

ARTIFICIAL INFLATION OF TRAFFIC OPERATIONS GUIDE

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1.0 INTRODUCTION

This is an operational guide to provide a general understanding of the operation of the SIA Artificial Inflation of Traffic (AIT) process implemented from 1st March 2010.

2.0 SCOPE

This guide is not contractually binding but is intended to support the contractual provisions for managing the risk associated with the artificial inflation of call traffic, and to help promote industry best practice.

This document will support the process to be followed with regard to notification and retention of monies in respect of Artificial Inflation of Traffic.

3.0 SUMMARY

AIT is comprehensively defined and scoped in Annex E of the Standard Interconnect Agreement (SIA), and is applied by Paragraph 14A of the main body of the SIA.

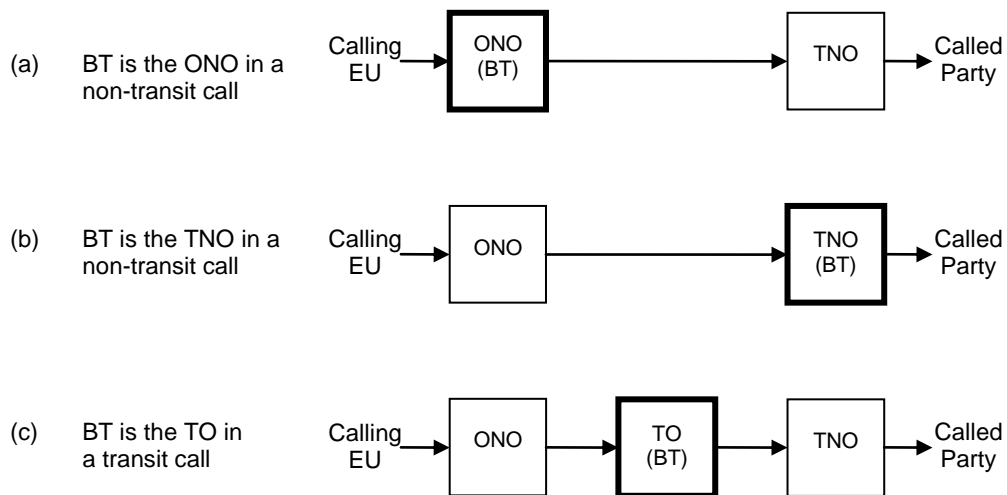
But more generally for the purposes of this guide, the AIT provisions are looking at a situation where a party running or associated with a telecommunications service is associated with activity causing calls to that service to be artificially generated or prolonged for financial benefit, in cases where the calling pattern would not have happened in the normal course of business.

4.0 ROLES UNDER THE SIA

4.1 The SIA is an agreement between BT and a CP which governs the interconnection of BT's PECN and the PECN of a CP. BT enters into separate SIAs with each and every CP which interconnects to BT's PECN.

4.2. When an end user (EU) makes a call that call is conveyed from that originating EU to the ONO (Originating Network Operator), and from the ONO to the TNO (Terminating Network Operator), either directly or via the BT network if BT is acting as the TO (Transit Operator).

Depending on the particular call, BT might be the ONO, the TNO or the TO, as illustrated by the three call scenarios in the following diagram:



5.0 RESPONSIBILITIES

5.1 General

Under Paragraph 14A of the SIA all Parties have a responsibility to detect, identify, notify and prevent AIT – and are committed to use reasonable endeavours to develop, implement and maintain appropriate procedures to identify and prevent AIT.

At Appendix 5 to Annex E is a list of “AIT Indicators” which could initially alert a Party to an incidence of AIT. All Parties to the SIA – whether acting as ONO or TNO (or in the case of BT, as TO) have a joint responsibility to minimise and mitigate the impact of AIT.

5.2 Originating Network Operator

The ONO will need to take a view on suspected AIT at each of the following three points in the process.

- 5.2.1 The initiator of the process between CPs will be the **A1 Retention Notice** almost invariably issued by an ONO. This is more fully defined in Annex E, but in summary requires the ONO with a reasonable suspicion of AIT to supply on the A1 Retention Notice the following information
- Estimated value of the sums to be retained;
 - Estimated total duration and number of relevant calls;
 - Start and end dates of those calls; and
 - Full dialled telephone numbers (exceptional circumstances are listed when incomplete dialled numbers may be acceptable);
- and then to report the reasons for a reasonable suspicion of AIT. Normally that would involve reference to the AIT Indicators – all those considered to be applicable should be referenced. As much supporting information as possible should be included with the A1 Retention Notice to enable the TNO to fully investigate and either confirm or reject the alleged AIT case.

5.2.2 The A1 Retention Notice is then followed by the **AIT Call Data**. The identified grounds for suspicion of AIT in the A1 Retention Notice are then expected to be further supported when the call records are provided. The detailed call information is to include

(a) Partial CLI of the call originator

(NOTES: (i) Partial CLI is defined in Annex E as the telephone number of the Calling Party less the final four digits; (ii) for requests for information which may reveal the identity of the Calling Party see section 8 below)

(b) Full dialled telephone numbers (in the process examples of exceptional circumstances are listed and in such cases incomplete dialled numbers may be acceptable)

(c) Call start time

(d) Call duration

(e) date(s) of the call; and

(f) “detailed written explanation of why the AIT Call Data referred to in (a) – (e) above supports a reasonable suspicion of AIT (having regard to the definition of AIT and paragraph 2.2).”

The detailed explanation given by the ONO will of course be fully dependent on the circumstances of the particular incident, but guidance is given here on what some of the indicators may involve for the ONO - and this guidance would be expected to be updated and added to in light of operational experience:

<p>Excessive Calls In the first three months of service does the call pattern represent growth 25% per month more than would be expected of a comparable service (if service growth is expected to be atypical then a special growth % should have been agreed by TNO and ONO/TO)</p>
<p>Excessive Growth After the first three months of operation, is traffic growing by more than 25% per month – without an evident reason</p>
<p>Small Number of Calling Centres Provide details if the calls are from a single party/number, or from Less than 5 numbers, Less than 10 etc. In the case of Mobile originated traffic this may also include information regarding the type of contract e.g. all calls originated from Pay As You Go (PAYG) SIM cards/Contracts; or from a disproportionate number of SIM cards compared to Handsets.</p>
<p>Call Duration ONOs should provide in their reasons details of any call duration issues which provide suspicion of an artificial calling pattern, and which do not appear justified by the nature of the service. If the calls are of the same or similar duration the ONO should indicate if the calls are all less than 1 second, 1 minute or 5 Minutes etc. It should also include details of deliberately prolonged or locked calls.</p>
<p>No Promotion If the ONO has been unable to discover any evidence that advertising of the service that explains the level/pattern of calling.</p>
<p>Payphone Origination Is an unreasonable amount of traffic originating from Payphones? If yes indicate volumes or percentage of traffic.</p>

<p>Self Generated Calls Does the call pattern suggest that the calls could be originating from a single calling party? Is there reasonable suspicion that the calls have been originated by a party connected to the service which profits from the operation of that service.</p>
<p>Breach of Law Any evidence or suspicion of criminal or illegal activity causing inflated traffic should be outlined. Crime reference numbers should be provided where available.</p>
<p>PhonepayPlus Code (PPP) Details of the conditions that have been breached i.e. has there been a failure to provide pricing information at the beginning of the call. If PPP emergency procedures have been instigated this should also be noted and should include details of the date the procedures were initiated and against whom.</p>
<p>Missed Calls Provide details around suspicions of missed calls to promote chargeable ring-back (Wangiri) including any complaints received and any approach made to PPP or OFCOM.</p>
<p>Impinges Billing Technology Provide details if there is reasonable suspicion of a pattern of calling which appears constructed to avoid capture by billing technology.</p>
<p>Fraudulent Calls If there is reasonable suspicion that there is some sort of relationship between the calling party and the called service. Note 1: specifically excludes calls made on individual lost or stolen mobile handsets/SIM cards. Note 2: PBX hacking is not of itself an indicator of AIT – but it is possible that it could be used as a means of generating AIT Traffic, in which case other evidence would be necessary to constitute "reasonable suspicion of AIT".</p>
<p>Self Generated or Related Calls Calls exploiting a retail rate card anomaly against the service termination payment, where there is reasonable suspicion that the calling party and called service are related in some way.</p>
<p>Excessive Durations Details of deliberately prolonged or locked calls.</p>
<p>Overseas Calls originating overseas for PRS services</p>
<p>Tromboning Provide information detailing the suspicion that calls originating in the UK to predominately UK terminating ranges have been routed offshore. Which country/ countries where they sent to before being passed back to the UK?</p>
<p>CLI Manipulation Provide evidence to support suspicions that the originating CLI has been manipulated, e.g. Hidden or Spoofed CLI or CLIs of non-activated number ranges or with unobtainable numbers.</p>

Often the indicators may be linked e.g. self-generated calls may be indicated by a large volume of calls of similar duration originating from overseas, or from a single operator, or from a restricted geographical area or range of originating numbers.

- 5.2.3 After the TNO has received the A1 Retention Notice and the AIT Call Data and evaluated the situation in the light of the case provided to the TNO and the TNO's own investigations (see section 5.3 below), then if the TNO considers that traffic not to be AIT, the TNO will forward the **A2 Rejection Notice** with suitable refutation of the case made.

It would seem 'best practice' for TNOs to wait for receipt of the relevant CDR information from the ONO before issuing an A2 Rejection Notice, unless it is clear the A1 Retention Notice information is so factually

incorrect as to make it impracticable to investigate the alleged incidence (e.g. wrong number ranges). Upon receipt of CDR data (which is a key requirement) any Rejection Notice issued by TNO should be clear as to why they believe the submitted CDR does not support AIT and as appropriate provide **additional evidence** (i.e. own data, supporting documentary information as to services on offer) to refute a claim of AIT. At all times BT should be copied in.

- 5.2.4 At that point the ONO needs to re-evaluate its belief of a reasonable suspicion of AIT in the light of the TNO's response, and any further investigation the ONO makes as a result of the TNO's response. If then the ONO considers that there is now "a strong and convincing suspicion" that AIT has occurred in respect of the Call traffic referred to in the A1 Retention Notice" the ONO must respond to the TNO with an **A4 Dispute Notice** explaining the grounds for the "strong and convincing suspicion"# (or conversely with an **A3 Withdrawal Notice** if it is believed there is not a strong and convincing suspicion).

Note: The necessary strengthened level of suspicion should be such that the ONO would reasonably expect a court or an arbitrator to accept that there was a "strong and convincing suspicion" that AIT had occurred - which could involve, for example, evidence of non-genuine terminating services, of collusion between call originator(s) and terminating service providers, of traffic patterns not compatible with good-faith telecommunications practice.

5.3 Terminating Network Operator

- 5.3.1 For the TNO "reasonable endeavours to develop implement and maintain appropriate procedures to identify and prevent AIT" (as referred to in Paragraph 14A.3 of the main body of the Standard Interconnect Agreement) may include such things as:

- A process for credit vetting and customer risk assessment of service providers where practical.
- PhonepayPlus registration checks in respect of service providers
- Call data monitoring or regular and timely reporting for AIT indicators (as described in Annex E, Appendix E5). Best practice could include regular checks on the services offered by service providers (test calls), checks and validation of service provider promotional material, checks on the origin of calls (e.g. calls only originated from one CP)
- Comprehensive contractual terms with the TNO's service providers might include the following rights for the TNO:
 - The ability to retain suspected AIT revenues

- The requirement for mirror image contracts between the TNO's service providers and any sub service providers
 - Contractual obligation to comply with all PhonepayPlus requirements (including any codes of practice), and
 - Appropriately operating the retention process outlined in this guide and Annex E
- 5.3.2 Immediately on receipt of an A1 Retention Notice (and subsequently the AIT Call Data), the TNO must evaluate the situation in the light of the TNO's knowledge of the circumstances, the evidence provided by the ONO and the TNO's own investigations. If the TNO considers the traffic not to be AIT, the TNO will forward an A2 Rejection Notice with suitable refutation of the case made.

6.0 ANNEX E AIT PROCESS

- 6.1 As a non-contractual aid to understanding the Annex E three flow chart diagrams have been prepared which explain the three different types of AIT retentions based on the party making the retention and the nature of the relevant call traffic – see Appendices 1-3.

7.0 IMPLEMENTATION

- 7.1 The revised AIT process was effective from **1st March 2010**.
- 7.2 It was agreed that a Contract Review in respect of AIT would take place twelve months after the new process became effective, and that review activity has now been completed. The Ofcom determination which enforced the revised process also required BT to submit a report after eighteen months of operation on how well it was going, and on any areas where possible improvements had been identified. That report was submitted by BT to Ofcom at the beginning of September 2011.

8.0 INFORMATION TO BE SUPPLIED (DATA PROTECTION)

8.1 Requests for information governed by the Data Protection Act 1998

- 8.1.1 Requests for information to the ONO from the TNO (or TO) which may reveal the identity of the calling party are governed by the Data Protection Act Sec 29.1 1998 (DPA), which provides authority for the release of personal data in certain circumstances.

- 8.1.2 Personal data, which is covered by the provisions of the DPA, includes;

- Full CLIs
- Names or addresses of calling parties

- Detailed call data, and
- Any information that may enable the identification of an individual

8.1.3 Under the provisions of the DPA personal data may be requested for the prevention and detection of crime. Personal data should only be requested if it is intended to be used for this purpose and requests must be made in a standard format and detail the reason for the enquiry.

(See Appendix 4)

8.1.4 The provisions of the DPA should be considered before making any request for information

9.0 CONTACTS

9.1 CPs are reminded that under paragraph 2.5 (a) of Annex E, AIT Notices (i.e. A1 Retention Notice, A2 Rejection Notice, A3 Withdrawal Notice, A4 Dispute Notice) are to be sent by Fax. E-mail may be useful as a repeat of the faxed information, but should only be used as the main form of communication if the recipient's Fax is not available. If the recipient's fax is not available or not working, then exceptionally notice may be served to the e-mail address provided under paragraph 4.1 of Annex E, or failing that to another e-mail address reasonably believed to be operational. [Note: "In the absence of contrary evidence, a notice by email shall be duly served as the time of successful receipt by the recipient (as may be evidenced by, but not limited to, the transmission of an automatic read receipt from, or a manual acknowledgement by, the recipient)" - paragraph 2.5 of Annex E].

9.2 Under paragraph 4.1 of Annex E, each Party to the SIA is obliged to ensure that the other Party has a current AIT contact person with current fax number and other contact details (including e-mail address), and to ensure that these are kept up-to-date.

9.3 For those participating in the AIT Notice Email Trial:

This paragraph applies if you have decided to join the AIT email notification trial by signing the Supplemental Agreement and agreeing a start date. The intention is that participants in the trial will exchange AIT Notices by email – though the existing contract arrangements would remain unchanged when dealing with non-participants in the trial. For transit cases TNO and ONO triallists would be informed of the relevant email addresses for triallists in the A1 Retention Notice which BT sends to the TNO (see sample BT Rejection Notice to TNO at Appendix 5 showing the information for triallists), or in the equivalent information copied to the ONO. (Note: BT will also circulate a list of current triallists at the beginning of each month to those taking part in the trial).

A copy of the A1 Retention Notice should be supplied in Word or Excel to permit details to be cut and pasted downstream; obviously it is a matter for individual CPs whether they also wish to provide a copy in pdf format for security purposes.

10 DEBIT NOTES

Paragraph 6.6 of Annex E includes a provision for CPs to raise Debit Notes if they are entitled to a credit note and haven't received it within the timescales.

Before raising a Debit Note it is wise to check to ensure that a credit note hasn't been raised and lost. If a Debit Note is raised and a credit note has in fact been sent, it could cause significant amounts of additional work and cost to correct the VAT situation.

Just as with invoices and credit notes, HMRC require Debit Notes to contain certain information as a minimum. The information requirements are subject to change and it is the responsibility of CPs to ensure that any Debit Notes they raise comply with the regulations in force at the time.

The CP's Accounting, Billing and Legal Departments should be consulted to ensure that systems are in place to handle them.

The understanding as at July 2011 for a document to be a legal Debit Note under HMRC regulations it must contain the following as a minimum:

The note should be headed "Debit Note" and include:

- 1) A unique identifying number and date of issue;
- 2) the supplier's and customer's names and addresses;
- 3) the supplier's VAT registration number;
- 4) a description which identifies the goods and services for which the credit is given;
- 5) the quantity and amount credited for each description and a reason for the credit;
- 6) the total amount credited, excluding VAT;
- 7) the rate and amount of VAT credited; and
- 8) the number and date of the original VAT invoice

When the debit note is issued it must feed through into the CP's VAT return.

BT's specimen Debit Note (as at June 2011) is attached as Appendix 6.

APPENDIX 1 - 3 DIAGRAMS

APPENDIX 4 – DPA REQUEST FORMAT

APPENDIX 5 – SAMPLE REJECTION NOTE FROM BT (TO) TO TNO (INDICATING ADDRESS FOR EMAIL TRIALLISTS TO USE)

APPENDIX 6 – SPECIMEN BT DEBIT NOTE

Diagram 1. ONO Initiated Non-Transit Retention (paragraph 5 of Annex E)

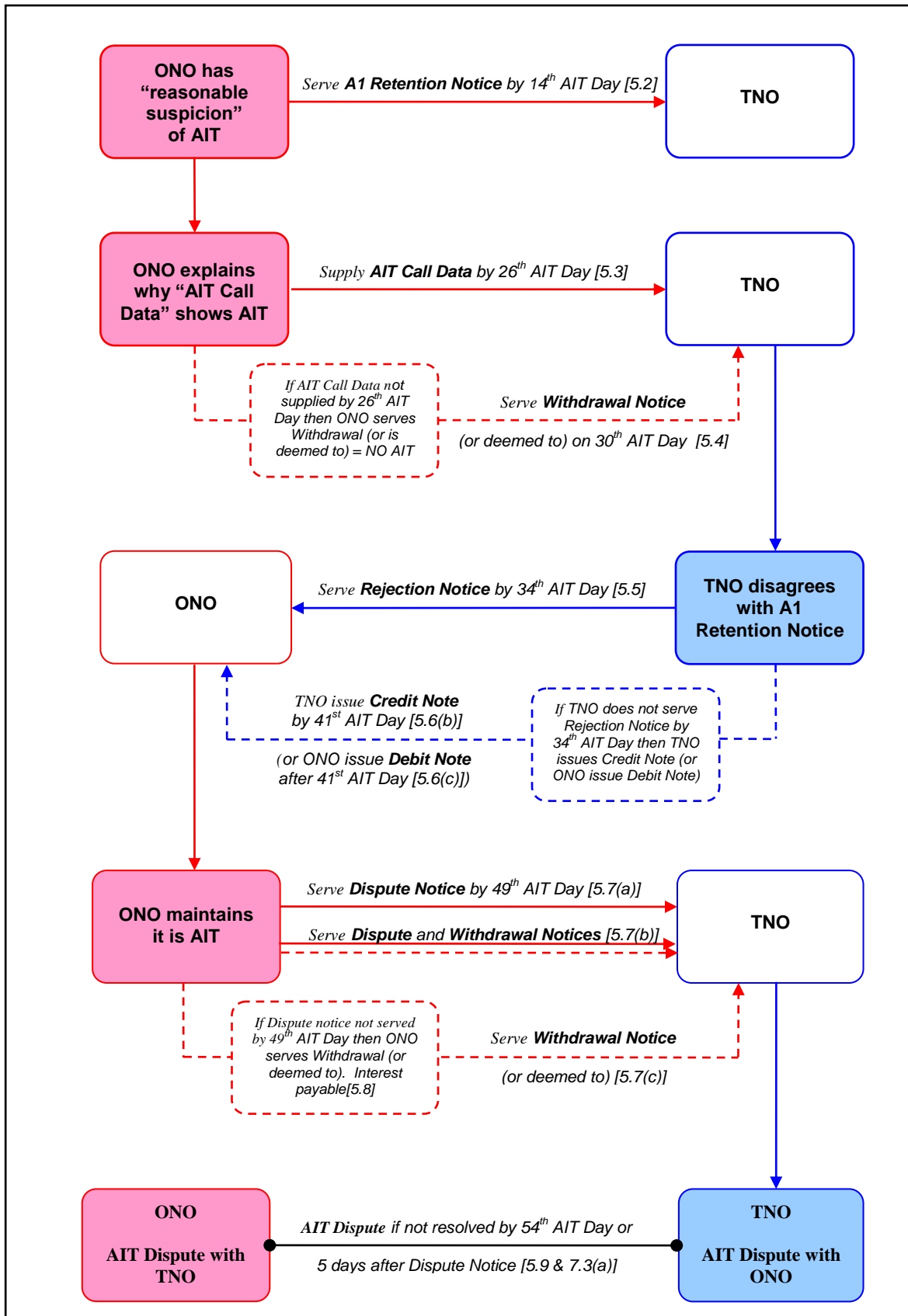


Diagram 2. ONO Initiated Transit Retention (paragraph 6.2(a) of Annex E)

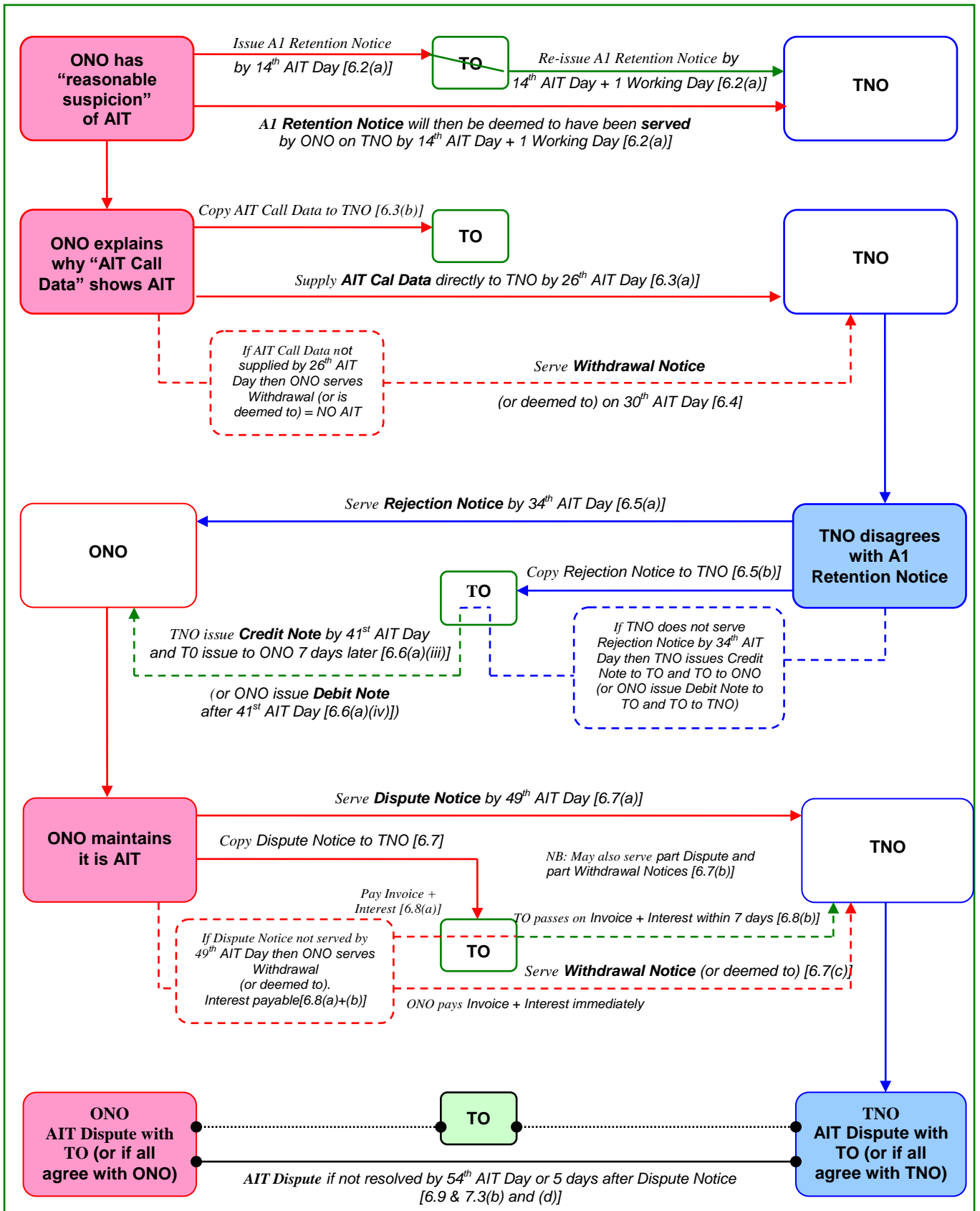
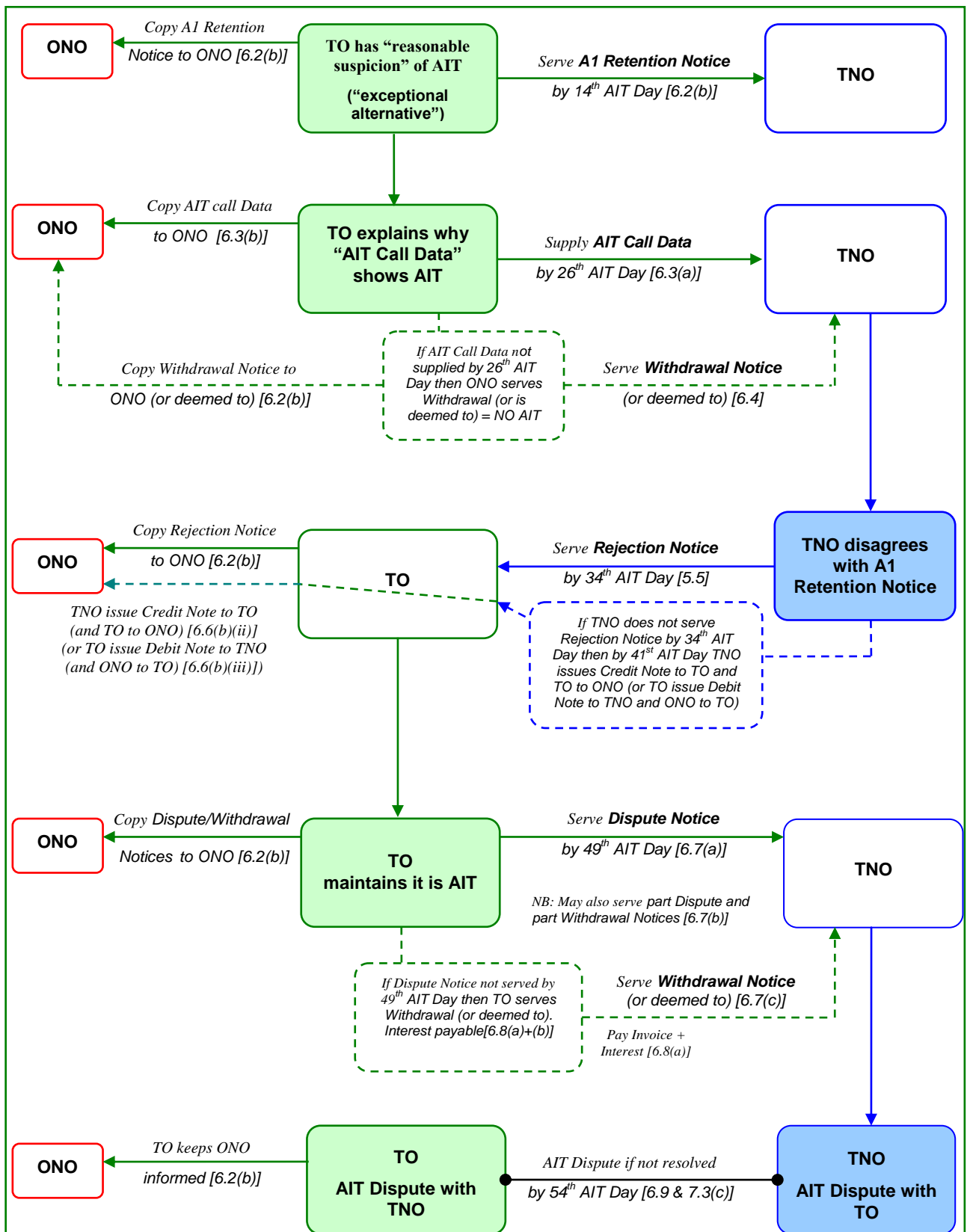


Diagram 3. TO Initiated Transit Retention (paragraph 6.2(b) of Annex E)



DPA REQUEST FORMAT

DISCLOSURE OF INFORMATION:

[Name]

[Company]

[Official Company Address]

[Date]

Will you please provide subscriber details for Tel No:

Provision of this information would greatly assist the conduct of our enquiries. It is essential, however, that the subjects of the information are not made aware of our interest.

In order to satisfy the provisions of section 29(1) of the Data Protection Act 1998, if applicable, I hereby certify that the information is required for the purpose of the prevention or detection of crime and/or the apprehension or prosecution of offenders.

We thank you for your co-operation in this matter and would appreciate your prompt reply.

Yours sincerely,

.....

APPENDIX 5

SAMPLE REJECTION NOTE FROM BT (TO) TO TNO (INDICATING ADDRESS FOR EMAIL TRIALLISTS TO USE)

A1 Retention Notice

<p>TO</p> <p>(transit operator OR terminating network operator)</p>	<p>COMPANY</p> <p>NAME / TITLE</p> <p>TELEPHONE</p> <p>FAX</p> <p>E-MAIL</p>	<p>Transit Operator</p>	<p>Terminating Network Operator</p> <p>DEF Ltd</p> <p>John Cream</p> <p>0000 000 0000</p> <p>0000 000 0000</p> <p>john.cream@def.com</p> <p><i>[Note to email triallists: notices should be exchanged by email with this CP]</i></p>
<p>FROM</p> <p>(originating network operator OR transit operator)</p>	<p>COMPANY</p> <p>NAME / TITLE</p> <p>TELEPHONE</p> <p>FAX</p> <p>E-MAIL</p>	<p>Originating Network Operator</p> <p>ABC Ltd</p> <p>John Brown, John White</p> <p>00000 000000, 00000 000000</p> <p>00000 000000</p> <p>john.brown@abc.com;</p> <p>john.white@abc.com</p> <p><i>[Note to email triallists: notices should be exchanged by email with this CP]</i></p>	<p>Transit Operator [BT use only]</p> <p>BT</p> <p>Alan Partington</p> <p>0208 666 2439</p> <p>01293 521536</p> <p>ait@bt.com</p>

I hereby give formal notice of an intention to withhold payment for the calls detailed below on grounds of suspicion of AIT in line with the appropriate provisions of the Standard Interconnect Agreement.

Terminating number range(s) and Operator	Dates	Estimated total calls / minutes	Estimated NET value/ interconnect revenue (£) (excl VAT)
000000 DEF Ltd	01/05/2011 31/05/2011	8,000	14000.0
Total Interconnect Revenue (£) (excl VAT)			14000.0

Details of the "reasonable suspicion" of AIT High volumes of calls made to DQ service. High call volumes from same distinct locations, same SIM types making calls.

I confirm that I am authorised to issue this notice on behalf of the above noted operator, and that numbers and revenues stated represent traffic profiles consistent with AIT indicators described in Annex E of the Standard Interconnect Agreement.

Signature:

Date: 14/06/2011.....

ADDITIONAL INFORMATION (use additional pages if necessary):
BT Case Number 0000

