will be necessary to maintain interruptions performance as electricity demand increases, DSOs could undertake this as part of their planned interruptions which are outside the scope of the incentive.
Commented that Fluvius already has a low number of interruptions and that the cost and energy to improve even more will grow exponentially and will make the grid more expensive. Therefore, it also does not seem logical to use the same interval (one standard deviation) for caps and collars, especially in the areas where improvement over the years is expected.	Our recommended incentives will give Fluvius an incentive to improve performance up to the point at which the marginal cost of making improvements equals the unit incentive rates. Fluvius will not have an incentive to continue incurring expenditure on performance improvements once the marginal cost rises above the unit incentive rate, as the additional rewards would be less than the additional costs. Hence, Fluvius will not be incentivised to make improvements in cases in which the cost is excessive. Setting caps and collars one standard deviation from the reference value simply reflects the variation observed in historical performance. Regulatory precedents (e.g. CRE, CRU) suggest that in many cases it is appropriate to set symmetric caps and collars.
Argued that the historical time period (i.e. 2017-2022) used by Europe Economics to determine the proposed targets may not be sufficient to accurately determine trends. A longer time series may tell a different story than the shorter historical period currently used.	Our calculations for all incentives based on quantitative metrics are based on the historical time period for which good quality data are available. For the "ensuring security of supply" incentive we used six years of data for both the electricity and gas sectors, which is longer than the five years of data used by VREG to calculate the cost trend in its overall regulatory framework.[3]
Suggested that the flat slope proposed for the gas reference values should instead be decreasing over	The reference values and other parameters for the incentives are determined using our framework developed in Phase I of the project which was designed to set stretching targets for Flemish DSOs. For the gas sector, the framework

[3] VREG (2022) "Tariff methodology for electricity and natural gas distribution during the regulatory period 2021-2024", p.37 [online]

the next regulatory period, as the network management for gas DSOs should get easier as electrification increases.	suggests reference values of zero for two deliverables (medium pressure interruption frequency and duration) which also represent the highest level of performance which is feasible, a deliverable with a decreasing slope to reflect the trend improvement that DSOs are expected to achieve (low pressure interruption frequency) and only one deliverable with a flat scope for which DSOs are not expected to achieve a trend improvement (low pressure interruption duration).

Table 6 below summarises the feedback from stakeholders relating to the "providing a good connections service" incentive and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 6: Stakeholder comments and responses relating to the "providing a good connections service" incentive

Comment	Europe Economics response
In terms of the definition of the "quotations on time" deliverable, queried whether declined connection requests were included as a quotation on time. If so, then argued this holds the risk of Fluvius declining more requests in order to achieve the target for this metric. Also argued that a quotation without a connection solution or one that includes a high cost should not count as providing good connections.	The data relating to "connection quotations on time" includes all applications for a quote including those where Fluvius was unable to provide a quote for the customer. Recognising the potential perverse incentive this may create for Fluvius to start refusing quotations where these could have been provided (but outside the applicable timescales), we recommend that Fluvius reports the number of quotations refused (i.e. where it was unable to provide a quotation following an application), as well as the reason for the refusal, under a reputational incentive. We do not agree that a connection solution with a high cost should not count as providing good connections, as some connections will genuinely involve high costs. For the purpose of the incentive scheme, it is not possible to assess whether the cost quoted for each connection is appropriate or not.
Referring to art. 2.2.39 §4 of the technical regulations[4] stating that "the terms for realizing the connection can also be extended at any time by mutual agreement", queried how the lack of a hard deadline and dependency on the customer's availability to realise a connection has been taken into account.	Despite the lack of a hard deadline, Fluvius provided us with data on both the number of quotations and the number of connection applications completed on time. This implies that Fluvius has (internally) adopted an approach to determine whether the quotations and/ or connections have been completed in a timely fashion. Going forward, we recommend that Fluvius clearly sets out the approach that it used to define these deliverables (i.e. "connection quotations on time" and "connections on time") and that it maintains a consistent approach across time. This is important to ensure that outturn performance is calculated on the same basis as the historical data used to determine the reference values and other parameters of the incentive scheme.
Referring to art. 2.2.39 §3 of the technical regulations[5] stating that "whereby for connections up to 5 MVA the applicant can demand that implementation takes place within eighteen weeks. Only in exceptional circumstances and after motivation, the electricity distribution system operator can extend that period for a reasonable period", queried how the exceptional circumstances and motivation have been taken	We recommend that Fluvius reports to VREG, under a reputational incentive, the number of the cases in which the deadline prescribed in the technical regulations (18 weeks) has been extended due to exceptional circumstances (while including data relating to whether the extended deadline has been met in the calculation of the relevant deliverables, if Fluvius included such cases in the historical data that it provided to us). Should VREG see a sharp, unjustified increase in the number of cases involving extensions to the applicable deadlines due to exceptional circumstances, then we would recommend that VREG takes action and excludes these connection applications from the scope of the calculations to determine Fluvius' performance under the relevant deliverable(s). This would prevent Fluvius from gaining financial benefit from unjustified increases in the use of this provision. In addition, we also recommend that Fluvius develop a clear and well-documented policy on dealing with cases involving

[4] For further details, see: VREG (2023): "Technical regulations for the distribution of electricity in the Flemish region" [online].
[5] For further details, see: VREG (2023): "Technical regulations for the distribution of electricity in the Flemish region" [online].

into account.	deadline extensions due to exceptional circumstances which is reviewed and approved by VREG.
Queried whether/how it affected the incentive if a third party (e.g. Elia) was the cause of a delay in connection time.	We consider that it is for Fluvius to manage its relationship with third parties, including with the TSO and other relevant parties.
Queried the rationale behind setting the caps and collars at +/- 5 per cent of the reference value for this incentive. Further queried why this approach was different to the one used for other incentives and commented that it did not seem logical to use the same interval (one standard deviation) for caps and collars.	We have revised our approach to setting caps and collars for incentives where no DSO-level data is available (i.e. the connections and customer satisfaction incentives) between the draft and final reports. We are now setting caps and collars based on the standard deviation in performance over time to reflect the variation observed in the historical data. In particular, the caps and collars for these incentives are set at three standard deviations above and below the relevant reference values. Using a greater number of standard deviations compared to the incentive where DSO-level data is available (i.e. interruptions) allows us to take into account the fact that industry-level data will not reflect the variation in performance across DSOs. Regulatory precedents (e.g. CRE, CRU) suggest that in many cases it is appropriate to set symmetric caps and collars.

Table 7 below summarises the feedback from stakeholders relating to the "enhancing customer satisfaction" incentive and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 7: Stakeholder comments and responses relating to the "enhancing customer satisfaction" incentive

Comment	Europe Economics response
Commented that they did not agree that one composite customer satisfaction score will provide the right incentive and that it may be better to put targets on the individual areas of services.	As explained in our report, we calculate the satisfaction score for each service area and then take a weighted average of the scores across service areas to arrive at our composite satisfaction score for each year. The weights are based on the number of customers that interact with Fluvius in each survey area. In our view it would not be appropriate to determine a separate reference value (along with the associated cap and collar) for each individual area of service as this could dampen Fluvius' incentive to improve its performance once it has hit the cap or collar in a specific area. By contrast, Fluvius is less likely to hit the cap or collar for the composite measure, as performance across the different measures may partially offset each other. The composite measure provides incentives for Fluvius to improve performance across all areas of service captured by the incentive.
Argued that reference values could be formulated more ambitiously than a flat line.	The reference values and other parameters for the incentives are determined using our framework developed in Phase 1 of the project which was designed to set stretching targets for Flemish DSOs. For the customer satisfaction incentive, the framework suggests that the reference value should be set at previous higher levels of satisfaction (in light of the deterioration seen in recent years) and that no further improvement factor should be applied in setting the reference value for the subsequent years of the regulatory period.
Suggested to include the number of complaints as a KPI.	We included complaints as a potential further metric VREG may wish to monitor under a reputational incentive. For the reasons set out in section 9.3.1 of our report (including potential issues around perverse incentives), we do not recommend using the number of complaints as the basis for a financial incentive mechanism.
Suggested that the customer satisfaction incentive would be improved if it was based upon a Net Promoter Score (NPS), rather than Fluvius' own satisfaction measure. This is because NPS scores	As explained in section 9.3.1 of our report, we do not believe that it is appropriate to use the NPS for the purposes of setting financial incentives for regulated companies. This is because, while the concept of a NPS is useful for businesses wishing to track customer loyalty, we are not aware of any precedent for using NPS for a regulated company which does not need to compete for customers. More fundamentally, the NPS does not distinguish between a customer giving a

can be compared internationally and across sectors, whereas Fluvius' customer satisfaction scores are less comparable.	score of 0 and a customer giving a score of 6 despite the customer scoring 0 having a much more negative view of the company's performance than the customer scoring a 6.
Argued that Fluvius' customer satisfaction survey is very broad and therefore it should be filtered to eliminate the influence of policy/legislative decisions and to make sure the emphasis is on the quality of Fluvius' work, while recognising that this would be a complex exercise.	In our view it is not feasible to take account of the factors mentioned by the stakeholder. Even if such an approach was be feasible, it would mean that there is no historical data that takes account of these factors to set the relevant parameters of the incentive.
Argued that customer satisfaction will always be a subjective matter and that amongst others, fluctuation of energy prices and the energy transition will mean that customers will be more focused on energy matters and will also be more critical.	We consider that the customer satisfaction survey (carried out by an independent market research company) and the question used to measure customer satisfaction are robust and in line with regulatory precedent. For example, Ofgem's customer satisfaction metric uses a general enquiries survey that asks "overall, how satisfied were you with the service provided?"
Queried the rationale for setting caps and collars at +/-1 per cent of the reference values. Further queried why this approach was different to the one used for other incentives.	As explained above, we have revised our approach to setting caps and collars for incentives where no DSO-level data is available (i.e. the connections and customer satisfaction incentives) between the draft and final reports. We are now setting caps and collars based on the standard deviation in performance over time to reflect the variation observed in the historical data. In particular, the caps and collars for these incentives are set at three standard deviations above and below the relevant reference values. Using a greater number of standard deviations compared to the incentive where DSO-level data is available (i.e. interruptions) allows us to take into account the fact that industry-level data will not reflect the variation in performance across DSOs.

Table 8 below summarises the feedback from stakeholders relating to the "providing smart metering information" incentive and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 8: Stakeholder comments and responses relating to the "providing smart metering information" incentive

Comment	Europe Economics response
Queried definition of "active accounts" for the smart metering information incentive.	An active account is defined as an account where a customer signs up to the portal, and then accesses the portal on at least one other occasion after signing-up. Please also refer to our response below regarding the "number of active accounts" deliverable. As we have revised the proposed deliverables for this incentive, the comment in no longer relevant for our report.
Argued that "active accounts" is not the right metric for smart metering information incentive. Suggested alternatives included data volumes and data volumes used by third parties; and flow of data to commercial players and end-customers (timeliness and quality), with a sub-incentive	As explained in section 9.4 of our report, we have revised our recommendation regarding the deliverables under this incentive between the draft and final reports. This is because there are drawbacks to the "number of active accounts" deliverable that mean we do not consider that it should be used for a smart metering incentive. These include issues around: • Exogeneity, which means the "the number of active accounts" deliverable focuses on outcomes that are primarily outside Fluvius' control (as Fluvius can only have so much influence on how many customers choose

focusing on timing, quality and stability for the delivery of informative monthly or quarter-hour values.	to be active portal users), and • Practical difficulties relating to the setting of reference values as outturn performance will be heavily influenced by the smart meter roll-out itself (as more smart meters means more potential portal users). Determining meaningful reference targets for the number of active portal accounts requires a forecast of the progression of the roll-out, which adds too much uncertainty to the deliverable's parameters. These drawbacks have led us to focus on deliverables relating to the quality of the smart metering data provided, covering both the completeness and the timeliness of data provision. The data provided by Fluvius only covers the provision of information to end-customers and not to third parties. Our revised set of proposed deliverables is in line with the data provided by Fluvius and therefore does not cover data provision to third parties.
Argued that "active accounts" is not a strong enough measure for the smart metering information incentive because simply having more people with active accounts will not mean people are actually behaving differently, and instead the measure should be related to the usage of the account.	Please refer to our response above regarding the "number of active accounts" deliverable. As we have revised the proposed deliverables for this incentive, the comment is no longer relevant for our report.
Noted that the "active accounts" measure might be problematic as it could be inflated by consumers doing the V-test (non-commercial price comparator in Flanders).	Please refer to our response above regarding the "number of active accounts" deliverable. As we have revised the proposed deliverables for this incentive, the comment is no longer relevant for our report.
Argued that the curve for 2025-2028 seems too steep: at this moment, approximately 30 per cent of smart meter customers have an account (500,000 accounts for 1,600,000 installed digital electricity meters). The proposed target is too far away from reality today: 2.3 million accounts in 2028 would imply a ratio of approximately 60 per cent in terms of active accounts to smart meters installed. Argued that Fluvius had an indirect impact on this incentive, as it was the customer's choice and responsibility to create an account on our portal.	Please refer to our response above regarding the "number of active accounts" deliverable. This recognises the issues around both the exogeneity of the deliverable and the practical issues around setting reference values.
Queried the rationale behind setting the caps and collars at +/-300.000 accounts from the reference value. Further queried why this approach was different to the one used for other incentives.	Please refer to our response above regarding the "number of active accounts" deliverable. As we have revised the proposed deliverables for this incentive, the comment is no longer relevant for our report.

Table 9 below summarises the feedback from stakeholders relating to the "innovative grid management to facilitate the energy transition" incentive and Europe Economics' response to these points (including any changes to the design of the incentive mechanisms where applicable).

Table 9: Stakeholder comments and responses relating to the "innovative grid management to facilitate the energy transition" incentive

Comment	Europe Economics response
Argued that the use of expert panel holds risks as the choice of the panel determines the outcome.	As explained in Chapter 10 of our report, we recommend that each expert panel (for the electricity and gas sectors, respectively) is composed of up to five independent sector experts and one VREG representative. Therefore, the panel is not intended to represent stakeholders and the outcome would not depend on the choice or composition of the panel but rather on the quality of the projects submitted by Fluvius for assessment.
Noted that the use of an expert panel could be difficult, as there are lots of conflicting views within the industry about what the grid should look like in 10 years' time.	Please refer to our response above regarding the independence of the experts on the panel. Our recommended governance process specifies a process for arriving at an overall score, including in cases when there are differences in opinion between panel members.
Commented that the governance arrangements for the expert panel should be carefully considered.	We agree with this point and our report sets out our recommendations regarding the governance arrangements for the expert panel.
Commented that at a minimum half of the projects should be electricity cases since electrification will be a large part of the energy transition.	We recommend that up to 5 projects can be submitted for each assessment period for each sector, electricity and gas. Within this constraint, the final decision regarding the number of projects submitted for each assessment will lie with Fluvius.
Suggested that the incentive should be broader than flexibility.	The innovation incentive is indeed intended to be wider in scope than just grid flexibility, covering all sorts of innovation in grid management that could contribute to the energy transition.
Commented that VREG should consider having an innovation budget.	Providing advice regarding an innovation budget is outside the scope of this project. For the avoidable of doubt, this incentive scheme is not intended to be a funding mechanism for innovation. Innovation activities should continue to funded out of the allowed revenue for endogenous costs, as in the past. In turn, endogenous costs are assessed as part of a separate study commissioned by VREG.
Noted that Fluvius encourages the principle of a panel for the incentive relating to innovative grid management to facilitate the energy transition, on the condition that: • It does not only serve to evaluate the candidate projects, but as a 'steering committee' to drive the innovation. • There is a clear view on the criteria for submission. • There exists a clear governance process. Stated that it can work on a proposal for this. • The panel is objective, both in terms of composition and content.	We disagree with the view that the panel should also serve as a 'steering committee' as the panel cannot sponsor and independently assess projects at the same time. We agree with the suggestion of establishing a clear criteria and process for the submission and assessment of projects, including clear governance arrangements for the expert panel. We also agree that the assessment should be conducted on the basis of objective evidence. Our recommendations regarding these aspects are set out in Chapter 10 of the report.
Argued that an innovation project that shows that the investigated innovation does not 'work' or is not eligible for further roll-out can also be seen as	We disagree with the suggestion that innovation projects that "do not work" and therefore did not demonstrate success should be rewarded under this incentive. In our view, the lack of rewards for unsuccessful projects simply reflect the risky and uncertain nature of innovation projects. Providing any rewards for such projects would not mimic the outcomes

a successful innovation project.	observed in competitive markets, in which only firms with successful innovation projects gain financially from them.
Concluded that the reward for this incentive is ex post, meaning it is given after successful implementation of the innovation. Commented that Fluvius considers it important that, before the start of an innovation project, the project is also financed, or at least that there is an agreement to incorporate its cost as an (investment) cost within the calculation of appropriate remuneration.	As explained in Chapter 10 of our report, this incentive mechanism is not intended to be a funding mechanism for innovation. Fluvius should continue to fund innovation activities out of the allowed revenue for endogenous costs, as in the past.

Table 10 below summarises any further feedback from stakeholders relating the five financial incentives and Europe Economics' response to these points.

Table 10: Other stakeholder comments raised at workshop and responses

Comment	Europe Economics response
Commented that it is important to clarify what was wanted from DSOs before designing specific incentive schemes. The set of five objectives selected for incentive mechanisms were too broad and missed other important objectives such as infrastructure investment synergies.	We explored and assessed these aspects during Phase 1 of the project.
Commented that the societal benefits needed to be considered when determining the revenue at risk. Argued that the 5 per cent threshold was defensible, however the objectives needed to adapt to technological changes.	All of our proposed objectives and deliverables are flexible to technological changes, since they do not specify what technology Fluvius should use to improve its performance. This flexibility to technological change is especially the case for the incentive relating to "innovative grid management to facilitate the energy transition".

3 Response to Feedback on Draft Report

In addition to the points that it submitted after the stakeholder workshops, we also received feedback on the draft report submitted to VREG on 13 October 2023 as well as on the draft section on the "providing smart metering information" incentive submitted to VREG on 15 November 2023. Table 11 below summarises the additional comments received (i.e. those not included in the chapter above) and our response to these.

Table 11: Additional comments received on the draft report and our response

Chapter/ section	Comment	Europe Economics response
Executive summary	In terms of our framework to set the reference values for the next regulatory period, queried whether it was possible for performance to improve if reference values are set based on the year in which performance was the best, and if so at what cost.	It is possible for DSOs to improve performance as the reference value (for interruptions) is set at the industry upper quartile level (among Flemish DSOs) rather than at the level of the best performing DSO. Further, for all of the deliverables, we only apply a trend improvement in calculating reference values through the next regulatory period for those measures where Fluvius has historically been able to achieve a trend improvement through time. Our recommended incentives will give Fluvius an incentive to improve performance up to the point at which the marginal cost of making improvements equals the unit incentive rates. Fluvius will not have an incentive to continue incurring expenditure on performance improvements once the marginal cost rises above the unit incentive rate, as the additional rewards would be less than the additional costs. Hence, Fluvius will not be incentivised to make improvements in cases in which the cost is excessive.
Executive summary	In terms of our framework to set the reference values, argued that any assumption of a trend improvement in relation to future performance assumes that the preconditions remain the same which is not always correct	In our view, we did not receive any robust and convincing evidence from Fluvius that the trend improvement suggested by historical data could not be achieved over the next regulatory period.
Executive summary	Queried how the appropriate amount of revenue at risk for the incentives package as a whole could be determined.	As explained in our report, our recommendations regarding the total upside and downside across the five financial incentives for both the electricity and gas sectors have been broadly informed by regulatory precedents, and also take account of our own informed judgement in the light of the Flanders context.
Executive summary	Queried the rationale for our recommendations regarding the revenue at risk across the financial incentives. Also queried how the allowed income was determined in other countries. Found a figure of 5 per cent of revenue for electricity too high for a first time implementing an absolute mechanism.	As explained in chapter 8 of our report, our recommendations regarding the revenue at risk have been broadly informed by regulatory precedents, along with our own informed judgement in the light of the Flanders context. When reviewing the regulatory precedents, we considered the nature of the incentive (relative versus absolute), the overall incentive package used and the length of time the incentive mechanisms have been in place.

		In the light of these considerations, our conclusion is that up to five per cent of total revenue is an appropriate upside to give the overall incentives package for electricity, and that up to 4.5 per cent is an appropriate downside. This financial weight is similar to three of the four regulatory precedents. Ofgem's incentive package has both a higher upside and downside, but we note that Ofgem uses more than five incentive mechanisms and has had many of those mechanisms in place for multiple regulatory periods.
Executive summary	In terms of the incentive relating to "innovative grid management to facilitate the energy transition", argued that the selection of the expert panel should be motivated and agreed upon by Fluvius.	We disagree with the suggestion that the selection of the expert panel should be motivated and agreed upon by Fluvius as this may affect the independence of the panel. Nonetheless, we think that it would be appropriate for VREG to consult with Fluvius (and other relevant stakeholders) during the expert panel member selection process but without requiring Fluvius' agreement regarding the final choice of panel members.
Executive summary	Regarding the criteria for projects to be eligible for submission under the incentive relating to "innovative grid management to facilitate the energy transition", argued that Fluvius was part of a market chain, and therefore was dependent on other parties.	We consider that it is for Fluvius to manage its relationship with other parties, including for the purposes of collaborating on innovative projects that contribute towards the energy transition.
Objectives and deliverables, section 4.2.1	Commented that flexible energy connections are not allowed by VREG in the current regulatory framework.	We deleted the reference to flexible connections in the report.
Objectives and deliverables, section 4.3.1	Argued that interruption frequency did not comply with the decision tree and specifically the question "Is the objective largely within Fluvius' control?". Noted that according to Appendix 9 of the 2021-24 tariff methodology unplanned interruptions are considered to be relevant interruptions. However, in the company's view. an unplanned interruption is generally caused by a third party performing nearby works, and thus the frequency of interruptions is largely out of Fluvius' control. The duration of the interruption can however be (partly) controlled by Fluvius.	We disagree with the argument that interruption frequency is outside Fluvius' control on the basis of regulatory precedents which suggest that other regulators view interruption frequency as sufficiently within DSOs' control to be subject to financial incentives. This includes the q-factor currently used by Fluvius which takes into consideration Flemish DSOs' performance regarding both interruption frequency and duration for the electricity sector. In addition, whether an event outside Fluvius' control leads to an interruption on the grid is determined by the resilience of the network which is clearly within Fluvius' control and which it is Fluvius' responsibility to manage.
Assessing performance and determining financial impact, section 6.1	Queried why it was not suitable to compare Fluvius' performance with that of DSOs in other countries of similar size, especially regarding security of supply. Asked whether an investigation been carried out to validate this.	As explained in section 6.1 of our report, data on similar (but not necessarily equivalent) incentives from other operators (e.g. those operating in other parts of Belgium or in neighbouring countries) will not be comparable e.g. due to differences in the precise definition used for deliverables, reporting metrics, etc.
Assessing performance and determining financial impact, section 6.1	Argued that Fluvius stood at the outset of the energy transition and that the forthcoming years will present substantial challenges for the DSO. Further argued that the profound implications of this evolution were not adequately	The energy transition has already started which means that the historical data used to determine the reference values for the financial incentives will already reflect some of the challenges experienced by DSOs in relation to this. Our approach is also in line with VREG's overall framework which is based on the extrapolation of

	acknowledged or considered in the historical data and trends. Noted that it was disconcerting that this significant shift was not even acknowledged or factored in.	historical trends. Finally, in our view it is also important that customers are protected through adequate quality of service metrics as the economy goes through the energy transition.
Assessing performance and determining financial impact, section 6.1	Asked whether it could be explained why 'the upper quartile' is considered as 'a cautious approach setting a reference value towards the lower end of a plausible range'.	We have improved the wording of this part of our report. Setting the reference value at the industry upper quartile level (among Flemish DSOs) is a cautious approach because it does not require all DSOs to improve performance to the level of the best performing DSO before they can start earning rewards.
Assessing performance and determining financial impact, section 6.4	Commented that the significance of robust evidence appears to be equally (if not more) essential when establishing the reference values (§6.1), unit incentive rates (§6.2), and caps/collars (§6.3). However, it appears that these elements are predominantly grounded in recommendations. Queried why there was such a sudden shift in approach when taking additional aspects into account.	For the avoidance of doubt, we confirm that our whole framework is based on the use of robust evidence, which is why reference values, caps and collars have been determined on the basis of objective historical data.
Assessing performance and determining financial impact, section 6.4	Argued that as articulated in §3.1.4, a critical insight from the ACM in the Netherlands is that "the marginal cost of reducing interruptions is likely to increase as the number of interruptions approaches zero." Therefore, it becomes challenging to comprehend why symmetric or linear incentive rates are implemented, particularly for security of supply. Noted that similar considerations should be extended to the other incentives.	Our recommended incentives will give Fluvius an incentive to improve performance up to the point at which the marginal cost of making improvements equals the unit incentive rates. Fluvius will not have an incentive to continue incurring expenditure on performance improvements once the marginal cost rises above the unit incentive rate, as the additional rewards would be less than the additional costs. Hence, Fluvius will not be incentivised to make improvements in cases in which the cost is excessive.
Assessing performance and determining financial impact, section 6.6	Queried which financial resilience considerations have been made to determine the total revenue at risk.	As set out in Chapter 8 of the report, we consider that our recommended financial weights are consistent with Fluvius continuing to be financeable. Firstly, other regulators have implemented financial incentives which have put a similar (or higher) percentage of revenue at risk under absolute quality incentives, without considering that this posed a problem in terms of the financeability of the regulated firms. Secondly, to explore the issue further we asked VREG to run a scenario through its financial model in which Fluvius performs at the collar of all of our recommended financial incentive schemes. The results of this analysis showed that in such a scenario Fluvius would still be able to maintain an investment grade credit rating.
Financial impact of five incentive schemes, section 8.1	Queried the rationale for the recommendation of setting the total revenue at risk at up to five per cent for the electricity sector. Further queried whether it has been confirmed that the financial sustainability of the DSO is guaranteed, as indicated in §6. Noted that in other jurisdictions (§3), it observed the application of lower percentages (e.g. 2-4 per cent in Germany). Argued that the top figure of 5 per cent suggested in this section drew from neighbouring countries that have already accumulated experience in prior regulatory	Please refer to our responses above regarding the financial sustainability of the DSO and the factors considered when determining the revenue at risk for both the upside and downside. Our rationale for these recommendations is explained further in Chapter 8 of the report.

	periods. Queried why a more cautious approach is not recommended given that it is the first time that absolute targets are being set in a switch from a relative incentive scheme (cf. §6).	
Financial impact of five incentive schemes, section 8.1	Queried whether there was a comparison available on how the allowed income for endogenous costs were determined in the countries with which Fluvius (in Flanders) was compared with (the Netherlands, Germany, Ireland, GB).	Table 8.1 in our report provides a comparison of the total allowed revenue at risk for quality of service incentives (upside and downside) for both the electricity and gas sectors in the Netherlands, Germany, Ireland and Great Britain.
Financial impact of five incentive schemes, section 8.1	Argued that table 8.1 appears to provide a simplistic interpretation of the analysis presented in §3, seemingly aimed at justifying a higher percentage. In Germany, it is indicated that the revenue at risk is between 2 and 4 per cent. Argued that Ofgem has chosen to utilize RoRE as the foundational revenue metric, and it is not evident how this connects to the allowed income. Stated that in Ireland, the percentage has been raised in the most recent regulatory period, drawing from its experience with absolute targets, although it commenced with a lower percentage initially. Stated that it is unclear why France (§3.3) is not mentioned in this table, and argued that based on the stated rewards/penalties this also seems to represent a lower percentage.	We disagree with the claim that table 8.1 provides a simplistic interpretation of our review of precedents in Chapter 3. As explained in our report, we consider a number of factors (including the Flemish energy market and regulatory context) before providing our recommendation regarding the percentage of allowed revenue to be at risk for Fluvius. In terms of the regulatory precedents: • The maximum reward/penalty of 2 to 4 per cent (of allowed revenue) used in Germany does not materially impact our recommendations given the significant differences in the regime (the BNetzA uses a relative incentive mechanism in the form of a q-factor while we are recommending that VREG switches to an absolute incentive mechanism). • While Ofgem reports the incentive range as a percentage of RoRE, this can also be expressed as a percentage of allowed base revenue using the information provided by Ofgem. • As stated in a table note, CRE is not included in the table as the final determination published by CRE does not specify a cap or collar for many of its quality of service incentives which in turn did not allow us to determine the total revenue at risk expressed as a percentage of allowed revenue.
Financial impact of five incentive schemes, section 8.1	Queried whether there was any robust evidence regarding our conclusion that 2.25 per cent of total revenue is an appropriate weight to give the overall incentives package for gas.	As set out in Chapter 8 of our report, our conclusion that up to 2.25 per cent of total revenue is an appropriate weight to give the upside of the incentives package for gas, and that up to 1.75 per cent is an appropriate downside, are both in line with regulatory precedent from Ireland and the UK.
Financial impact of five incentive schemes, section 8.2	In terms of our recommendation of a low relative weight of 0.25 per cent for "ensuring security of supply for gas", argued that another consideration could be that this is part of 'ensuring safety', and thus a legal requirement, so less than 100 per cent compliance is unacceptable (see table 4.4).	We disagree with this suggestion given that the data shows greater than zero gas interruptions for both the low and medium pressure grids. We also note that Ofgem applies a financial incentive to unplanned interruptions in the gas sector.
Design of financial incentives based on quantitative metrics, section 9.1.1	Included a reference to the decision tree in §4.1.1 arguing that the "ensuring security of supply" incentive did not comply with the decision tree and specifically the question "Is the objective largely within Fluvius' control?".	Please see our response above regarding the claim that interruption frequency is outside Fluvius' control.
Design of financial incentives based on	Noted that, as from 2025, there will be extra changes in DSO boundaries.	The boundary change from 2025 is not relevant to our calculations. VREG will need to do the relevant mapping following the boundary change when using data from

quantitative metrics, section 9.1.2		2025 and beyond.
Design of financial incentives based on quantitative metrics, section 9.1.2	Queried what robust evidence supported the selection of one standard deviation for setting caps and collars. Further queried how the requirement to balance the provision of incentives and the need to maintain financial resilience, as outlined in §6.3, was taken into account.	Setting caps and collars at one standard deviation from the reference values for incentives where DSO-level data is available means that caps and collars will reflect the variation observed in DSO performance. As outlined in our response above and in chapter 8 of our report, we have taken financeability consideration into account when providing our recommendations regarding the total revenue at risk across the five financial incentive schemes.
Design of financial incentives based on quantitative metrics, section 9.1.2	Commented that Fluvius is at the dawn of the energy transition, and the years ahead will bring substantial challenges to the electricity distribution network. Stated that it is disconcerting that this substantial shift is not recognized or taken into account. Noted that VREG has already observed in its recent "Rapport kwaliteit dienstverlening" that there is a negative trend in the quality of service, primarily due to the significant challenges related to the electrification of society. Argued that expecting the DSOs to make significant enhancements to the already high quality of supply, which is acknowledged as one of the best in Europe, was unrealistic. Argued that maintaining the current high quality during the energy transition is already an enormous challenge in itself, and therefore the recommended parameters should reflect this reality.	Referring to our response above, we note that the energy transition has already started which also means that the historical data used to determine the reference values for the financial incentives will already reflect some of the challenges experienced by DSOs in relation to this. The trend improvement observed in the historical data for some of the incentives and deliverables also means that if this improvement is not taken into account, then (as explained in Chapter 6 of our report) reference values which may appear to be stretching at the time the price control is set may turn out to be too easy for the DSOs to outperform by the end of the price control period, leading to high financial rewards for DSOs at the expense of customers.
Design of financial incentives based on quantitative metrics, section 9.1.2	In terms of recommended deliverables for interruptions in the gas sector, questioned whether this was an area where the regulator wished to set stretching targets and where it considered that current performance levels were not sufficient (cf. §5.5). Noted that in its recent "Rapport kwaliteit dienstverlening," the VREG concludes that the high quality of service in the area of supply security is being maintained. Found it perplexing why the DSO was encouraged to make additional investments in gas distribution to attain minor percentage improvements, as this appears counterproductive in the context of the energy transition.	Please refer to our response above regarding the need to take into account the trend improvement observed in the historical data when setting the parameters for the incentive schemes for the next regulatory period, as well as the importance of safeguarding consumers' interests during the energy transition. As explained in Chapter 8 of our report, recognising that the historical data indicates that interruptions are already very low in gas (with DSOs having zero interruptions in some years) and that there is little room for performance to improve further, we recommend a lower relative financial weight for the gas sector under the "ensuring security of supply" incentive compared with the electricity sector.
Design of financial incentives based on quantitative metrics, section 9.1.2	Argued that sustaining a performance of 0.000 interruptions for medium pressure interruption frequency on an annual basis was entirely unrealistic, especially when considering interruptions caused by external parties over which the DSO has no control. Claimed that it was unjust for the DSO to face penalties when a third party negligently damages an medium pressure grid. Furthermore, a medium pressure	We disagree with the argument that sustaining performance at our proposed reference value is not sustainable by DSOs, given that the historical data indicate that this level of performance has already been achieved in the past. We also note that in an earlier comment Fluvius argued that for gas interruptions "another consideration could be that this is part of 'ensuring safety', and thus a legal requirement, so less than 100 per cent compliance is unacceptable (see table 4.4)." This contradicts the claims here that a performance of 0.000 interruptions for

	incident, being related to safety, should not be factored into the incentive structure, as indicated in §4.	medium pressure interruption frequency on an annual basis in unrealistic. In the case of a third party negligently damaging the medium pressure grid, it would be for Fluvius to decide whether to take legal action against that party and claim compensation for any damage incurred.
Design of financial incentives based on quantitative metrics, section 9.2.1	In terms of the incentive relating to "providing a good connections service", argued that with the implementation of this incentive, the DSO faced dual penalties, a situation that should be prevented in line with the guidelines outlined in §4.	We do not consider that double counting is a material issue for this incentive for the following reasons: • The compensation provided under the Energy Decree provides insufficient financial incentives for DSOs to provide good connections to customers – this is because both the daily compensation rates specified by the Decree and the overall compensation paid to customers historically are small. • For customers to be awarded any compensation for such delays, they have to initiate the compensation process themselves (i.e. compensation is not provided automatically). In turn, customers' engagement with the compensation process for late connections and reconnections may also be affected by the level of anticipated compensation for the delays, and the daily rates specified in the Decree are relatively modest. • The overall financial exposure of DSOs as a result of the compensation paid to customer is also small. We also note that the current q-factor also provides an additional incentive for DSOs in relation to connections based on the compensation paid by individual DSOs.
Design of financial incentives based on quantitative metrics, section 9.2.1	Commented that Fluvius is at the dawn of the energy transition, and the years ahead will bring substantial challenges to the electricity distribution network. Stated that it is disconcerting that this substantial shift is not recognized or taken into account. Argued that with greater electrification, it is expected that there will be a substantial increase in the number of connection requests, and consequently historical data and trends are not representative of the future. Argued that sustaining the current level of connection times is already an immense challenge in its own, and that the recommended parameters should align with this reality.	Please refer to our response above regarding the challenges posed by the energy transition and any implications for setting the parameters for financial incentives. We also note that the data used for setting the parameters for the deliverables under the connections incentive for the next regulatory period include demand connections but exclude generation connections.
Design of financial incentives based on quantitative metrics, section 9.2.2	Argued that in a similar way to security of supply, the additional cost of enhancing the connection service was anticipated to increase as the number neared 100 per cent. Commented that this aspect should be considered in the suggestions for caps and collars, which should not be symmetrical.	As for our response above regarding the "security of supply" incentive, our recommended incentives will give Fluvius an incentive to improve performance up to the point at which the marginal cost of making improvements equals the unit incentive rates. Fluvius will not have an incentive to continue incurring expenditure on performance improvements once the marginal cost rises above the unit incentive rate, as the additional rewards would be less than the additional costs. Hence, Fluvius will not be incentivised to make improvements in cases in which the cost is excessive. Regulatory precedents (e.g. CRE, CRU) suggest that in many cases it is appropriate

		to set symmetric caps and collars for incentives.
Innovative grid management to facilitate the energy transition, section 10.2.1	Commented that our recommendation that "it should be left to Fluvius to determine the form(s) of innovation that are optimal for achieving the energy transition in Flanders" seemed to contradict the 'whole systems thinking' mentioned later on.	We disagree with this comment as our recommendation simply notes that the regulator should not be micromanaging innovation. In line with our recommendations, Fluvius would be allowed to work with third parties on innovative projects that contribute to facilitating the energy transition.
Innovative grid management to facilitate the energy transition, section 10.2.1 and 10.2.1	Commented that there was a focus throughout the text on 'success' and 'roll-out', but this was not always the result of an investigation. Argued that the criterion of 'success' should be better defined.	As noted in our earlier response, in our view it is essential that this (reward-only) incentive focuses on innovative projects that have been successful. This is because providing any rewards for unsuccessful projects that "do not work" (and therefore do not deliver significant benefits and represent value for money for consumers) would not mimic the outcomes achieved in competitive markets. In our view the proposed concept of "success" (i.e. having at least passed a feasibility stage such that the innovation has been proven as a concept, even if it has not yet been rolled out) strikes an appropriate balance between providing a flexible approach that allows Fluvius to submit projects with the potential to deliver significant benefits and value for money for consumers in the context of the energy transition and providing guidance to Fluvius on the sort of projects that would be eligible for submission under this incentive.
Innovative grid management to facilitate the energy transition, section 10.2.1	Queried whether "promoting whole systems thinking" could be added as an extra (optional) criterion for determining which innovation projects are eligible for submission.	In our view "promoting whole systems thinking" could be one way to meet the criteria of being innovative in nature or delivering significant benefits and representing value for money for electricity and/or gas consumers. However, we would not recommend adding this to the list of selection criteria as "promoting whole systems thinking" would not be relevant for every innovation project.
Providing smart metering information (section 9.4 of report)	In terms of the figures presented for the incentive, commented that a major limitation was that Europe Economics worked on the last percentages. Stated that it did not understand who benefits from this proposed incentive and what (social) added value is provided in return for any additional costs. Noted that stabilizing the figures may be an option.	We determine the parameters for the "providing smart metering information" incentive in line with our framework developed during Phase 1 of the project on the basis of the last (and only) year for which data is available. Using 2022 as the final year of data to determine the parameters for the incentive is consistent with our approach to other incentives where data beyond 2022 is not yet available (e.g. ensuring security of supply). We disagree with the suggestion that it is not clear who benefits from this incentive. Customers will benefit from this incentive as they will receive both better quality and quicker data regarding their energy consumption. In turn, this may increase the effect that smart meters have on energy consumption, providing wider societal benefits.
Providing smart metering information (section 9.4 of report)	Regarding the rollout of more new functionalities via MijnFluvius and via service provider API, noted that Fluvius had already come a long way with this (compared to other DSOs in Belgium and Europe). Commented that Fluvius was limited/not completely free in its role as data manager for further expansions. Noted that today Fluvius already provide	As explained in our report, we agree that a drawback associated with deliverables related to the quantity of smart metering data provided (e.g. number of customers with active accounts, number of mandates that portal users put in place) is exogeneity, meaning that the deliverables focus on outcomes that are primarily outside Fluvius' control. In the light of this drawback (along with other practical difficulties relating to the setting of relevant parameters), we do not recommend

	important information via API to, among others, the service providers. Argued that further expansion would be close to the limit of what Fluvius is allowed to deliver.	using these measures as deliverables for our financial incentive relating to smart metering information.
Providing smart metering information (section 9.4 of report)	In terms of data granularity, commented that this was largely already imposed by law (e.g. the legal requirement to fully roll out quarterly values by 2026), which meant that this was not eligible for an incentive.	None of our recommended deliverables regarding the timeliness and completeness of smart metering data focuses on the rollout of quarterly values.