Modification Report
Revise INS Charge to Zero
Modification Reference Number 0632
Version 2.0

This Modification Report is made pursuant to Rule 8.9 of the Modification Rules and follows the format required under Rule 8.9.3.

1. The Modification Proposal

The proposer stated:-
"Amend the INS charge as introduced through M479 so that the charge is zero."

2. Transco's Opinion

Transco does not support implementation of this Modification Proposal.

Specifically the Incentivised Nomination Scheme (INS) was designed to:

- provide the residual system balancer with extra information that might improve the efficiency of its balancing action process;
- provide better incentives for shippers to achieve imbalances close to their nominations; and
- deliver better cost targeting by removing the "free option".

Many market participants expressed concern that INS had the potential to act to the detriment of trading efficiency.

It was recognised that INS did not directly address Transco's concerns about regime operation, particularly the issue about within-day flow rate variations. However, it was acknowledged that, if the incentives were sufficiently strong, then the incentive might encourage shippers to make arrangements to either procure gas via NBP trades or to have, and to have exercised, rights over gas deliveries so that they are closer to their intended imbalance position earlier in the day. If this turned out to be the case, then in aggregate gas flows onto the system, taking account of any actions that Transco might take in its residual system balancer role, should be closer to system design and operational assumptions.

Transco notes that the commercial freedom introduced with the New Gas Trading Arrangements (NGTA), including the OCM, were introduced to better facilitate User "fine tuning" of their imbalance positions. Transco believes that many market participants are using the prompt gas market for far more than "fine tuning" of their imbalance risk mitigation strategies. The regular nomination against demand discrepancies apparent before and during the early part of the gas day give rise to input and offtake flow rate mismatches that has caused much higher utilisation of linepack since the introduction of NGTA. Whilst acknowledging the benefits of the commercial freedom afforded to shippers this does create increased operational concerns.

This Modification Proposal seeks to remove the financial consequences of INS. Transco does not consider this appropriate when considered in the context of current and prospective operation of the regime. Transco does, however, consider that evolution of the INS should be contemplated and if it is not considered that such a “second generation” INS (that might have financial consequences to Users) would have benefit then it is essential that alternatives are considered that might deliver a regime that might provide sufficient assurance of flow rates on the system sufficiently close to system design assumptions that they satisfy operational requirements.

In the context of the stated objectives for INS Transco believes that the scheme has afforded shippers the opportunity to supply information to Transco about imbalance projections that shippers would otherwise not have been able to provide. This information informs the balancing decision making process and it is noticeable that system balancing volumes were lower this winter than in the previous winter, and that the evidence indicates that Transco is generally taking smaller balancing actions. This might be considered to be a measure of improved efficiency.

Additionally INS has provided better incentives for shippers to achieve imbalances close to their nominations. The differences between INS nominations and actual daily imbalances are demonstrated in this report to be both smaller, and to have lower variability, than the differences between nominated imbalance positions (derived from the AT-Link input, offtake and NBP Trade Nominations on the NB10 AT-Link screen) and actual daily imbalances. There can be no doubt that INS is providing Transco with better information about expected end of day positions than other nomination information currently available to Transco. However this benefit does need to be considered in the context of both the administrative burden and the financial exposure that this incentive mechanism creates for Users. Transco considers that the strength of the incentive may need to be reconsidered. Transco notes that none of the respondents responded to the question raised in the Draft Modification Report as to what level of INS charge might be suuficient to induce shippers to change their balancing behaviours so that they might come into balance, in respect of their input and offtake and NBP trade nominations, either at, or before, the start of the Gas Day. In the absence of any responses Transco concludes that the current INS incentive may be insufficient to induce this behavioural change. Transco therefore cannot conclude that implementation of this Proposal is more likely to encourage User actions that will generate flows on the system sufficiently close to system and operational assumptions that they satisfy operational requirements.

Furthermore, INS might be considered to have delivered improved cost attribution that might be assessed as removing the “free option” that previously enabled shippers to change their imbalance positions without any financial consequence. Transco notes that accurate cost targeting is unlikely to be possible within the regime but that the existence of INS might have contributed to an avoidance of what might otherwise have been wasteful, and therefore cost generative, actions. Therefore INS might be considered to have reduced the level of mis-allocation of cost that would otherwise have occurred in the regime. Transco therefore concludes that implementation of this Proposal might have adverse consequences, potentially increasing cost mis-allocation that might be considered to act to the detriment of competition between Users.

Regrettably, however, despite the introduction of INS, Transco has not been able to detect improved performance over the winter in respect of the linepack variation issue. Put quite simply, the current regime as it applied over the last winter, still continues to deliver flow patterns that are not consistent with system design assumptions and which might not satisfy operational requirements. The experience of the hitherto unprecedented requirement for summer interruption confirms the deterioration in regime performance that Transco has been discribing to the community for aperiod of more than three years. However, despite the Transco continued concern about regime opetration, this does not mean that INS has not had a beneficial effect on regime operation; merely that any benefits arising from INS have been offset by other factors making a detrimental contribution.

Transco notes the views of many market participants, prior to its implementation, that INS would be damaging to within-day trading. This does not appear to have been the case. OCM trading activity continues to increase and Transco's market share has reduced to single figure percentages. This must be considered a success. Transco believes that INS may have contributed to this success. Transco notes that Users appear more prepared to trade at prices outside of the prevailing SMPs therefore demonstrating the greater incentives to achieve a desired imbalance position. This is likely to have contributed to the reduced quantities of imbalance subject to cashout when compared with the pre-INS period. The effect of this increased within-day trading, via the cashout price determination process, appears to be that of setting modestly higher cash-out incentives. This is evidenced by the fact that Transco continues to trade "close to market" but that User to User trading is now more likely to leave Transco trade prices outside of the default differentials from the SAP that would otherwise define the SMPs. Transco therefore concludes that the removal of any charges associated with non-zero INS performance measures, as advocated in this Proposal, would effectively reduce the incentive to balance and eliminate the incentive to achieve close to the nominated imbalance. This might be expected to increase User imbalances, which when considered in conjunction the likely deterioration in respect of information accuracy associated with the INS nominations, might be expected to increase both the extent and unpredictability of flow rate variation thereby further exacerbating linepack variations.

Whilst Transco notes that implementation of this Proposal might still preserve the flow of information to Transco about Users imbalance projections Transco believes that the removal of the financial incentive would reduce the accuracy, and therefore value, of such information. Specifically Transco notes the comments of several respondents which suggest that a reduction of the INS charges to zero would render the arrangements ineffective and remove the incentive to provide accurate information to Transco. Transco also notes the views expressed by several Users in the NT&T Workstream that, under the current arrangements, the information they provide should only be relied upon at the INS charging times. Therefore Transco concludes that setting the charges to zero would materially reduce the effectiveness of INS.

Transco therefore concludes that the implementation of the Proposal would act to the detriment of the economic and efficient operation of the system.

Transco does not envisage that implementation of this Proposal would have any implications for the electricity regime.

As Transco has outlined in its response to the recent Ofgem document about gas balancing regime performance, even without implementation of this Proposal, it believes that there is significant opportunity for regime performance to further deteriorate. Therefore at this point in time, and prior to any wider consideration of development of the regime, Transco considers it to be imprudent to eliminate the financial incentive to shippers provided by INS.

3. Extent to which the proposed modification would better facilitate the relevant objectives

Transco believes that implementation of the Modification Proposal would not better facilitate the economic and efficient operation of the system or better facilitate competition between Users.

Implementation of the Proposal would decrease incentives on Users to achieve imbalances close to their nominated imbalances thereby contributing to increased uncertainty associated with projected system imbalances. Implementation of the Proposal cannot therefore be considered to better facilitate the economic and efficient operation of the system.

The continuation of INS with some financial incentive in respect of nomination accuracy might contribute to an avoidance of what might otherwise be wasteful, and therefore cost generative, actions. Therefore the continuation of INS, with some possibility of financial consequence to Users, might be considered to reduce the level of mis-allocation of cost that would otherwise occur in the regime. Transco considers that mis-allocation of cost is likely to be detrimental to competition between Users and therefore implementation of the Proposal would appear to be contrary to the relevant objective of better facilitating competition between Users.

4. The implications for Transco of implementing the Modification Proposal , including

a) implications for the operation of the System:

Transco believes that the setting of INS charges to zero would be likely to have a detrimental effect on the operation of the system.

b) development and capital cost and operating cost implications:

Transco would envisage some modest implementation costs. The INS system is parameterised to such an extent that it is anticipated that only modest costs would be incurred.

c) extent to which it is appropriate for Transco to recover the costs, and proposal for the most appropriate way for Transco to recover the costs:

Any costs incurred would be shared with Users in accordance with the relevant SO Incentive scheme.

d) analysis of the consequences (if any) this proposal would have on price regulation:

None are anticipated.

5. The consequence of implementing the Modification Proposal on the level of contractual risk to Transco under the Network Code as modified by the Modification Proposal

None are anticipated.

6. The development implications and other implications for computer systems of Transco and related computer systems of Users

No development issues are envisaged.

7. The implications of implementing the Modification Proposal for Users

Implementation of this Modification Proposal might be expected to lead to greater linepack utilisation which might trigger greater requirements for balancing activities which might lead to increased costs accruing to the community.

8. The implications of implementing the Modification Proposal for Terminal Operators,Consumers, Connected System Operators, Suppliers, producers and, any Non-Network Code Party

No direct implications are envisaged.

9. Consequences on the legislative and regulatory obligations and contractual relationships of Transco and each User and Non-Network Code Party of implementing the Modification Proposal

Transco is not aware of any impact on legislative and regulatory obligations.

10. Analysis of any advantages or disadvantages of implementation of the Modification Proposal

Advantages: (Identified by Proposer)

- Would re-instate the free option for all shippers.

Disadvantages:

- May lead to increased linepack variation and the associated consequences.

11. Summary of the Representations (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Responses have been recieve from fifteen respondents :-

Scottish and Southern Energy plc	SSE
BG Group	BGG
Association of Electricity Producers	AEP
PowerGen UK plc	PG
Conoco (UK) Ltd	Conoco
Bord Gais Energy Supply	BGES
Scottish PowerUK Plc	SP
London Electricity Group Plc	LE
Statoil (UK) Gas Ltd	Statoil
ShellGasDirect	SGD
Entergy-Koch Trading Europe Ltd	EKT
British Gas Trading	BGT
Innogy	Innogy
BP Gas	BP
ENI UK Ltd	ENI

Seven respondents (AEP, SSE, LE, Statoil, SGD, EKT and BGES) expressed support for this Proposal.
Six respondents (SP, Conoco, BG Trading, BGG, PG and Innogy) did not support this Proposal.
BP and ENI offered qualified support on the basis that the zero charge should be implemented for a limted period whilst INS is bing reviewed by the industry.

General
The majority of respondents expressing support for this Proposal did so on the basis that they considered sufficient time had been given to assess the success of the INS and that the scheme had failed to deliver the expected benefit of providing Transco with the appropriate information which may better inform balancing action decisions and promote more efficient system balancing. The respondents also identified the following reasons for supporting the Proposal. (1) the levels of INS charges are not reflective of the costs to Transco of inaccurate end of day imbalance nominations, (2) that the INS scheme may reduce within day trading and market liquidity, (3) that the INS scheme penalises Shippers attempting to provide 'good information' who then experience unforeseen circumstances outside of their control and (4) that the INS scheme leads to increased revenue cycling.

Respondents not in support of the Proposal, or who limited their responses to providing comments, cited that insufficient time had been allowed to assess the performance of the scheme and further constructive debate was required in respect of issues surrounding reform of the INS scheme and appropriate Shipper information provision.

Many respondents, including some who supported implementation of the Proposal, said that they would welcome a fundamental review of the INS scheme and/or consideration of alternative schemes that might seek to address concerns about current regime operation.

Transco's response
Transco recognises the difficulties associated with making an assessment of the impact of the INS scheme on regime performance. This is made all the more difficult by the coincident introduction of Modification 0511 'Removal of NDM Forecast Deviation From Imbalance Calculations'. Transco notes that there is significant support from the respondents for a review and potential reform of the INS scheme or potential alternative schemes. This is consistent with the views Ofgem expressed in the 21 March 2003 document that stated that, "the review should consider whether to extend remove or amend the scheme".

It is likely that this Proposal would decrease incentives on Users to achieve imbalances close to INS nominations and, for many Users, to achieve a daily balance. Given that the risks that this might occur at times when the system is under stress Transco considers that such increased uncertainty might prejudice the economic and efficient operation of the system. Therefore Transco concludes that it would be imprudent to implement this Proposal.

Shipper Provision of Information
Many of the respondents expressing support for the Proposal considered that Shipper accuracy of information provided to Transco would remain unchanged should this Modification Proposal be implemented.

SGD observed that analysis of balancing behaviour since the beginning of Network Code demonstrated that Shippers in aggregate come into balance by +/- 2% and stated that it was "difficult to understand why Transco needs further information to let them know this when any modelling based on previous experience would provide prediction with a high degree of confidence".

PG stated that Shippers were not able to control flows onto the system and were often constrained by activities of the upstream fields and producers. It considered that, "Increasing the incentive, therefore, will only have negligible impact on shippers' nominations". ENI and CP did not believe that it was appropriate for Shippers to be penalised. ENI asserted that, "the INS regime as currently levied unfairly penalises Shippers who are making every effort to inform Transco of their expected end of day position". ENI considered that it was impossible for some Shippers, managing "a portfolio made up of physical assets " consisting of upstream and down stream customers, "to accurately predict their end of day position". CP considered that Shippers were being penalised under both cashout and INS, for providing good information through the day only to be subject to a "mishap (which could occur after the last INS nomination)" later in the day. CP added that a Shipper in this position may also face paying a high gas price for attempting to become balanced.

Statoil noted that most Shippers forecast the end of day imbalance to zero and believed that "INS could be creating perverse incentives on Shippers to match their nominations rather than balancing to zero as the cash out incentive should ensure".

SGD advised that it had raised Modification Proposal 0632 for consideration if the Community and Ofgem believed that the INS provided a useful mechanisms for Shippers to tell Transco their intended end of day position. EKT suggested that a sensible approach would be to remove the charging element of the scheme as "the information the shippers provide would not change" and added that, "Shipper have no incentive to provide false or misleading information to Transco".

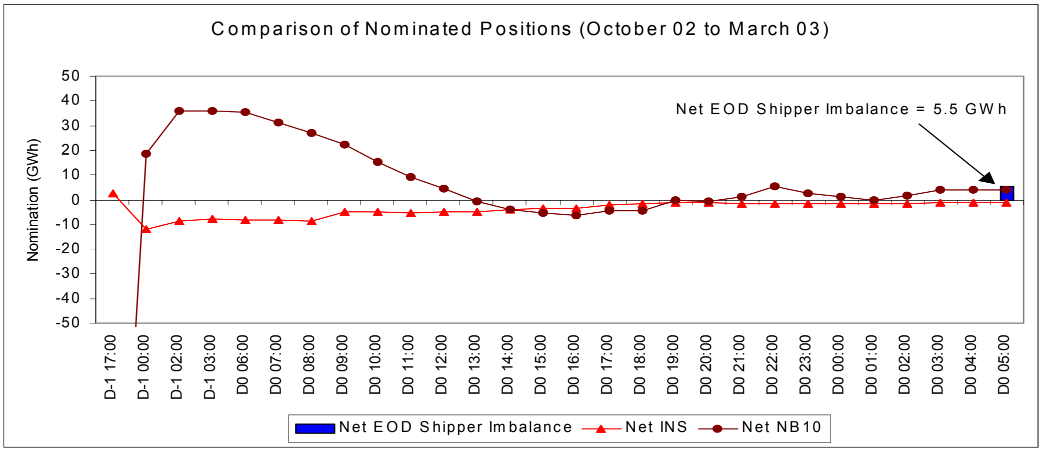
SP and BGT did not consider it appropriate to revise the charge to zero, as proposed by Modification Proposal 0632, as this would render the arrangement completely ineffective with no incentive to provide 'good information'. BGG recognised that although INS was probably not "a desirable feature of the regime" by virtue of the increase in cost of balancing a physical portfolio it was "a necessary feature" to provide stronger balancing discipline. BGG asserted that if this Proposal or Modification Proposal 0632 were implemented any deterioration in Shipper balancing performance was likely to be countered by more "draconian measures".

Transco's Response

Transco notes the differing views held by the respondents about the impact on information accuracy should the INS charges be set to zero. Transco believes that the existence of the financial consequences has provided incentives for shippers to achieve imbalances close to their INS nominations. The differences between INS nominations and actual daily imbalances are generally very much smaller than the differences between nominated imbalance positions (derived from the AT-Link input, offtake and NBP Trade Nominations on the NB10 AT-Link screen) and actual daily imbalances. This demonstrates that INS is providing Transco with better information about expected end of day positions than other nomination information.

The graph below compares the average of the aggregated net NB10 nominations with the aggregated net INS nominations and the average of the actual daily imbalances for the period of 1st October 2002 to 31st March 2003. The data indicate that the INS nominations, in the early part of the day, and the actual imbalances are more closely aligned than are the NB10 nominations and the actual imbalances. Analysis of the underlying distributions in the data samples shows that the means and standard deviations of the INS nominations (06:00D) and the actual imbalances are generally smaller than is the case for the NB10 nominations (06:00D) and the actual imbalances.

Actual Imbalance	*Average = 5,492,000 kWh*	*StDev = 48,824,000*
INS Nomination (06:00D)	*Average = -8,257,000 kWh*	*StDev = 39,219,000*
NB10 Nomination (06:00D)	*Average = 35,620,000 kWh*	*StDev = 110,477,000*



INS was introduced to provide better information about expected end of day imbalance positions. It was recognised that the NB10 imbalance projection is made on the basis of expected demands, NBP trades and input nominations "confirmed" up to that point in time. It therefore did not recognise any intent to finish at a different projected imbalance which might be achieved by a change in any one or more of the demand nominations, further NBP trades or input nomination changes. INS enables this information to be provided.

The effectiveness of INS is illustrated in the following analysis based on observed data from the period 1st October 2002 to 31st March 2003. In the graph above, NB10 nominations appear to be at their closest to the average EOD actual imbalance at 12:00D, therefore the following analysis has been undertaken at 12:00D as well as at 06:00D. Transco has chosen 06:00D as the system wide imbalance defined by NB10 data at that time should provide an indicator of the initial rate of linepack and stock change that is attributable to the aggregate balancing impact of the User community at that point in time. To be in line with system design assumptions, and to be consistent with a philosophy that the Users should be balancing the system this initial rate of change should be close to zero. The INS nomination for an individual shipper provides an estimate of an individual shipper's imbalance. Therefore the aggregate INS nominations at any point can be regarded as providing an estimate of the aggregate imbalance of all accounts on the system. The mean difference and standard deviation of the "error", defined as the difference between the "projection" and the "actual value", is shown in the attached table together with the comparable figures for the aggregate NB10 position values.

	Mean Error (GWh)	Standard Deviation of Error (GWh)
06:00D Aggregate INS Nomination Vs Actual Imbalance	-13.7	64.4
06:00D Aggregate NB10 Nomination Vs Actual Imbalance	30.3	112.5
12:00D Aggregate INS Nomination Vs Actual Imbalance	-10.3	56.4
12:00D Aggregate NB10 Nomination Vs Actual Imbalance	-1.0	83.8

As can be seen from the above the INS nominations at 06:00 D provide much better estimates of actual imbalances and with much lower standard deviations than the NB10 nominations at 06:00D. At 12:00D the mean error between the NB10 nomination and the actual imbalance appears to be smaller, as assessed by the average, than that between the INS nomination and the actual imbalance. However the standard deviation for the NB10 versus actual imbalance errors is much greater than that for the INS versus actual imbalance errors suggesting that much greater confidence can be placed in the INS nomination as a prediction of the actual imbalance even though the mean error appears to be larger. It is the unpredictability of the end of day system imbalance that may generate inefficiency in the system balancing process.

The observation made by SGD that since the introduction of Network Code Shippers in aggregate have come into balance by +/- 2% and the statement that it was "difficult to understand why Transco needs further information to let them know this when any modelling based on previous experience would provide prediction with a high degree of confidence" is an oversimplification. The +/- 2 % level noted referred to the long term trend shown by a 30 day rolling average of the over-delivered and under-delivered quantities separately, this cannot accurately describe the underlying variations observed on a day to day basis. The system has to be managed on a daily basis, and it is the uncertainties both in respect of end of day and within day quantity and flow rate variations that will cause inefficiency in the balancing process.

Net shipper imbalances, as a function of throughput, over the period 1st October 2002 to 31st March 2003 have been analysed. The analysis shows that on average for the period the net daily shipper imbalance was 0.14% of throughput with a standard deviation of 1.29%. At the 95% confidence limits the net daily imbalance will fall in the range of +2.68% to -2.40%. The maximum and minimum values observed during the period were +4.42% & -3.00%. The difficulty for Transco is that within day it is not clear what the actual net imbalance position will be. To set this level of imbalance in the context of the potential for residual System balancing actions the table below indicates the volumetric changes implied by the results of this analysis based on data sets associated with different system demand ranges. The average system demand throughout the winter period was ~350 MCM. (Note: for the purposes of this analysis throughput & demand are assumed to be the same).

System Demand (MCM/d)	Average Volume (MCM)	95% Confidence Limits (MCM)	Max/Min Volumes (MCM)
300	0.42	+8.0/-7.2	+13.3/-9.0
350	0.49	+9.4/-8.4	+15.5/-10.5
400	0.56	+10.7/-9.6	+17.6/-12.0

The table demonstrates that the net shipper imbalances are greater, even on a "1 in 20 day" basis, than suggested by the respondent. The extreme observed values, of course, are very much greater. Transco would anticipate that it is likely that aggregate net shipper imbalances would, on many days, increase if the financial incentives associated with INS were removed from the regime.

ENI and CP express the view that they do not consider it appropriate for Users to be penalised when attempting to accurately inform Transco of their end of day position when managing portfolios made up in part of physical assets, not being in control of beach flows and the potential of being affected by 'mishaps' during the day. Transco notes however that the Network Code was designed based upon the concept not that Shippers should have obligations to balance but rather that shippers should have commercial incentives to balance. Such an approach assumed some measure of control with commercial advantages accruing to those who can efficiently manage both input and offtake flows and therefore their imbalance exposure . The scheduling and balancing incentives were therefore developed to promote efficient operation of the system as well as promoting greater Shipper competition. The consequences of 'mishaps' and deliberate flow rates are the same and unfortunately the current regime provides no means to differentiate between the two even if such different treatment was to be considered desirable.

In respect of Statoil's view that the INS could be creating perverse incentives on Shippers, Transco responds that the relative strength of INS and balancing incentives was discussed during the development of Modification Proposal 0479. Transco does not believe the scheme creates perverse incentives but wonders why so many Users are still nominating zero imbalances via the INS nominations when this might not be the commercially optimum behaviour. This might suggest that the strength of the INS incentives is insufficient to generate submission of the best imbalance projections.

In relation to the interaction of the imbalance cash-out incentives and INS, Transco recognises that there are potential trade offs. Imbalance charges within the Network Code are intended to incentivise Users to achieve a close to balanced position by the end of the gas day, whilst INS charges incentivise Users to provide the most accurate information, before and during the day, about their end of day imbalance. The parameters within the INS scheme define stronger incentives to achieve an end of day balance at any time before the last INS assessment time. Beyond that a User might be neutral as to whether to endeavour to achieve an end of day balance, its INS declared position or any intermediate position. Transco therefore considers that, in the current formulation, the INS incentive is complementary to, and reinforces, the discipline and intentions behind the existing balancing incentives. This was noted during the Modification Proposal 0479 development process. Hence Users are incentivised to respond to market shocks and system or offshore problems with imbalance cashout being the primary and dominant incentive.

In response to the comment made by BGG that the INS scheme may not be a desirable feature of the regime but that further deterioration of regime performance could lead to more draconian measures being put in place, Transco reiterates its view that the INS scheme was introduced as a 'first incremental step of reform' and that it considers that it would be imprudent for this Proposal to be implemented prior to wider consideration as to whether the INS might be refined to deliver better incentives that might provide a high likelihood of ensuring satisfactory regime operation.

Cost reflectivity
Three Shippers (AEP, CP, EKT, ENI and Powergen) observed that in the first six months operation of the scheme INS charges did not reflect the costs faced by Transco. SGD and Powergen considered that INS charges introduced distortions to the regime by "creating charges on Shippers" that were not cost reflective. Powergen noted that the INS Charge "is not targeted at those providing inaccurate information" it believed that this created, "artificial winners and losers in the redistribution of costs through neutrality". AEP and Statoil expressed concern that costs generated by the INS may be passed through, either directly or indirectly, to End Users.

Three respondents (SGD, CP, and EKT) highlighted concerns in respect of recycling large amounts of revenue. EKT noted that, "this may be an indication of inefficiency particularly when the volume of revenue relates more to the market price than the level of imbalance". CP noted that there was a lot of uncertainty over the amount of neutrality revenue that could be generated through INS charges and asserted that should the industry face a cold winter there was the potential that some Shippers may be apportioned substantial neutrality 'smears'.

Transco's Response
Transco notes that given the nature of the gas balancing regime precise cost targeting is not possible. This is true of all the Shipper incentives within the regime; imbalance cashout, scheduling and INS. The primary User incentive is provided by the daily balancing cash out regime. This cannot be cost reflective but, like the other incentives, should be designed to provide appropriate incentives that, as far as possible, are consistent with the objective of cost reflective charges.

Transco believes that the INS charges, derived using the pricing methodology preferred by the Workstream during the development of Modification Proposal 0479, has delivered improved cost attribution removing the "free option" that previously enabled Shippers to change their imbalance positions throughout the gas day without any financial consequences. Such changing of imbalance positions, without risk of any cost consequences, cannot be conducive to accurate cost targeting. Transco considers that the current INS regime is better than having no such scheme. The presence of INS might be considered to have reduced the level of mis-allocation of cost that would otherwise have occurred in the regime.

Transco agrees that it is not desirable for any scheme, which cannot be considered to accurately cost target, to produce recycling of large amounts of revenue through neutrality. However Transco notes that neutrality costs remain "low" with the net effect being mildly revenue generative, the "costs" for the winter of 2002/03 were of the order of -0.06 p/therm with approximately 50% of this revenue being generated from the INS scheme.

Implementation of this Proposal would reinstate the "free option" to change position within-day as a feature of the regime. This would ensure that there is no cost targeting, or proxy charge, associated with such change of position. Transco considers that this would be undesirable and might generate increased mis-allocation of costs within the regime.

Improvements to System Balancing Action

PG recognised Transco concerns regarding inefficient information provision and its effect on the ability to take efficient balancing actions. ENI appreciated that there could be some merit in INS nominations if they provided Transco with additional information regarding Shippers intentions and provided assistance in determining efficient balancing actions. Four respondents (Statoil, EKT, ENI and PG) expressed the view that evidence that INS had improved balancing performance was inconclusive. PG added that there was,"no evidence to suggest that removing the charge would lead to greater linepack utilisation".

SSE asserted that although there was evidence of change in Transco's balancing actions it was not clear that, "they were necessarily more efficient or that they were as a direct result of additional information or the application of INS charges", and as such SSE considered it "inappropriate that charges are continued to be levied on Shippers".

Three Shippers (SGD, BGG and EKT) noted that some Shippers believe that there has been an increase in small actions to trigger the INS charge and that Transco claim that increases in smaller volume trades was evidence of more efficient actions. BGG observed that one of the "key reasons" for industry hostility to the INS has been the increase in these small actions and advises that this behaviour should be discouraged. BGG noted that more recently Transco have tended to take more "significant balancing actions".

Transco's Response

Transco accepts that it has not been able to detect improved performance over the winter in respect of the linepack variation issue. Put quite simply, the current regime, as it applied over the last winter, still continues to deliver flow patterns that are not consistent with system design assumptions and which therefore may generate unacceptable flow patterns on the system. As Transco has outlined in its response to the Ofgem document (21/03) it believes that there is significant opportunity for regime performance to further deteriorate. Therefore, at this point in time, and without wider consideration of the development of the regime, Transco considers it inappropriate to eliminate the financial incentive to shippers provided by INS.

Transco notes that as part of this consultation it asked respondents to comment on how high the INS charges might need to be to induce change in User behaviours. Transco notes that no-one responded to this question. Whilst Transco would not necessarily advocate stronger financial incentives such information might have been useful to inform decisions about INS refinement. In the absence of confirmation from Users, and on the basis of observed behaviour since the introduction of INS, Transco concludes that the current INS incentives have been insufficient to encourage Users to make arrangements to be closer in respect of physical and trade nominations, to their nominated INS imbalances early in the day. Despite this the incentives might have been sufficient to encourage performance close to nominated imbalances by the end of the day. Therefore, and although such opinion is offered without reference to other considerations, Transco believes that the directional inference must be that increased INS charges (at least on days of system stress) might generate improved regime performance from the perspective of the pipeline operator.

In response to the observation made by BGG that 'one of the "key reasons" for industry hostility to the INS has been the increase in small actions taken by Transco to trigger INS charges' Transco has undertaken further analysis of its balancing activities. At the presentation on 5th June 2003 Transco presented data that showed an increase in the frequency of days where Transco traded less than 10 GWh/d on the OCM. This analysis has been extended to include thresholds at lower levels and the results are given in the table below.

Threshold (GWh/d)	Winter 99/00	Winter 00/01	Winter 01/02	Winter 02/03
10.0	13	31	18	39
5.0	5	10	8	16
~3 (2.9)	2	6	4	4

There is significant variation year on year in the results yielded by this analysis however the variations diminish as the threshold levels are reduced. Transco interprets this information as showing that it has not increased the rate at which it takes small actions solely to trigger INS charges, rather the increased incidence of trade levels below 10 GWh/d is a facet of the general decrease in Transco's residual balancing activity.

Application of the INS incentive

SGD did not believe it, "appropriate for Transco to be deciding on the level of incentives for Shippers to behave in certain ways". It considered that incentives on Shipper should be cost reflective and therefore did not agree with Transco's statements that the previous incentives were 'benign' and that removal of the INS charges make the incentives merely 'less benign'.

Transco's Response

Complex behavioural interactions are the essence of the current regime. When Users are not, in aggregate, sufficiently close to a balanced position Transco will need to take balancing actions with consequent impacts on Transco's incentive performance. Transco and User actions are inextricably related, that is the nature if the interaction between the primary system balancing role (Users as a community) and the complementary system balancing role (performed by Transco), but it is important to recognise that Transco's incentives are aligned to minimise its impact on shipper incentives.

Transco believes that the industry should consider change, perhaps in the context of variable or graduated INS incentives, which might be stronger over periods when the system might otherwise be expected to be under high stress. Potential changes should be assessed in the context of both commercial and operational efficiency and any trade-offs there-between. However Transco consider that the current regime has, and continues to, promote competition and effective trading and these benefits should be retained wherever it is possible to do so.

Transco believes that the INS charges might still be considered to be reflective of the costs generated as a result of inaccurate imbalance nominations and to have delivered improved cost attribution by removing the "free option" that previously enabled shippers to change their imbalance positions throughout the gas day without any financial consequences. Transco maintains the view that the current cashout arrangements on Shippers are relatively benign particularly when compared with cashout regimes in other countries as identified by Brattle in their survey of international gas balancing regimes in the recent Ofgem gas balancing document.

Increased Cost to Users

LE supported the revision of the INS charge to zero, on the grounds that if the INS mechanisms were to be removed and subsequently a new balancing tool were introduced in six months time, with a similar mechanism introduced "a lot of needless additional cost on the Users" may result.

Transco's Response

Transco notes that there would be costs associated with removing the INS Charge functionality. However, Transco considers that implementation of this Proposal would be inappropriate given the arguments contained elsewhere in this report.

Preliminary Six Months of INS Operation and Analysis

PG believed that adequate time had been given to monitor the success of the INS charge and considered that, "the six month review has shown that the charge has not helped the DFN/Demand accuracy".

Four respondents (BGT, SP, BP and BGG) considered that it was premature to make a judgement about the schemes value after such a short period of operation and without proper evaluation. SP asserted that its position was driven to some extent by data provided in the Energy Balancing Performance review (5th June 2003). It believed that, "a number of improvements seem to have demonstrated regime efficiency despite the proposer's arguments". BGG stated that, "there was insufficient data set to provide clear analysis of behaviour and consequence to remove the fiscal incentive that INS represents". BGG advised that it would "be against change before January 2004, by which time adequate data will be available".

LE noted that, "Transco's analysis of this winter has shown a slight improvement in system balancing when compared to previous winters, but they had difficulty in attributing this to any one variable". LE expressed the view that the removal of the INS was inappropriate at this point in time as there was insufficient data to ascertain whether Transco balancing actions within the period from 1st October 2002 were entirely down to the introduction of INS given that the removal of NDM tolerance was introduced on the same date.

Transco's Response

Transco notes that PG observe that INS has not helped improve DFN/Demand accuracy. However Transco is unable to conceive of any rationale that would suggest that removal of the financial consequences of INS would improve such accuracy, indeed quite the contrary. Transco believe the removal of INS charges would generate additional risk that such DFN/Demand differences might further worsen. Transco therefore concludes that implementation of the Proposal would not better facilitate the economic and efficient operation of the system.

In respect of the six month review of the INS, Transco agrees with some of the respondents that it would be premature to reach any firm conclusions regarding the effectiveness of the INS after such a short period of operation and in light of other variables that may have had an effect on User behaviour and performance of system balancing .

Transco agrees with the view expressed by BGG and LE that the scheme should remain in place for a further period as this may provide sufficient time in which the community can fully review the impact of INS and agree on the most appropriate approach by which information may be provided that will improve Transco's ability to efficiently manage the system.

Impacts on Trading

CP and EKT raised concerns in respect INS's impact on trade prices and market liquidity. EKT stated that, "trading activity often reacts strongly to the INS charges but not always in the manner that encourages liquidity". It suggested that market liquidity may dry up when high INS charges are imposed particularly late in the day when it is more difficult to find counter parties. EKT considered that this had the potential of increasing the "overall risk" the cost of which "will eventually find its way through to all prices, including those paid by customers". CP asserted that, when carrying out certain trades, market participants may now be factoring in the risk of exposure to INS and that this may potentially increase uncertainty and volatility in respect of commodity charges.

BGG does not believe that the INS has had any adverse impact on prompt trading, and when Transco does take actions, it probably enhances the volume traded although the price spreads are wide.

Transco's Response

Transco notices that trading volumes on the OCM continue to increase and that Transco's market share has reduced to single figure percentages. Transco infers that the INS may have contributed to liquidity, as witnessed by increased trading volumes and later trading within the day. Additionally Transco notes that trading often occurs at prices outside of the prevailing SMPs particularly late in the day. This demonstrates that Users are responding to the financial incentives provided by INS and that it is therefore contributing to the improved end of day balancing performance observed since the introduction of INS. If the INS charge were removed then Transco would expect a deterioration in performance and this must be considered to be detrimental to the economic and efficient operation of the system and therefore could not be considered to better facilitate the relevant objectives.

Transco believes the daily balancing and allocation elements of the NBP concept are valuable features of the regime that promote trading liquidity and should be retained. Transco wants to preserve these benefits whilst ensuring that the commercial regime should deliver physical flows which are sufficiently close to system design assumptions that they satisfy operational requirements.

Review and Development of INS

Although the majority of respondents clearly supported the removal or revision of the INS charge to zero, most respondents welcomed further debate in respect of further developments within the current regime which may assist the system operator in the efficient and economical management of the system.

In their responses to this Proposal some respondents advocated implementation of Modification Proposal 0632 to facilitate appropriate refinements of INS or the development of other regime reform proposals. Three Shippers (LE, SSE and BP) expressed the view that the scheme should be kept in place, with the application of zero charges, as this would provide the opportunity for a fundamental review of the scheme at the earliest opportunity. Both ENI and BP offered qualified support to the revision of the INS charge to zero. ENI shared the view expressed by BPs that it would be, "supportive of Modification 0632 being implemented for a limited period whilst INS is being reviewed by the industry". BP believed that such a program of works would be possible to complete over "the next few weeks". ENI added that it considered, "there was merit in keeping the regime within the Network Code" and that following debate the charge may be reinstated should it be deemed appropriate. BGT considered that the INS should remain in place "until some acceptable and working alternative is available". SGD observed that the Brattle report advocated that change should be introduced while imposing zero or minimal burdens on Shippers.

Innogy supported the provision of information that will allow the system operator to more efficiently manage the system and supported the development of alternative mechanism that improve the information flow to Transco. Innogy noted that, "interaction with Transco's SO incentives needs to be considered". BGT believed that the scheme was intended as an information incentive rather than an additional balancing incentive. It stated that, "This fact cannot be omitted but the interaction of the incentives must also be considered".

SP stated that to date the industry has not "looked at changing the parameters associated with the scheme, in terms of refining the incentive itself, the way the redistribution works, and other parameters". This was a view shared by AEP which considered that, "if a detailed review were to show that benefit had resulted from the INS regime", it would not be in support of this Modification Proposal and Modification Proposal 0632 and would advocate the development of the INS principles further stating that development considerations may include "variation of the parameters or alternative means by which the revenue is re-distributed". SP asserted that it would prefer to use the scheme as a "building block" for further change than to lose it at this stage and noted that, "an INS-based solution is seen as preferable to other untried within-day regime changes".

BGT believed that there was scope for INS in "some amended form" to be trialed rather than "abandonment of the arrangement entirely".

Transco's Response

Transco fully supports consideration of refinement of the INS. However Transco believes that it would be imprudent to implement this Proposal prior to consideration of INS refinement or alternative regime evolution. Transco believes that removal or revision of the scheme may significantly impact upon the performance of the regime and Transco's ability to manage the system, particularly on days where the system is under high stress.

Consideration of Alternative Proposals

BP asserted that, "following further analysis it is possible that different proposals to revise INS in other ways than those proposed in Modification Proposal 0632 may be identified and proposed by the community".

ENI support the Proposal of "putting INS charges to zero, upto to a trigger point" and advocated a fixed tolerance, within which INS charges would not be applied. ENI expressed the opinion that, "thresholds should be sufficiently high so as to penalise shippers with large deviations from the INS nominations".

Statoil noted Transco's view, that there was merit in considering whether different commercial incentives might apply on days when the system might be under greater stress, and would welcome further discussion and development of this subject. SGD advised that it awaited proposals from Transco that related to future developments of indicators which provide 'advanced warning' of 'difficult days'.

PG proposed that a more effective way of incentivising accurate Shipper information provision may be on D+1, "Transco could look at CVA data against UK Link nominations to track down persistent offenders, with a possible role for the regulator to impose penalties on persistent offenders, as is being developed in electricity".

Transco's Response

Transco reiterates its support for considering evolution and refinement of the INS. The current formulation was derived by the Modification Proposal 0479 development process although Transco acknowledge the reluctance of Users to contribute to the debate. It might be that, with greater input from Users, a better scheme might be developed. Transco would be pleased to discuss such possibilities with the industry but notes that the NT&T Workstream on the 5th June 2003 declined the opportunity to meet on the 18th June 2003 to discuss a plan for consideration of options to address Transco's concerns about current regime operation.

Inconsistency with Design Assumption

SGD asserted that in respect of Transco's concerns, relating to the increased Shipper freedom, that the regime might be inconsistent with design assumptions, there needs to be "consideration of the extent to which the market should adapt to the design assumption (if this is required) or whether the design assumptions needs to adapt to the market structure".

Transco's Response

It is essential that flows on the system are sufficiently close to design assumptions that they satisfy operational requirements. In the short term this means the 'market' might need to fit with the 'physical'. In the longer term the system can be sized and operated to meet market requirements provided that the appropriate investments in physical infrastructure can be made. Transco recognises that this might require appropriate signals which might be derived from the forward release of within day linepack services. Transco notes however that this might necessitate regime changes to include within day allocations. Transco believes that the broader community (including Transco) might prefer not to require a commercial regime that would include sub-daily allocations unless such an arrangement is considered essential.

Transco reiterates its support for further refinement of the INS scheme and/or alternative schemes at the earliest opportunity at which time this issue can be investigated further.

Business Cost and Complexity
EKT stated that INS arrangements placed an increased business cost on Shippers in respect of customer management and internal resource any increase in cost will ultimately be reflected in customer costs.

SGD and EKT asserted that, "increasing complexity can lead to greater direct costs and raise barriers to entry for new players, which may reduce competition between Shippers". These effects may lead to higher costs for customers.

Transco's Response
The INS was developed with a view to impose minimal administrative overhead on Users. This was considered more acceptable than the development of other schemes that would have imposed more onerous requirements. Users can both mitigate their own exposures and provide Transco with the best information possible under the INS by the maintenance of a single nomination.

Meter flows
PG recalled that in its response to Modification Proposal 0479 - 'Incentivised Nomination Scheme', it suggested that the community should focus on the fact that metered flows do not align with DFNs on an hourly basis and suggested that governance through tolerances on OPNs and DFNs should be explored.

Transco's Response
Transco would agree with this assertion, however it would emphasise the fact that DFNs versus flows in the 'next few hours' are generally good but that the real problem lies in the context of DFNs (early in the day) versus 'over the day flows'. The exercise of commercial freedom within day creates considerable uncertainty when DFNs early in the day are compared with the actual "over the day" flows.

12. The extent to which the implementation is required to enable Transco to facilitate compliance with safety or other legislation

No such requirement exists in respect of the Modification Proposal.

13. The extent to which the implementation is required having regard to any proposed change in the methodology established under Standard Condition 4(5) or the statement furnished by Transco under Standard Condition 4(1) of the Licence

No such requirement exists in respect of the Modification Proposal.

14. Programme of works required as a consequence of implementing the ModificationProposal

No specific programme of works is anticipated

15. Proposed implementation timetable (including timetable for any necessary information systems changes)

Transco anticipates the change could be implemented at a few days notice. However in a similar manner as with Modification Proposal 0632 Transco believes that implementation starting on the first Gas Day in a calendar month would create less systems and administrative issues than any implementation during a month.

16. Recommendation concerning the implementation of the Modification Proposal

Transco does not recommend implementation.

17. Restrictive Trade Practices Act

If implemented this proposal will constitute an amendment to the Network Code. Accordingly the proposal is subject to the Suspense Clause set out in the attached Annex.

18. Transco's Proposal

This revised Modification Report contains Transco's proposal not to modify the Network Code but has been prepared following direction from the Gas & Electricity Markets Authority.

19. Text

SECTION E - AMEND PARAGRAPH 5.3.8(b) AS FOLLOWS:

5.3.8 (b) the "Incentivised Nomination Price" is in respect of a relevant Day, the price (in pence/kWh) calculated as follows:

(i) where the User's Daily Imbalance is positive for the relevant Day:

INP = **PSFS** x (SAP - SMSP)

(ii) where the User's Daily Imbalance is negative for the relevant Day:

INP = **PSFB** x (SMBP - SAP)

Where:

INP	is the Incentivised Nomination Price for the relevant Day;
PSFS	**is the Sell Price Scaling Factor for the relevant Day;**
PSFB	**is the Buy Price Scaling Factor for the relevant Day;**
SAP	is the System Average Price for the relevant Day;
SMBP	is the System Marginal Buy Price for the relevant Day;
SMSP	is the System Marginal Sell Price for the relevant Day, and

(iii) the Sell Price Scaling Factor for the relevant Day is zero; and

the Buy Price Scaling Factor for the relevant Day is zero; and

Signed for and on behalf of Transco.

Signature:

Nigel Sisman
Development Manager, Gas Balancing
NT & T

Date:

Gas and Electricity Markets Authority Response:

In accordance with Condition 9 of the Standard Conditions of the Gas Transporters' Licences dated 21st February 1996 I hereby direct Transco that the above proposal (as contained in Modification Report Reference **0632**, version **2.0** dated **29/08/2003**) be made as a modification to the Network Code.

Signed for and on Behalf of the Gas and Electricity Markets Authority.

Signature:

The Network Code is hereby modified with effect from, in accordance with the proposal as set out in this Modification Report, version **2.0**.

Signature:

Process Manager - Network Code

Transco

Date:

Annex

1. Any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which The Restrictive Trade Practices Act 1976 ("the RTPA"), had it not been repealed, would apply to this Agreement or such arrangement shall not come into effect:

   (i) if a copy of the Agreement is not provided to the Gas and Electricity Markets Authority ("the Authority") within 28 days of the date on which the Agreement is made; or

   (ii) if, within 28 days of the provision of the copy, the Authority gives notice in writing, to the party providing it, that he does not approve the Agreement because it does not satisfy the criterion specified in paragraphs 1(6) or 2(3) of the Schedule to The Restrictive Trade Practices (Gas Conveyance and Storage) Order 1996 ("the Order") as appropriate

   provided that if the Authority does not so approve the Agreement then Clause 3 shall apply.

2. If the Authority does so approve this Agreement in accordance with the terms of the Order (whether such approval is actual or deemed by effluxion of time) any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which the RTPA, had it not been repealed, would apply this Agreement or such arrangement shall come into full force and effect on the date of such approval.

3. If the Authority does not approve this Agreement in accordance with the terms of the Order the parties agree to use their best endeavours to discuss with Ofgem any provision (or provisions) contained in this Agreement by virtue of which the RTPA, had it not been repealed, would apply to this Agreement or any arrangement of which this Agreement forms part with a view to modifying such provision (or provisions) as may be necessary to ensure that the Authority would not exercise his right to give notice pursuant to paragraph 1(5)(d)(ii) or 2(2)(b)(ii) of the Order in respect of the Agreement as amended. Such modification having been made, the parties shall provide a copy of the Agreement as modified to the Authority pursuant to Clause 1(i) above for approval in accordance with the terms of the Order.

4. For the purposes of this Clause, "Agreement" includes a variation of or an amendment to an agreement to which any provision of paragraphs 1(1) to (4) in the Schedule to the Order applies.