



BT MIS Separation

Amendments to section 5 and 8 (separation of systems shared between Openreach and the rest of BT) of the Enterprise Act Undertakings given by BT to Ofcom

Statement

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Section 1

Executive Summary

- 1.1 On 22nd September 2005 Ofcom accepted BT's undertakings pursuant to section 154 of the Enterprise Act 2002 ("the Undertakings") addressing Ofcom's competition concerns through, inter alia, the implementation of what has been termed "Equality of Access" for all communications providers. This document sets out Ofcom's decision to vary certain of the Undertakings regarding the separation of Management Information Systems ("MIS") in accordance with the proposals contained in the consultation *BT MIS Separation* published on 7th September 2006.
- 1.2 The separation of systems shared between Openreach and the rest of BT is a key part of Equality of Access. A number of sections in the Undertakings refer to these systems including:
- Section 5.45, which requires BT to logically partition its MIS as defined in the Undertakings so that they are run separately for Openreach and the rest of BT by 22nd October 2006 such that they do not lead to undue discrimination against other Communications Providers;
 - Section 8.5, which requires BT to logically separate its systems which hold Commercial Information and Customer Confidential Information between Openreach on the one hand and the Upstream and Downstream Divisions on the other.
- 1.3 In understanding the types of separation Ofcom and BT have found it helpful to identify three levels:
- "Level 1 System Separation" means the application of access rights and controls to ensure that users only have access to data to which they are entitled.
 - "Level 2 System Separation" means both separation of systems data and separate instances of the application software such that users can only have access to which they are entitled.
 - "Level 3 System Separation" means Level 2 System Separation plus physical separation of the supporting computer hardware;
- 1.4 Of the 71 MIS previously shared between Openreach and the rest of BT, 58 of them were no longer shared at any level by 22nd October 2006, being put beyond shared use through migration, de-scoping or closure. In our consultation of 7th September Ofcom proposed that:
- For the remaining 13 MIS listed in the Consultation, BT will implement Level 1 Separation from 22nd October until 30th June 2010, after which Level 2 System Separation will apply unless systems are closed or replaced or unless otherwise agreed with Ofcom. The rigour of Level 1 System Separation will be tested by independent external audit.
 - By 30th June 2007, following timely consultation with Ofcom and taking into account Ofcom's comments, BT will provide Ofcom with a roadmap which will set out how BT plans to implement Level 2 separation for the listed MIS systems by 30th June 2010. The delivery of this roadmap will be a binding Undertaking. The

roadmap will be a plan and dates in the roadmap will not be binding. BT will agree with Ofcom those elements of the roadmap that are appropriate for publication having regard to BT's commercial need for confidentiality. Ofcom will publish our view of progress against the roadmap in the ordinary course of our implementation reporting, subject to commercial confidentiality.

- The systems separation referenced in Section 8.5 is clarified: these systems will be subject to Level 2 Systems Separation.

1.5 The variation is not material in Ofcom's view, however Ofcom considered it appropriate to consult for a four week period because of the level of interest the proposals might generate with stakeholders. Ofcom has received two responses to the consultation. One, from BT, supported the proposals whilst correcting the description of one system Aspire. The second from Cable and Wireless raised three main concerns:

- The level of information provided in the consultation regarding the 13 named MIS and how we had assessed the impact on Equality of Access of Level 1 separation
- The need for the roadmap to be public
- The need for the external audit to include risk reporting and assessment

1.6 With regard to the first two points, it is Ofcom's view that there will always be information asymmetry between BT and the rest of the industry with regard to BT's systems and that BT cannot always be expected to share detailed and often commercially sensitive material with its competitors. Whilst BT has shared more detailed information on these systems with Ofcom, our assessment of risk to the delivery of Equality of Access is primarily based on their function as Management Information Systems as well as on the imposition of externally audited access controls. Ofcom does not therefore believe that our assessment of the risk to the delivery of Equality of Access would change were more information publicly available but is including further information on the 13 systems here in the interests of transparency. Ofcom does agree with Cable and Wireless that, allowing for commercial sensitivities, as much as possible of the roadmap should be made public and we shall actively work with BT to ensure that this is the case.

1.7 With regard to the third point, Ofcom agrees with Cable and Wireless that a risk assessment is integral to any professional audit and is including a clarification on the external audit within this statement.

1.8 Overall, in the light of the responses and given the minor nature of the variation, it remains Ofcom's view that the proposed variation does not constitute a material variation to the Undertakings and that the Undertakings continue to represent a comprehensive solution as is reasonable and practicable to the adverse effects on competition identified. Ofcom has therefore determined to vary the Undertakings as set out in our consultation and summarised in paragraph 1.4 above. The exact wording of the variation can be found in Annex 1 to this statement.

Section 2

Background and Impact Assessment

- 2.1 On 22nd September 2005 BT offered and Ofcom accepted undertakings in lieu of reference under section 154 of the Enterprise Act 2002 (“the Undertakings”). The Undertakings are set out in full in the document entitled *Final statements on the Strategic Review of Telecommunications, and undertakings in lieu of a reference under the Enterprise Act 2002*.¹ The Undertakings address the competition concerns identified in the Strategic Review (“the Review”), inter alia, through the implementation of what has been termed “Equality of Access” for all communications providers (“CPs”).
- 2.2 Equality of Access is made up of two concepts: Equivalence of Inputs to products for CPs, and organisational separation for BT. The Undertakings explicitly recognise the importance of systems in delivering both parts of Equality of Access for CPs.
- 2.3 In the definition of Equivalence of Inputs the Undertakings state:
- “Equivalence of Inputs” or “EOI” means that BT provides, in respect of a particular product or service, the same product or service to all Communications Providers (including BT) on the same timescales, terms and conditions (including price and service levels) by means of the same **systems** and processes, and includes the provision to all Communications Providers (including BT) of the same Commercial Information about such products, services, **systems** and processes. In particular, it includes the use by BT of such **systems** and processes in the same way as other Communications Providers and with the same degree of reliability and performance as experienced by other Communications Providers” (emphasis added).
- 2.4 The second aspect of Equality of Access, organisational separation, is concerned with ensuring that Openreach acts as a separate division within BT as required by section 5.23 of the Undertakings. This includes the effectiveness of “Chinese Walls” between the different parts of the BT organisation, making sure that Commercial Information (“CI”) and Customer Confidential Information (“CCI”), as defined in the Undertakings, is not inappropriately shared between Openreach and other parts of the BT organisation. The definition of Management Information Systems specifically refers to access to CI and CCI:
- “Management Information Systems” means those management information systems which hold Commercial Information and/or Customer Confidential Information.”
- 2.5 The Undertakings therefore set out certain requirements and deadlines for the separation of systems currently shared between Openreach and the rest of BT as follows:

Section 5.45

Within 12 months of these Undertakings taking effect, BT shall logically partition its Management Information Systems such that these systems are run separately for AS and the rest of BT such that

¹ http://www.ofcom.org.uk/consult/condocs/statement_tsr/statement.pdf

they do not lead to undue discrimination against other Communications Providers.

Section 8.5

BT shall logically separate its systems which hold Commercial Information and Customer Confidential Information between AS on the one hand and the Upstream and Downstream Divisions on the other, by the IBMC date for Wholesale Analogue Line Rental given in Annex 1. BT will use its reasonable endeavours to achieve such logical separation earlier.

- 2.6 According to Section 18.1 of the Undertakings, BT and Ofcom may, from time to time, vary the Undertakings by mutual agreement. On 7th September 2006, Ofcom published a consultation seeking views on proposals for varying the above sections of the Undertakings in regard to MIS.

Ofcom's approach to the varying of the Undertakings

- 2.7 The Enterprise Act requires that Ofcom should "have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition"². Ofcom's competition concerns were set out in its Strategic Review of Telecommunications Stage 2 Consultation Document³ ("the Review"). In considering the case for varying the Undertakings, Ofcom must consider whether the proposed variation varies the Undertakings in force in any material respect.

- 2.8 The variation addresses three issues:

- i) The different levels of systems separation
- ii) The level of separation that is proportionate for shared MIS systems
- iii) The roadmap for MIS systems

- 2.9 Ofcom does not consider the proposed variation to be material and it therefore follows that the variation does not in anyway materially affect the comprehensive solution that the Undertakings represent. Furthermore Ofcom considers that the variation will not have a negative impact on the comprehensive solution and in particular on Equality of Access. In this section Ofcom sets out our assessment of the impact on Equality of Access of the level of separation implemented for BT's MIS and the delivery of the roadmap.

MIS Systems

- 2.10 The Undertakings require logical partitioning for MIS systems by 22nd October 2006⁴. In considering separation, Ofcom has found it useful to view systems as having four dimensions:

² Section 154 (2) Enterprise Act 2002.

³ http://www.ofcom.org.uk/consult/condocs/telecoms_p2/tsrphase2/

⁴ As set out in the variation document of 6th September included as part of the consultation BT MIS Separation

- Users – the people who use the system, for example employees working in Openreach and the rest of BT;
- Data – the underlying data upon which the system acts;
- Application – the specific instance of the ‘software’ which the system runs; and
- System – the whole system including the hardware platform.

2.11 In clarifying the types of separation, Ofcom and BT have found it helpful to identify three levels, of which the first two are referenced in the proposals in this consultation:

- “Level 1 System Separation” means the application of access rights and controls to restrict access to information and, in the case of Operational Support Systems, functionality. Such controls will ensure that users can only have access to which they are entitled or which they are permitted, consistently with the Undertakings.
- “Level 2 System Separation” means both (a) separation of the data held by the system and (b) separate instances of the application software such that users can only have access to which they are entitled or which they are permitted, consistently with the Undertakings.
- “Level 3 System Separation” means Level 2 System Separation plus physical separation of the supporting computer hardware such that the Openreach hardware can operate independently of other BT systems outside Openreach.

2.12 In determining the level of separation appropriate for a specific system, Ofcom and BT have also found it helpful to clarify the definition of MIS:

- “Management Information Systems” means those management information systems which hold Commercial Information and/or Customer Confidential Information and which are used by BT to help plan and direct business and organisational operations, decision making and competitive strategies.

System Separation as required by the Undertakings

2.13 Ofcom understands that BT’s approach to the separation of MIS systems is to build new, separate systems and migrate to them, to shut down legacy system and to re-scope existing systems so that they are no longer shared. In general, then, it is not BT’s approach to separate systems: BT considers that such investment in legacy systems is inefficient. However, BT recognises that it is not possible to close or re-scope all relevant systems because of continued use. So there are some systems in which investment is necessary to achieve a degree of separation. BT is therefore implementing user access controls to effect separation, i.e. Level 1 System Separation.

2.14 User profiles and access rights are commonly used as a means of controlling access to information and capability within systems. Prior to the Undertakings, BT had for many years used training and compliance procedures to control the use of information and, in limited situations, this was enhanced with access to certain information being controlled by user rights. These measures were, amongst other objectives, in place to meet extant regulation requiring no undue discrimination. The limited access controls were, in general, based on the role of the users and the application which the user was accessing, not the user’s line of business.

- 2.15 As part of this variation, for those MIS systems for which Level 1 System Separation is appropriate, BT is required to implement a user access control regime which gives confidence that system users can only access the data or functionality which they are entitled to access under the Undertakings. Ofcom is aware that this regime will be designed on a system by system basis but in essence access controls will be based on the line of business of the user, as well as their role or the application they are using. The rigour of the Level 1 MIS Separation will be tested by independent external audit: the process envisaged by BT is that it reports to the EAO⁵/EAB⁶ its view that it has met the relevant obligation. The EAO will then carry out its own validation process and will also commission an external audit against an appropriate set of success criteria.
- 2.16 It is Ofcom's view that the user access regime implemented by BT combined with the implementation of external independent audit is such that it is proportionate that BT implement Level 1 System Separation for certain listed MIS systems, until such time as Level 2 System Separation is implemented, or the systems are otherwise put beyond shared use. The implementation of Level 2 System Separation will be set out in a roadmap for MIS systems separation (see below) and will be complete by 30th June 2010 at the latest.
- 2.17 Ofcom also proposes that, following timely consultation with Ofcom and taking into account Ofcom's comments, BT will provide Ofcom with a roadmap setting out how BT plans to implement Level 2 Separation for the MIS systems listed (other than those MIS which will be no longer shared, closed, replaced or otherwise agreed with Ofcom). The delivery of this Roadmap, by 30th June 2007, will be a binding Undertaking. The roadmap will be a plan; the dates in the roadmap will not be binding under the terms of this Variation. As the future plans for BT's MIS systems are a matter of commercial confidentiality, particularly with regard to the suppliers of those systems, it will not be possible to make all elements of the roadmap public but BT and Ofcom will agree what is suitable for publication. Ofcom will publish our view of progress against the Roadmap in the ordinary course of our implementation reporting, subject to commercial confidentiality.

MIS which will be subject to Level 1 Separation

- 2.18 Of the 71 MIS shared between Openreach and the rest of BT, 58 of them were no longer shared at any level by 22nd September 2006, being put beyond shared use through migration, de-scoping or closure. The remaining 13 systems are listed in the table below:

⁵ Equality of Access Board

⁶ Equality of Access Office

Table 1, Named MIS

Amethyst Wholesale	Amethyst is a data warehousing application developed on an Oracle database. It gives users the capability to drill down and search for detailed information. Amethyst contains network product, financial and investment data.
Aspire	Accounting Separation, Product Integration & Reporting Environment (ASPIRE) is BT's regulatory accounting system based on ORACLE. It is the source system for BT's annual published regulatory financial statements. It ensures that costs are appropriately allocated across BT's activities, and provides detailed product level cost information
CAMERA	Campaign Management Evaluation and Reporting Application (CAMERA) is a BT wide system for creating, managing and reporting on BT Marketing Campaign spend. The system manages the financial and procurement activities associated with marketing campaigns and provides a reporting function for campaign managers.
CDS	CDS is a data warehouse which receives inputs from various systems including CAMSS, COSMOSS and CSS. Against these inputs, CDS provide various quality of service and management information reports against BT line of business provision, repair, customer contact and call centre activities.
CID	The Central Information Database is a data warehouse which collates financial and non-financial information from all Lines of Business. Information is accessible by Line of Business and is also summarised for Group-level accounting and reporting purposes .
eCAESAR	E-Caesar stands for "electronic COSMOSS Activity Extract and Summary Analysis Reports". It extracts real time order data for Private Circuits from COSMOSS and makes it available on a web page.
Hyperion Strategic Finance	Hyperion Strategic Finance is a tool that is used by BT within its annual strategic planning process. It forecasts the financial data for any predefined account based upon the driver of that account.
Netview	Netview stores Quality of Service data for orders that have been provided to customers. The system calculates and reports measures for Productivity, Quality, Finance and Volumes.
NIMS MIS	NIMS MIS is a data warehousing system which measures and reports on the performance of field force activities. The system also reports on costs for engineering jobs.
POWERHOUSE	The Powerhouse is a BT Group Level data warehouse which collates Product Volumes information from all Lines of Business. Information is summarised for Group-level accounting and reporting purposes.
Retail Amethyst	Provides reports to support the debt management processes by integrating "Aged Debt" reports/feeds from the separate billing systems into unified reports for the Lines of Business.
RM Datamart	The RM Datamart is a Resource Management system providing web-based reports. Its prime function is to match and supply appropriately skilled resources based on demand.
Web MIS	Web MIS provides reports that are used by teams across BT Lines of Business to identify and act against the causes of customer dissatisfaction and business process performance issues.

- 2.19 The separation of shared data and applications for these systems present particular challenges for two reasons:
- complexity of data separation particularly where the MIS in question uses data from legacy and/or shared systems; and/or
 - a strategic replacement is planned for the system in line with BT's 21CN Platform Architecture ("the Matrix").
- 2.20 Ofcom therefore requires that the latest date for Level 2 separation of MIS is the 30th June 2010.
- 2.21 For these reasons, and based on the proposals summarised below, Ofcom believes it is proportionate to agree to Level 1 separation of these systems until Level 2 separation is implemented.
- For the 13 named systems, BT will implement Level 1 System Separation to ensure that access to Openreach data is restricted, consistently with the Undertakings.
 - BT will ensure that there is in place an independent external audit regime, which will apply to all shared MIS systems for which Level 1 System Separation is implemented.
 - The 13 MIS systems named will achieve Level 2 separation not later than 30th June 2010 unless they are closed, replaced or unless otherwise agreed by Ofcom

Section 3

Responses to the Consultation and Ofcom's Determination

- 3.1 This section provides a summary of the key points from the responses to the consultation, Ofcom's assessment of the points raised, our decision with regard to the variation and the next steps.

BT

- 3.2 BT expressed support for the proposed variations to the Undertaking described in the Consultation and agreed that these proposals do not have material impact on the Undertakings. BT provided clarification of the description of the ASPIRE system described in Annex 1 of the consultation. The clarification has been incorporated in the Annex and also in the body of this statement.

Cable and Wireless

- 3.3 Cable and Wireless expressed a number of concerns in their response. Firstly, they were concerned that the consultation did not provide sufficient detail as to the determination that the proposed variation was not material to the overall delivery of the Undertakings. Ofcom's assessment of the materiality of the proposed variation was based on the impact the proposal would have on the overall delivery of Equality of Access as set out in the Undertakings, considering primarily the function of these systems as Management Information Systems, i.e. with no operational capability, and the protection against abuse offered by the imposition of an externally audited access control regime.
- 3.4 In addition, Cable and Wireless did not believe that the consultation provided sufficient details of the 13 relevant MIS for them to make an assessment of the risk of different parts of BT accessing data to which they are not entitled. Cable and Wireless stated that there is clearly a level of risk indicated by Ofcom's requirement on BT to achieve Level 2 separation for all systems by June 2010. Cable and Wireless expressed concerns that the June 2010 deadline was a considerable delay from the original September 2006 deadline.
- 3.5 It is Ofcom's view that the complexity, proprietary nature and extent of systems deployed by BT mean there is an unavoidable information asymmetry between BT, Ofcom and industry. Given the commercial sensitivity of these systems it would be unreasonable for BT to share a detailed knowledge of these systems with the rest of industry. BT has shown a willingness to share information with Ofcom for the purposes of this consultation and in a more limited way with industry as laid out in the consultation document. However, as set out above, Ofcom's assessment of the risk the variation poses to Equality of Access is based primarily on the function of these systems as Management Information Systems and the imposition of an externally audited access control regime, rather than detailed knowledge of these systems which in our view is impractical. Nevertheless, recognising Cable and Wireless's concerns and in the interests of transparency, Ofcom is including more extensive descriptions of the systems in Table 1.
- 3.6 Whilst agreeing with Cable and Wireless that the time period between the original deadline and June 2010 is considerable, it is Ofcom's view that the implementation of

Level 1 separation, together with external audit regime provides sufficient protection against material abuse during this period.

- 3.7 With regard to the proposal of an independent external audit of Level 1 separation, Cable and Wireless was supportive but added that this should not be a one off assessment given the potential for on-going abuse of access rights and would welcome visibility of the output of this process. Ofcom notes and supports Cable and Wireless's view and has subsequently asked BT to clarify the audit process: BT envisages that it will report to the EAO/EAB its view that it has met the relevant obligation. The EAO will then carry out its own validation process and will also commission an external audit against an appropriate set of success criteria.
- 3.8 Cable and Wireless emphasised the value of having visibility of BT systems roadmap in enabling planning for their own systems deployment and changes which Ofcom fully understands. However, the information contained in such a roadmap is commercially sensitive, both in relation to BT's operations and their supplier relationships. As a result, there must be limits on what can be published, but Ofcom will seek to ensure that as much as possible is made public in the interests of transparency.

Ofcom's determination

- 3.9 Having considered both BT's and Cable and Wireless's responses, and noting the limited number of responses, it remains Ofcom's view that the variation proposed does not constitute a material change to the Undertakings. In varying the Undertakings as set out in Annex 1, Ofcom considers that the Undertakings continue to represent a comprehensive solution as is reasonable and practicable to the adverse effects on competition identified in the Strategic Review of Telecommunications
- 3.10 As a result, on October 18th Ofcom and BT signed the Variation to the Undertakings set out in Annex 1.

Next steps

- 3.11 BT is currently reviewing its systems development activities as a prelude to developing the roadmap described in this statement. Ofcom is working with BT to ensure that this roadmap meets the requirements as set out in this statement. Ofcom will include updates on progress in the development of the roadmap in our quarterly Undertakings Implementation Report.
- 3.12 The External Audit will be commissioned by the EAO following BT's reporting that it has met the requirements of the obligation. Ofcom will monitor the results of the audit.

Annex 1

Variation Document

Variation of Undertakings given to Ofcom by BT pursuant to the Enterprise Act 2002

Variation Number: 5

WHEREAS:

- (a) British Telecommunications plc ('BT') has given Ofcom certain undertakings ('the Undertakings') which took effect on 22 September 2005, pursuant to the Enterprise Act 2002;
- (b) by virtue of section 18.1 of the Undertakings, BT and Ofcom may from time to time vary and amend the Undertakings by mutual agreement;
- (c) BT and Ofcom have agreed to vary the Undertakings as hereinafter appears.

NOW THEREFORE:

It is hereby agreed between BT and Ofcom pursuant to section 18.1 of the Undertakings that the Undertakings are varied as follows:

1. Definitions and interpretation

- 1.1 Words or expressions hereinafter appearing have the same meanings as in the Undertakings.
- 1.2 References hereafter to section numbers are references to section numbers in the Undertakings.
- 1.3 Section 2.1 of the Undertakings (definitions) is amended to include the following definitions:-
 - “Level 1 System Separation” means the application of access rights and controls to restrict access to information and, in the case of Operational Support Systems, functionality . Such controls will ensure that users can only have access to which they are entitled or which they are permitted, consistently with the Undertakings.
 - “Level 2 System Separation means both (a) separation of the data held by the system and (b) separate instances of the application software, such that users can only have access to which they are entitled or which they are permitted, consistently with the Undertakings;

1.4 The definition of “Management Information Systems” in section 2.1 of the Undertakings is amended to read as follows:

“Management Information Systems” means those management information systems which hold Commercial Information and/or Customer Confidential Information and which are used by BT to help plan and direct business and organisational operations, decision making and competitive strategies.

2. Section 5.45 is deleted in its entirety and replaced with the following:

5.45.1 Within 13 months of these Undertakings taking effect BT shall implement Level 2 System Separation of its Management Information Systems between AS and the rest of BT, apart from those listed in Annex 5.

5.45.2 Within 13 months of these Undertakings taking effect BT shall implement Level 1 System Separation of those Management Information Systems listed in Annex 5 between AS and the rest of BT such that they do not lead to undue discrimination against other Communications Providers.

5.45.3 By 30 June 2010 BT shall implement Level 2 System Separation of those Management Information Systems listed in Annex 5 between AS and the rest of BT other than in relation to those Management Information Systems which:-

- a) are no longer shared, or
- b) are closed or have been replaced, or
- c) have been otherwise agreed between BT and Ofcom.

5.45.4 The implementation and ongoing application of any Level 1 System Separation referred to in section 5.45.2 shall be audited by independent, external auditors.

5.45.5 BT, following timely consultation with Ofcom and after consideration of Ofcom’s comments, will provide Ofcom with a roadmap by 30 June 2007 which will set out how BT plans to implement Level 2 System Separation between AS and the rest of BT for those Management Information Systems listed in Annex 5 (other than those Management Information Systems which will be no longer shared, or will be closed or replaced or have been the subject of an agreement between BT and Ofcom under section 5.45.3 (c)) by 30 June 2010. The roadmap will be a plan and all dates contained in it will not be legally binding. For the avoidance of doubt the existence of the roadmap will in no way affect the IBMC dates set out in Annex 1 of the Undertakings.

3. Section 8.5 is amended by

- a) replacing the first sentence with the following two sentences:-

“BT shall implement Level 2 System Separation between AS on the one hand and the Upstream and Downstream Divisions on the other of any system which is not a Management Information System or Operational Support System but

holds Commercial Information and Customer Confidential Information by the IBMC date for Wholesale Analogue Line Rental given in Annex 1. For the avoidance of doubt the obligation in this section does not extend to any system which is operated exclusively by a function located outside AS and the Upstream and Downstream Divisions, or by a function listed in Annex 2 and accessed only by people in Annex 2

b) Amending the previous second sentence by replacing “logical separation” with “Level 2 System Separation”

4. The Undertakings shall be amended by the inclusion of Annex 5 in the form attached hereto.

5. These variations of the Undertakings take effect immediately upon signature hereof on behalf of both parties.

Signed for and on behalf of British Telecommunications plc

Signature _____
Name _____
Position _____
Date _____

Signed for and on behalf of Ofcom

Signature _____
Name _____
Position _____
Date _____

Annex 5 of the Undertakings

List of the Thirteen MIS Systems

Amethyst Wholesale	Amethyst is a data warehousing application developed on an Oracle database. It gives users the capability to drill down and search for detailed information. Amethyst contains network product, financial and investment data.
Aspire	Accounting Separation, Product Integration & Reporting Environment (ASPIRE) is BT's regulatory accounting system based on ORACLE. It is the source system for BT's annual published regulatory financial statements. It ensures that costs are appropriately allocated across BT's activities, and provides detailed product level cost information
CAMERA	Campaign Management Evaluation and Reporting Application (CAMERA) is a BT wide system for creating, managing and reporting on BT Marketing Campaign spend. The system manages the financial and procurement activities associated with marketing campaigns and provides a reporting function for campaign managers.
CDS	CDS is a data warehouse which receives inputs from various systems including CAMSS, COSMOSS and CSS. Against these inputs, CDS provide various quality of service and management information reports against BT line of business provision, repair, customer contact and call centre activities.
CID	The Central Information Database is a data warehouse which collates financial and non-financial information from all Lines of Business. Information is accessible by Line of Business and is also summarised for Group-level accounting and reporting purposes .
eCAESAR	E-Caesar stands for "electronic COSMOSS Activity Extract and Summary Analysis Reports". It extracts real time order data for Private Circuits from COSMOSS and makes it available on a web page.
Hyperion Strategic Finance	Hyperion Strategic Finance is a tool that is used by BT within its annual strategic planning process. It forecasts the financial data for any predefined account based upon the driver of that account.
Netview	Netview stores Quality of Service data for orders that have been provided to customers. The system calculates and reports measures for Productivity, Quality, Finance and Volumes.
NIMS MIS	NIMS MIS is a data warehousing system which measures and reports on the performance of field force activities. The system also reports on costs for engineering jobs.
POWERHOUSE	The Powerhouse is a BT Group Level data warehouse which collates Product Volumes information from all Lines of Business. Information is summarised for Group-level accounting and reporting purposes.
Retail Amethyst	Provides reports to support the debt management processes by

	integrating "Aged Debt" reports/feeds from the separate billing systems into unified reports for the Lines of Business.
RM Datamart	The RM Datamart is a Resource Management system providing web-based reports. Its prime function is to match and supply appropriately skilled resources based on demand.
Web MIS	Web MIS provides reports that are used by teams across BT Lines of Business to identify and act against the causes of customer dissatisfaction and business process performance issues.