

December 2001

**INITIAL WRITTEN ASSESSMENT OF
MODIFICATION PROPOSAL P59**

**The Acceptance of Bids and Offers to Honour a BM Unit's Dynamic
Parameters Beyond the Balancing Mechanism Window**

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a Distribution

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1 INTRODUCTION

This Report has been prepared by ELEXON Ltd. on behalf of the Balancing and Settlement Code Panel ('the Panel'), in accordance with the terms of the Balancing and Settlement Code ('BSC'). The BSC is the legal document containing the rules of the balancing mechanism and imbalance settlement process and related governance provisions. ELEXON is the company that performs the role and functions of the BSCCo, as defined in the BSC.

An electronic copy of this document can be found on the BSC website, at www.elexon.co.uk

2 EXECUTIVE SUMMARY

Modification Proposal P59 was raised by Innogy on 3 December 2001. It aims to formalise the procedure for accepting Bids and Offers from Balancing Mechanism Units (BMU) with dynamic parameters that would extend the impact of any acceptance beyond the Balancing Mechanism window, or as it is informally known the "wall".

The impetus for the modification is a consultation on "Beyond the Wall" that has been conducted by National Grid Company (NGC). This modification represents the alternative approach proposed by Innogy in their response to this consultation.

The key features of the proposal are to require the System Operator to accept the minimum volume of Bids and/or Offers to return the BMU to its Final Physical Notification (FPN) level:

- in accordance with the Dynamic data set applicable at the "wall"; and
- at prices submitted for the Settlement Period preceding the "wall".

The proposer also believes that the issue of the "Beyond the Wall" should be progressed within the governance of the BSC and that any solution should then be contained within the BSC.

ELEXON recognise that this Modification raises significant questions about the governance beyond the end of the Balancing Mechanism window, and whether this issue should be included in BSC.

ELEXON recommend that this Modification is progressed through the Assessment Procedure, and given the potential size of the system changes recommend a 3-month assessment period, reporting back to the Panel on 14 March 2002. The modification should be progressed by the Pricing Issues Modification Group, in particular those member of the Group who have been involved in the assessment of P34/P36.

Furthermore, ELEXON recommend the Terms of Reference are used to provide guidance on the governance issues, in particular:

- whether formal obligations regarding the end of the Balancing Mechanism window should be included in the BSC; and
- the treatment of Alternative Modifications that may have greater impact outside the BSC.

3 PURPOSE AND SCOPE OF THE REPORT

Section F of the BSC sets out the procedures for progressing proposals to amend the BSC (known as 'Modification Proposals'. These include procedures for proposing, consulting on, developing, evaluating and reporting to the Authority on potential modifications.

The BSC Panel is charged with supervising and implementing the modification procedures. ELEXON provides the secretariat and other advice, support and resource required by the Panel for this purpose. In addition, if a modification to the Code is approved or directed by the Authority, ELEXON is responsible for overseeing the implementation of that amendment (including any consequential changes to systems, procedures and documentation).

When a new proposal to modify the BSC is made, it is the responsibility of the Panel to determine how it should be progressed. Options include submitting the proposal to a Definition Procedure¹, submitting it to an Assessment Procedure², amalgamating the proposal with another proposal³, or proceeding directly to the Report Phase⁴. With a view to assisting the Panel in taking this decision, ELEXON prepares this initial written assessment of the implications of the Modification Proposal as soon as reasonably practicable after the proposal is made⁵. ELEXON endeavours to complete this initial assessment such that it can be reviewed by the Panel at the Panel meeting at which the relevant Modification Proposal is first to be considered.

This initial assessment provides a preliminary view on the following:

- the potential impact of the proposed modification on BSC systems and processes;
- the potential impact of the proposed modification on other systems and processes used by Parties;
- the potential impact of the proposed modification on the BSC, Code Subsidiary Documents and Core Industry Documents;
- the potential impact of the proposed modification on ELEXON;
- the potential impact of the proposed modification on BSC financial arrangements and budget;
- the potential impact of the proposed modification on BSC Agent contractual arrangements;
- The process and timetable that should be adopted for the progression of the Modification Proposal, in light of its complexity, importance and urgency; and
- Issues that will need to be considered and addressed in progressing the Modification Proposal (including the potential need for impact assessments, consultation and analyses).

It should be noted that, as this document only represents a preliminary assessment of the Modification Proposal, the information contained herein will, in most cases, be superseded by the subsequent analysis and reports produced by the Modification Group to which the Panel assigns the proposal for consideration.

¹ see BSC F2.5

² see BSC F2.6

³ see BSC F2.3

⁴ see BSC F2.7

⁵ see BSC F2.1.8

4 DETAILS OF THE MODIFICATION PROPOSAL

4.1 Background

On 28 September 2001 NGC wrote to Balancing Mechanism participants regarding a consultation on what has become known as the "Beyond the Wall" issue. This issue has always existed since Go-Live, however should there be a reduction in the Gate Closure period, then an increased number of Bid-Offer Acceptances and hence Parties would potentially be impacted by this.

In accordance with the Grid Code, NGC are only able to provide Bid-Offer Acceptances (BOA) for periods up to the "wall" (the end of the Balancing Mechanism window). This can result in BMU facing an instantaneous change in their output at the "wall", which the physical dynamics of the BMU prevent it from meeting. This requirement for instantaneous change can result in a BM Unit incurring imbalance charges. NGC perceive this as either making certain parties reluctant to participate in the Balancing Mechanism, or submitting more extreme offer and bid prices to manage the risk of exposure to energy imbalance prices.

The NGC consultation proposed a number of possible ways forward:

- National Grid could offer to enter into bilateral Balancing Service contracts with Balancing Mechanism participants to manage imbalance beyond the wall;
- National Grid could modify its Balancing Principles Statement to describe how we deal with the situation;
- The current situation could be maintained where National Grid seek (subject to conditions) to continue to accept Bids or Offers to honour a BMU's dynamics; and
- National Grid may only accept Bids and Offers up to the wall. It would be up to the service provider to manage the risk of potential imbalance exposure in subsequent settlement periods.

It is recognised that each of these would have a different impact on the quantity and volume of Bids and Offers within the Balancing Market. However, a common feature of these approaches is that they would not need to change the BSC, and in particular make no change to the processing of data within the Central Systems.

On 25 October 2001 NGC published a consolidated set of responses to their consultation. The document provided a summary of the 14 responses they received, as well as including an annex of the full responses.

50% of the respondents supported one or more of their options with the other 50% respondents expressing no view or proposing an alternative mechanism.

In total three alternative approaches were suggested, in summary they can be described as:

- A BSC and Grid Code change to allow dynamics of longer than the Balancing Mechanism window to be honoured;
- A full consultation under the Grid Code Review Panel with the recommended solution being adopted; and
- A deemed Bid Offer Acceptance to honour dynamics extending beyond the wall.

The response from Innogy detailed their preferred solution, which would require a change to both the BSC and Grid Code. It is this solution which is the basis of Modification Proposal P59.

4.2 Modification Proposal P59

Modification Proposal P59 was raised by Innogy on 3 December 2001. The proposal aims to formalise the procedure for accepting Bids and Offers from BMU with dynamic parameters that would extend the impact of any acceptance beyond the Balancing Mechanism window.

The key features of the proposal are to require the System Operator to accept the minimum volume of Bids and/or Offers to return the Unit to its FPN level:

- in accordance with the Dynamic data set applicable at the "wall"; and
- at prices submitted for the Settlement Period preceding the "wall".

This would require Central Systems to have the ability to calculate the BM Unit Cashflows, and subsequent Imbalance Prices, using Bid-Offer Prices submitted for a prior Settlement Period. This Modification Proposal, therefore, would require changes to the BSC, in particular to the section T that describes the settlement and trading charges.

The justification for this modification is that without a formal obligation on the System Operator to return the BMU to its FPN, there is a material risk of being left out of balance beyond the "wall". Removal of this risk would improve transparency and encourage participation in the Balancing Mechanism.

The Modification Proposal states the obligation to return plant to its FPN should be within the BSC, a belief that is repeated in Innogy's response to the NGC consultation. This Modification Proposal covers the governance of both the consultation process for proposals and any resulting solution.

5 IMPACT ON BSC SYSTEMS AND PROCESSES

BSC System / Process	Potential Impact of Proposed Modification
Registration	No impact identified at this time
Contract Notification	No impact identified at this time
Credit Checking	No impact identified at this time
Balancing Mechanism Activities	Significant changes to the calculation of BM Unit Cashflows and Imbalance Prices
Collection and Aggregation of Metered Data	No impact identified at this time
Supplier Volume Allocation	No impact identified at this time
Settlement	Significant changes to the calculation of BM Unit Cashflows and Imbalance Prices
Clearing, Invoicing and Payment	No impact identified at this time
Reporting	Potential changes to report new data items
Dispute Resolution	No impact identified at this time

6 IMPACT ON OTHER SYSTEMS AND PROCESSES USED BY PARTIES

System / Process	Potential Impact of Proposed Modification
Central systems – Energy contract notification systems	No impact identified at this time
Party Systems	Parties may need to change their systems to reflect that cashflows will in some circumstances be based on Bid Offer prices in a previous Settlement Period. In addition they may also need to make changes to allow a BOA to continue beyond the “wall”
System Operator	The systems used to prepare BOA would need to be able to instruct “beyond the wall” and understand the financial implications on BM Unit Cashflows.

7 IMPACT ON DOCUMENTATION

7.1 Impact on Balancing and Settlement Code

BSC Section	Potential Impact of Proposed Modification
A: Parties and Participation	No impact identified at this time
B: The Panel	No impact identified at this time
C: BSCCo and its Subsidiaries	No impact identified at this time
D: BSC Cost Recovery and Participation Charges	No impact identified at this time
E: BSC Agents	No impact identified at this time
F: Modification Procedures	No impact identified at this time
G: Not Used	No impact identified at this time
H: General	No impact identified at this time
I: Not Used	No impact identified at this time
J: Party Agents	No impact identified at this time
K: Classification and Registration of Metering Systems and BM Units	No impact identified at this time
L: Metering	No impact identified at this time
M: Credit Cover and Credit Default	No impact identified at this time
N: Clearing, Invoicing and Payment	No impact identified at this time
O: Communications	No impact identified at this time

BSC Section	Potential Impact of Proposed Modification
P: Energy Contract Volumes and Metered Volume Reallocations	No impact identified at this time
Q: Balancing Mechanism Activities	Introduction of the concept of the "wall" and changes to indicate additional requirements on receiving acceptances
R: Collection and Aggregation of Metered Data from CVA Metering Systems	No impact identified at this time
S: Supplier Volume Allocation	No impact identified at this time
S: ANNEX S-1 Performance Levels and Supplier Charges	No impact identified at this time
S: ANNEX S-2 Supplier Volume Allocation Rules	No impact identified at this time
T: Settlement and Trading Charges	Significant changes to the Bid-Offer, Acceptance, Cashflows and Imbalance price calculations
U: Provisions Relating to Settlement	No impact identified at this time
V: Reporting	Potentially changes to reflect new calculations
W: Trading Queries and Trading Disputes	No impact identified at this time
X: Definitions and Interpretation	No impact identified at this time
X: ANNEX X-1 General Glossary	No impact identified at this time
X: ANNEX X-2 Technical Glossary	No impact identified at this time

7.2 Impact on Code Subsidiary Documents

Code Subsidiary Document	Potential Impact of Proposed Modification
BSC Procedures	No impact identified at this time
Codes of Practice	No impact identified at this time
BSC Service Descriptions	Potentially large changes for BMRA and SAA
Party Service Lines	No impact identified at this time
Data Catalogues	Additional data items may be required in flows from the System Operator, or as a result of changes to BSC section T.
Communication Requirements Documents	No impact identified at this time
Reporting Catalogue	Depending on the level of change to the calculation of cashflows and imbalance prices additional reporting changes may be required to make the Modification transparent

7.3 Impact on Core Industry Documents

Core Industry Document	Potential Impact of Proposed Modification
Grid Code	Changes will probably be required to recognise BOA extending beyond the "wall"
MCUSA	No impact identified at this time
Supplemental Agreements	No impact identified at this time
Ancillary Services Agreements	No impact identified at this time
Master Registration Agreement	No impact identified at this time
Data Transfer Services Agreement	No impact identified at this time
British Grid Systems Agreement	No impact identified at this time
Use of Interconnector Agreement	No impact identified at this time
Pooling and Settlement Agreement	No impact identified at this time
Settlement Agreement for Scotland	No impact identified at this time
Distribution Codes	No impact identified at this time
Distribution Use of System Agreements	No impact identified at this time
Distribution Connection Agreements	No impact identified at this time

8 IMPACT ON OTHER CONFIGURABLE ITEMS

Item	Potential Impact of Proposed Modification
GTMA contract format	No impact identified at this time

9 IMPACT ON ELEXON

Area of Business	Potential Impact of Proposed Modification
ELEXON Systems	Changes to TOMAS to monitor any changes in the pricing algorithm
ELEXON Procedures	No impact identified at this time
ELEXON Contracts (Excluding BSC Agent Contracts)	No impact identified at this time
Other (e.g. costs, staffing, etc.)	No impact identified at this time

10 IMPACT ON FINANCIAL ARRANGEMENTS AND BUDGET

No impact identified at this time.

11 IMPACT ON BSC AGENT CONTRACTUAL ARRANGEMENTS

BSC Agent Contract	Potential Impact of Proposed Modification
Logica (BMRA, CRA, CDCA, SAA, ECVAA, TAA(CVA))	Potentially large changes to BMRA and SAA
EPFAL (FAA)	No impact identified at this time.
ESIS (TAA(SVA))	No impact identified at this time.
Cap Gemini (SVAA)	No impact identified at this time.
PwC (BSC Auditor, Certification Agent)	No impact identified at this time.
EASL (Teleswitch Agent, Profile Administrator)	No impact identified at this time.

12 PROCESS AND TIMETABLE FOR PROGRESSING THE PROPOSAL

The proposer believes that the issue of the “beyond the wall” should be progressed within the governance of the BSC and that any solution should then be contained within the BSC.

In order to assess this Modification there are four main aspects to be considered:

- The proposed Modification requires changes to the BSC and BSC systems. The approach is fairly clear and with some clarification could be assessed.

ELEXON believe that this Modification could be progressed through the Assessment Procedure with clear instructions to consider the Modification as proposed and whether it better achieves the Applicable BSC Objectives.

- The consideration of Alternative Modifications, will increasingly raise questions about governance. For instance the 4 options initially introduced in the NGC consultation, could be progressed by NGC without requiring changes to the BSC.

ELEXON believe that the Panel could use the Terms of Reference to guide the Modification Group on the criteria that any Alternative Modification would need to satisfy. In particular how the Modification Group should respond should they believe that another option being considered by NGC outside the BSC is more “appropriate”.

- Modification Proposal P59 regards the lack of a formal obligation within the BSC as deficiency and hence any solution to the “wall” should be recognised within the BSC.

ELEXON cannot comment on whether any solution to the “beyond the wall” issue should be recognised within the BSC.

- NGC’s consideration of “Beyond The Wall” issues will continue and solutions that are outside the BSC will be evaluated.

ELEXON recognise that this is independent to any modification conducted under BSC governance and may complete in a different time-scale. ELEXON also recognises that should any consideration by NGC complete in the near future, then Modification P59 may become obsolete.

ELEXON recommend that this Modification is progressed through the Assessment Procedure, and given the potential size of the system changes recommend a 3-month assessment period, reporting back to the Panel on 14 March 2002.

Furthermore ELEXON recommend the Terms of Reference are used to provide guidance on the governance issues, in particular:

- whether formal obligations regarding the end of the Balancing Mechanism window should be included in the BSC; and
- the treatment of Alternative Modifications that may have more impact on the Grid Code than the current BSC.

ELEXON recommend that the Pricing Issues Modification Group is used to assess the modification, in particular those who have been involved in the assessment of P34/P36.

13 ISSUES

This modification raises a number of governance issues, these have already been considered in Section 12. This section concentrates on the consideration of the technical aspects of the modification as proposed, and its impact on the BSC if adopted.

ELEXON believe that this Modification Proposal may require significant changes to Section T of the BSC, and feel it is important to note that it is not simply a minor change to procedures and obligations.

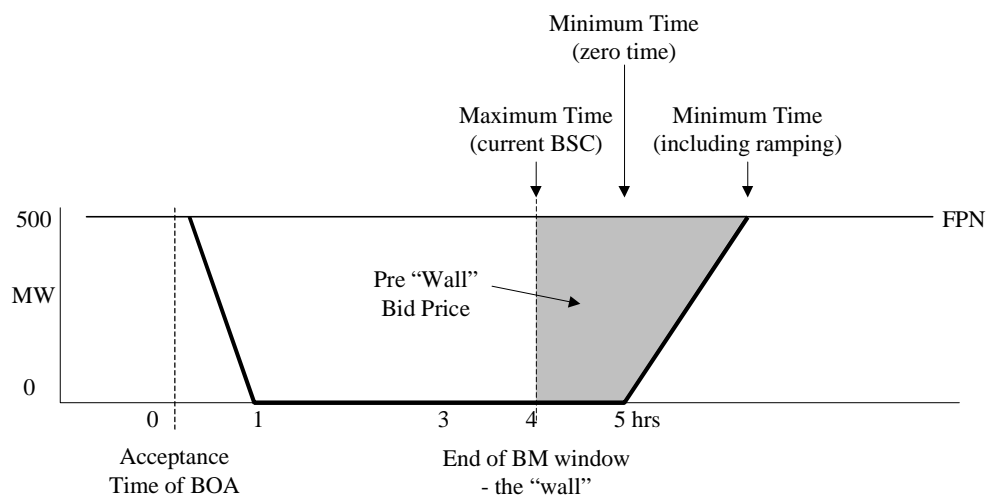
Figure 13.1 is based on the illustration provided by NGC within their consultation. The figure shows a single BOA that honours the dynamics of an example BMU, and also extends beyond the “wall”.

At the top of the figure, the left-hand label shows the current maximum time for any single BOA within the current BSC baseline, i.e. less than 4 hours. However, as the labels to the right show, this BMU needs to remain at the current output level for an additional period of time, before starting to ramp back to the original FPN.

As the current BSC does not allow a BOA to go beyond the “wall”, the additional volume would need to be provided by a second BOA, once the “wall” had moved and the new Bid-Offer prices were known.

One approach to implementation of this new modification would be to allow the original BOA to include this additional time and volume, i.e. without the need for a subsequent BOA once the “wall” had moved. In this case it would be necessary for Settlement to price it (i.e. the shaded area) at the bid price for the last Settlement Period prior to the “wall”⁶. It is assumed that creation of a suitable BOA, which honours plant dynamics, would remain outside the BSC.

Figure 13.1 – Basic Example

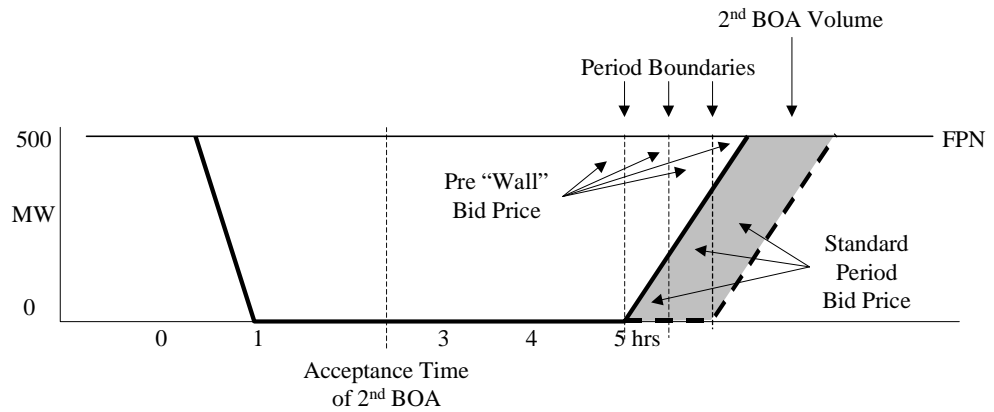


In addition the assessment of this modification will need to consider more complex scenarios, such as what happens if a subsequent unrelated BOA extends the intention of the original BOA. Figure 13.2 represents the same scenario as shown in figure 13.1, but

⁶ Using this approach Central Systems could compare the Acceptance Time with the start-time of the Settlement Period being processed. This could be used to determine which Bid/Offer price the volume within that Settlement Period should be valued at.

two hours later in time. In this figure a second BOA is issued in order to continue to intention of the original BOA. In this case the additional volume (i.e. shaded) would be within the Balancing Mechanism window for this second BOA and would normally be priced at the standard Bid-Offer prices submitted for those Settlement Periods.

Figure 13.2 – Second BOA



This 2nd BOA raises the question of how, within a single Settlement Period, to handle the situation where the volume attributed to original BOA should be priced at the value prior to the “wall”, whereas the volume attributed to the second BOA, could potentially be priced at a different value.

A number of options may exist, the simplest approach maybe to price both volumes at the standard Settlement Period Bid price as the System Operator could take any price change into account when issuing the second BOA. Another approach may be to price all volumes independently for each acceptance (i.e. QAO^{kn}_{ij}).

The point of including these examples is to illustrate some of the topics to be discussed during the progression of this modification. In addition this also gives some impression of the complexity and the level of change that may be required to Section T of the BSC. It is possible that during the Assessment Procedure a simple solution may be proposed, however for the purposes of the IWA it is assumed that significant changes will be required to section T.

ANNEX 1 – MODIFICATION PROPOSAL

Modification Proposal	MP No: 59 <i>(mandatory by BSCCo)</i>
Title of Modification Proposal <i>(mandatory by proposer):</i> The acceptance of Bids and Offers to honour a BM Unit's dynamic parameters beyond the Balancing Mechanism window.	
Submission Date <i>(mandatory by proposer):</i> 3/12/2001	
Description of Proposed Modification <i>(mandatory by proposer):</i> To codify in the BSC the "gentleman's agreement" between the System operator and BM participants regarding the acceptance of Bids and Offers "beyond the wall" to honour a BM Unit's dynamic parameters. This would require the System Operator to accept the minimum volume of Bids and/or Offers to return the Unit to its PN level in accordance with the Dynamic data set applicable at "the wall", at the prices submitted for the Settlement Period preceding "the wall".	
Description of Issue or Defect that Modification Proposal Seeks to Address <i>(mandatory by proposer):</i> "The Wall" is the name given to the period at the end of the Balancing Mechanism window, beyond which National Grid cannot issue Bid Offer Acceptances. Therefore any individual Bid Offer Acceptance that the System Operator issues can only honour a plant's dynamics (for example minimum zero time) up to "the wall". To date, the System Operator has been issuing multiple bid offer acceptances (subject to limitations) to honour a plant's dynamics beyond the initial wall. As this practice is not codified in the BSC, it has been handled as a "gentlemen's agreement". The System Operator is not obliged to return a Unit to its PN beyond "the Wall" in accordance with its dynamic parameters. BSC parties are therefore discouraged from participating on the BM due to the risk of being left out of balance beyond "the wall".	
Impact on Code <i>(optional by proposer):</i> Section Q5.3 and parts of section T would need to be changed to implement this modification proposal.	
Impact on Core Industry Documents <i>(optional by proposer):</i> A change to Grid Code BC2.7.2 may be required.	
Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties <i>(optional by proposer):</i>	
Impact on other Configurable Items <i>(optional by proposer):</i>	

Modification Proposal	MP No: 59 <i>(mandatory by BSCCo)</i>
Justification for Proposed Modification with Reference to Applicable BSC Objectives <i>(mandatory by proposer):</i> <p>The omission in the BSC of a formal obligation on the System Operator for acceptance of bids and offers beyond "the Wall" is a significant defect of the BSC which needs to be rectified. The defect is a deterrent to participation in the BM due to the risk of being left out of balance beyond "the wall". Formalising arrangements for Bid/Offer acceptances that would extend beyond 'the wall' would remove this risk, improve transparency and encourage participation in the Balancing Mechanism. This would promote the BSC objectives of effective competition in the generation and supply of electricity and the efficient, economic and co-ordinated operation of the Transmission System by the Transmission Company.</p>	
Details of Proposer: <p style="margin-left: 40px;">Name: David Tolley Organisation: Innogy plc Telephone Number: 01793 892650 Email Address: david.tolley@innogy.com</p>	
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Details of Representative's Alternate: <p style="margin-left: 40px;">Name: Stephen Chapman Organisation: Innogy plc Telephone Number: 01793 893643 Email Address: stephen.chapman@innogy.com</p>	
Attachments: NO If Yes, Title and No. of Pages of Each Attachment:	