



CEI Service Delivery Process Equivalence Options

Accelerated MARTIS Provisioning – Data Services Tool
(‘AMP DST’)

Version 1.0

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Prepared for:



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Registered Office Address: Descartes House, 8 Gate Street, London WC2A 3HP United Kingdom

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1. Context

In April 2016, Cartesian was engaged by the Commission for Communications Regulation (ComReg) to review Eircom's Regulated Wholesale Poles and Ducts products (collectively, Civil Engineering Infrastructure, "CEI") in Ireland and identify potential changes to the process and systems supporting these products.

The scope of our study included potential changes to improve the current Equivalence of Outputs (EOO) service delivery model, and other changes that would be required for an Equivalence of Inputs (EOI) service delivery model. For the options identified, Cartesian was requested to estimate the cost and effort that would be required if the changes were implemented.

Cartesian's findings were published in a report¹ ("Cartesian's Report") accompanying ComReg's Consultation² in November 2016. Responses to the Consultation were received from Eircom and other parties. A non-confidential version of Eircom's Response³ was published on ComReg's website.

In November 2017, ComReg requested information from Eircom regarding its Accelerated MARTIS Provisioning – Data Services Tool ('AMP DST').

AMP DST is a service workflow management system. According to Eircom: "[3<

[REDACTED]

]”⁴

Specifically, ComReg requested the following information:

1. Electronic copies of AMP DST system documentation including inter alia, the AMP Training Manual, AMP User Guide, and AMP System Manual (or equivalent).
2. An example of a completed 1Gbit/s WSEA CSH (Wholesale Symmetrical Ethernet Access Customer Sited Handover) provide order, where sub-duct was installed in the Eircom access network enabling delivery of the order, documented in a series of AMP DST screenshots. The screenshots should provide an AMP DST view of the order lifecycle, starting at order issue and finishing with WSEA delivery. The screenshots to include all process and sub-process steps (including process/task owners).

ComReg asked Cartesian to review this information and consider (i) whether AMP DST could potentially be used within an EOI service delivery model for CEI, and (ii) whether this would change Cartesian's estimate of implementation costs.

¹ Cartesian (ComReg Document No. 16/96d); CEI Service Delivery Process Equivalence Options: Analysis of alternative service delivery approaches; 29 July 2016 ("Cartesian's Report")

² ComReg Document No. 16/96; Market Review: Wholesale Local Access (WLA) provided at a Fixed Location | Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products; 11 November 2016 (the "Consultation")

³ Eircom response dated 30 January 2017 is included in ComReg Document No. 16/96sR; Market Reviews: Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products Submissions to Consultation 16/96; 8 March 2017. ("Eircom's Response")

⁴ Eircom Systems Review Statement of Compliance, September 2014

2. Potential for use of AMP DST within an improved CEI service delivery model

As discussed above, AMP DST is a template-driven workflow management system that is used by Eircom in service delivery. Cartesian was asked to consider whether AMP DST could potentially be used within an improved service delivery model for CEI.

There are two factors that lead us to conclude that AMP DST could potentially be used in CEI service delivery. First, AMP DST is a flexible, template-driven system that allows the creation of new workflows to support new products. We believe that the template-driven approach allows new workflows to be created without extensive software development.

Second, we note that the existing workflow template for the 1Gbit/s WSEA CSH product includes tasks for duct and fibre provision, if required. From this we conclude that it would be possible to design a new template for a CEI duct access product. Conceptually, this template would be similar to that of the 1Gbit/s WSEA CSH product, however it would not contain the WSEA CSH tasks for fibre or electronics.

It therefore appears that AMP DST does have the potential to manage the workflow of an improved CEI product. From the available information, we would anticipate that this would require the following development:

- Creation of new workflow template(s);
- Association of new templates with CEI product orders in the OMS.

3. Implications of AMP DST use within CEI service delivery on Equivalence

Cartesian's Report identified seven changes to the CEI product that would be required for an Equivalence of Input (EOI) delivery model. The relevance of the potential use of AMP DST to each of these potential improvements is discussed below. References from Cartesian's Report are provided for convenience.

1. Use of the same data sources supporting the survey activities to ensure equal access to network data (Ref. DE.1)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

2. Use of the same systems for storing any network related data (e.g. from surveys and post-installation activities) and deriving accurate usage levels (Ref. DE.2)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

3. Use of the same order forms and the same order request channels (Ref. DE.3)

The use of AMP DST would provide a consistent channel to manage internal (WSEA CSH) and external orders for CEI.

4. Use of the same SLAs (Ref. DE.4)

Using AMP DST would not, of itself, cause common SLAs to be adopted for internal and external orders. However, the monitoring of any SLAs that are introduced would be facilitated by AMP DST. (see Ref. DE.7 below.)

5. Use of the same fulfilment and assurance processes (Ref. DE.5)

Assuming that it is possible to adapt AMP DST without material change to the service delivery activities within the workflow, then this would secure equivalence between the activities for fulfilment of CEI orders and the activities that support Eircom's own consumption of CEI.

The use of AMP DST is not relevant to the service assurance processes.

6. The definition and implementation of a Data Governance Model (Ref. DE.6)

The potential use of AMP DST would need to be considered within the definition and implementation of a Data Governance Model.

7. Use of KPIs to help monitoring the processes performance and SLA breaches (Ref. DE.7)

Using AMP DST to manage both WSEA CSH and CEI orders would enable consistent performance monitoring to assure that orders were processed equivalently.

Whilst AMP DST does not fully address all of the identified changes for EOI, from this initial analysis, it appears that it could provide a satisfactory foundation on which an EOI model could be built. Of the seven identified changes, three would appear to benefit directly from the use of AMP DST.

As previously mentioned, AMP DST uses a template-based approach to avoid extensive software development. The use of AMP DST could therefore be a cost-effective solution to meet some of the changes required for EOI.

4. Ability of AMP DST to Accommodate CEI Process Improvements

In its impact assessment, Cartesian's Report identified potential process improvements that would enable OAOs to be less dependent on Eircom in the pre-order and order fulfilment activities for CEI.

The potential improvements would require change to Eircom's CEI systems and processes. To assess these, Cartesian mapped the impacts using the TM Forum's industry-standard eTOM and TAM frameworks.⁵

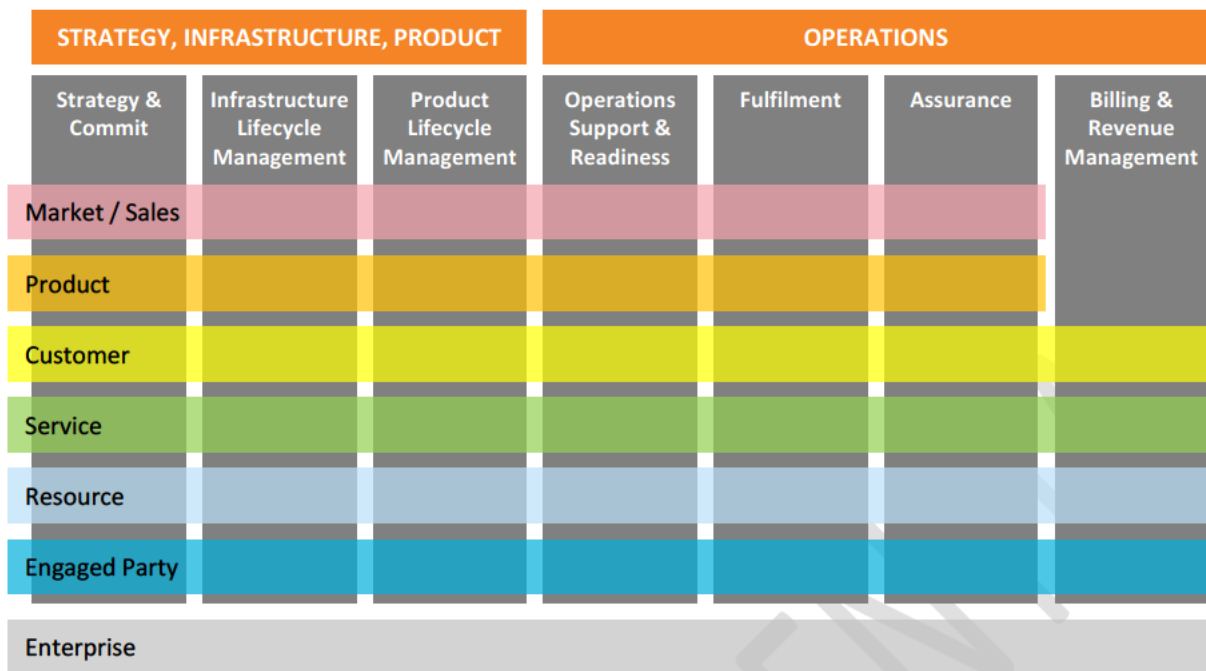
TM Forum eTOM is a hierarchical catalogue of the key business processes required to run a service-focused business, and can be applied in business process design, integration, procurement, etc. TAM is a hierarchical map of the various system applications that deliver the OSS and BSS business capabilities across an organisation.

An overview of the eTOM framework is provided in the figure below. Cartesian's Report focused on the operational process areas for Fulfilment and Assurance. Billing & Revenue Management was beyond the scope of the project; no changes would be made in Operations, Support & Readiness (OSR), although this function would implement the changes in Fulfilment and Assurance.

For Fulfilment and Assurance, the Report focused on the Customer, Service and Resource domains within the organisation (i.e., the horizontal areas representing the management functions).

⁵ TM Forum GB929 Application Framework (TAM) R15.0.1 (<https://www.tmforum.org/resources/suite-standard/gb929-application-framework-r15-0-0/>)

Figure 1. High-level Representation of the eTOM Framework (illustrative)



Using the eTOM framework, Cartesian identified the processes within the Fulfilment and Assurance areas that would be impacted by the potential changes, as follows:

- **Fulfilment:** Order Handling, Service Configuration and Activation, Resource Provisioning
- **Assurance:** Problem Handling, Customer QoS/SLA Management, Service Problem Management, Service Quality Management
- **Both:** Customer Interaction Management, Customer Information Management

The TAM framework was used to identify the impacted applications. Through research, Cartesian determined that many of the CEI processes are currently not automated. Cartesian concluded that Eircom does not appear to have software applications in place for the Customer Order Management, Customer SLA/QoS, Customer Service Quality Management and Problem Management functions of the CEI products.

Against the TM Forum frameworks, AMP DST is an application for the management of Order Handling, triggering manual activities in Service Configuration and Activation, and Resource Provisioning. Data from AMP DST may potentially also support Customer Interaction Management (tracking order status) and Customer QoS/SLA Management (recording task completion timestamps for external analysis and performance reporting).

Cartesian's Report identifies eight potential improvements to the duct access product that would impact the Order Handling process and a further four for the pole access product. The relevance of the potential use of AMP DST to each of these potential improvements is discussed below. References from Cartesian's Report are provided for convenience.

1. Provide duct structural and capacity information upfront to OAOs (Ref: B|DS.1)

The use of AMP DST to manage the order workflow is not relevant to the provision of duct information. This activity is not dependent on individual duct access orders.

2. Allow OAO to conduct the desktop survey instead of Eircom (Ref: B|DS.2)

The use of AMP DST to manage the order workflow is not relevant to OAO desktop surveys. It is envisaged that OAOs, in possession of the duct information, would conduct their own desktop surveys independently of Eircom.

3. Allow OAO to conduct the field survey activity (Ref: DF.1)

The use of AMP DST to manage the order workflow may be relevant to this potential improvement. Depending on how Eircom wishes to manage the duct access orders, it may choose to track OAO field surveys as an activity within AMP DST. Alternatively, these OAO activities may be beyond the scope of AMP DST.

4. Use the results of the field survey to update duct usage information/records (Ref: DF.3)

The use of AMP DST to manage the order workflow may be relevant to this potential improvement. Depending on how Eircom wishes to manage the duct access orders, it may choose to track the updating of duct usage records as an activity within AMP DST. Alternatively, this activity may be beyond the scope of AMP DST.

5. Allow OAO to conduct the RRT (Ref: DD.1)

The use of AMP DST to manage the order workflow may be relevant to this potential improvement. Depending on how Eircom wishes to manage the duct access orders, it may choose to track the OAO's RRT as an activity within AMP DST. In this scenario, AMP DST users would need to identify which party was conducting the RRT.

6. Allow the OAO to install the sub-duct and the cable together (Ref: DO.1)

The use of AMP DST to manage the order workflow may be relevant to this potential improvement. Depending on how Eircom wishes to manage the duct access orders, it may choose to track the OAO's installation as an activity within AMP DST. In this scenario, AMP DST users would need to identify which party was conducting the installation.

7. Allow OAO to supply own sub-duct for the interconnection duct (Ref: DO.5)

The use of AMP DST to manage the order workflow may need to reflect this option so that Eircom can supply the sub-duct if the OAO wishes.

8. Eircom to define OAO documents for installation of interconnection sub-duct (Ref: DO.6)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

9. Make available pole usage information upfront to OAOs during OAO survey phase (PS.3)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

10. Make Eircom responsible for preparing the route independent of the size of the order request (PO.1)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

11. Require Eircom to start route preparation if OAO raises the need for it as part of the survey (PO.3)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

12. Additional pole furniture request to go together with the OAO survey (PO.7)

The use of AMP DST to manage the order workflow is not relevant to this potential improvement.

Of the twelve potential improvements, five may require process changes to be made to AMP DST templates (as compared with the existing template for WSEA CSH). These improvements are the ones where responsibility for specific service delivery activities is transferred from Eircom to the OAO.

If AMP DST was used to manage the workflow of CEI orders in which the OAO performed specific actions, then the option for OAO involvement may need to be explicitly recognised in the workflow template. The precise means of handling this would be determined in detailed design. It may be that AMP DST already manages activities that are sub-contracted to suppliers, and if so, this may form a useful starting point.

5. Conclusion

This high-level review of information provided on the AMP DST tool indicates that it may be a useful platform to use within an EOI approach to service delivery workflow for CEI orders. There are four specific characteristics that make AMP DST an interesting candidate:

1. The tool is template based, which avoids the need for extensive software development.
2. The existing workflow for the 1Gbit/s WSEA CSH product already manages activities associated with the provision of CEI.
3. The tool would facilitate equivalence between the processing of internal requirements for CEI and external CEI orders.
4. Use of a common tool for internal and external needs would facilitate performance measurement and reporting.

As identified above, further consideration would need to be given to scenarios where the OAO takes responsibility for selected activities in the pre-order and delivery phases. However, solving these issues does not appear insurmountable.

In terms of development effort, we would anticipate that using AMP DST would not cause a material increase to the estimated costs in Cartesian's Report.

6. Appendix – AMP DST Information Sources

The following documents were provided by ComReg to Cartesian to support this assessment. The documents were supplied by Eircom to ComReg in response to a Section 13D request, dated 30 November 2017.

“AMP DST 2.9 Functional Specification”, version 0.1, 20 March 2003

“AMP DST Accelerated Martis Provisioning | System Functionality & Queue Management Procedure”

“AMP DST 1Gb/s Symmetrical Ethernet Access (WSEA) Sample of Customer Site Handover with sub-duct”

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CEI Service Delivery Process Equivalence Options

Review of additional information provided by Eircom

Version 1.0

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Registered Office Address: Descartes House, 8 Gate Street, London WC2A 3HP United Kingdom

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1. Context

In April 2016, Cartesian was engaged by the Commission for Communications Regulation (ComReg) to review Eircom's Regulated Wholesale Poles and Ducts products (collectively, Civil Engineering Infrastructure, "CEI") in Ireland and identify potential changes to the process and systems supporting these products.

The scope of our study included potential changes to improve the current Equivalence of Outputs (EOO) service delivery model, and other changes that would be required for an Equivalence of Inputs (EOI) service delivery model. For the options identified, Cartesian was requested to estimate the cost and effort that would be required if the changes were implemented.

Cartesian's findings were published in a report¹ accompanying ComReg's Consultation on the Wholesale Local Access and Wholesale Central Access market review² in November 2016. Responses to the Consultation were received from Eircom and other parties. A non-confidential version of Eircom's Response³ was published on ComReg's website.

Eircom's Response expresses several concerns regarding the feasibility and cost of the potential changes that were outlined in Cartesian's Report. The nature of these concerns indicated that Eircom may have misinterpreted certain aspects of Cartesian's Report.

2. Review of Information Received

Cartesian identified several points in Eircom's Response that appear to have contributed to Eircom's position that achieving EOI would be highly complex, time consuming and costly. Specifically, Eircom appeared to envisage the following requirements:

1. A requirement to survey the entire Eircom CEI estate to develop a complete inventory before launch;
2. A requirement to establish a new division to provide EOI for CEI;
3. A requirement for third-parties to be granted a license to access the Smallworld GIS;
4. A requirement for third-parties to obtain licenses from Ordnance Survey Ireland (OSI); and,
5. A requirement to automate Billing and other processes/systems.

The above points were not included as requirements in Cartesian's Report. For avoidance of doubt, Cartesian does not believe that any of these items are pre-conditions to establishing EOI for CEI.

Seeking to address any potential misunderstanding, ComReg sent a list of clarification questions to Eircom in a Section 13D notice dated 25 May 2017. The questions are included as an appendix to this report.

Eircom returned a confidential response to the Section 13D notice on 23 June 2017.

Eircom's answers to the Section 13D notice support the view that Eircom initially misinterpreted some aspects of the potential changes outlined in Cartesian's Report. It is Cartesian's opinion that Eircom's

¹ Cartesian (ComReg Document No. 16/96d); CEI Service Delivery Process Equivalence Options: Analysis of alternative service delivery approaches; 29 July 2016 ("Cartesian's Report")

² ComReg Document No. 16/96; Market Review: Wholesale Local Access (WLA) provided at a Fixed Location | Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products; 11 November 2016 (the "Consultation")

³ Eircom response dated 30 January 2017 is included in ComReg Document No. 16/96sR; Market Reviews: Wholesale Local Access (WLA) provided at a Fixed Location, Wholesale Central Access (WCA) provided at a Fixed Location for Mass Market Products Submissions to Consultation 16/96; 8 March 2017. ("Eircom's Response")

Response to the Consultation was based on a more complex implementation path to EOI than Cartesian had considered in its assessment.

Below, we address each of the five points in turn.

2.1. Completeness of Inventory

Eircom appears to assume that its inventory records would need to be complete to achieve EOI for CEI. In Eircom's Response to the Consultation, Eircom states that it does "not have accurate or complete occupancy information on ducts or similar information on poles and the cost / time required to gather this information is staggering..."⁴

Cartesian agrees with Eircom that a full survey of its ducts and poles would be a significant effort. However, to be clear, Cartesian has not proposed that such a survey is required.

A complete set of inventory records would obviously be the ideal situation, but we do not consider it to be a necessary condition. For equivalence, the important issue is that Access Seekers obtain the same information that is available internally to Eircom. Where records are incomplete, this will impact both parties.

Cartesian had had assumed that Eircom is continuously improving the quality/coverage of its records over time as it captures new information regarding the external network. In our Report, we identified that the field survey, RRT and installation activities would provide information that could be used by Eircom to this end.

In response to the 13D notice, Eircom states: "Occupancy is not recorded when surveys are conducted. The purpose of the survey is to identify if there is sufficient space to meet a request. However, occupancy information is accumulated and recorded over time. eir's Smallworld GIS system was implemented in early 2014 and existing recorded data with respect to overhead and underground routes was transferred to the new system. Capability to store occupancy information on either ducts or poles was not a feature of the previous GIS system and is not therefore recorded for the historic information transferred to Smallworld. The use of the occupancy capabilities of Smallworld PNI is being used for all new ducts being deployed. The largest activity since the introduction of duct occupancy recording has been the laying of new ducts in the form of sub-duct for the rural FTTH deployment. The build activity on rural FTTH commenced mid-2016 and as-built records are being used to record occupancy information."⁵

The 13D response indicates that Eircom is now recording occupancy information, and that this information is being updated over time in line with build activity. For equivalence, this enhanced information should be made available to Access Seekers.

Cartesian notes that, based on Eircom's answer to the 13D notice, our assumption that Eircom was also be using the results of field surveys (and RRT) to update its records is incorrect. We are somewhat surprised by this as we had assumed that Eircom would want to use its GIS to consolidate available data on its external network to improve operational efficiency.

However, whilst the current situation is unexpected, it does not fundamentally change our position. If Eircom was to change its processes and use field survey information to improve its records, under an EOI approach for CEI, we would expect this information to be shared with Access Seekers. In this scenario, we would also expect that Eircom would want to also capture information from Access Seekers' surveys.

⁴ Eircom Non-Confidential Response, page 32

⁵ Eircom response to S13D Information Requirement dated 25th May 2017, Question 2(b)

2.2. Establishment of a new division to provide EOI for CEI

In Eircom's Response to the Consultation, Eircom envisions a situation in which it would need to duplicate existing teams to meet the standard for equivalence. In the Response, Eircom states: "It is inherently inefficient to require eir to consume its own CEI products in the same manner as Access Seekers as some teams, for example the network design team, will effectively need to be duplicated – the network design team currently undertakes designs and provides the assurance function that the designs are compatible with eir's network integrity requirements. This would not appear to be able to continue."⁶

Organisational design issues were beyond the scope of Cartesian's assessment. We did not include any requirement for separation of duties as envisioned by Eircom, above.

2.3. Access seeker licenses for the Smallworld GIS

In Eircom's Response to the Consultation, in the context of access to GIS information, Eircom stated: "No estimate for additional licensing costs was included in the Cartesian Report. This could also be a significant outlay for both new software modules and end-users licences in Eircom's Smallworld solution."⁷

In the Section 13D notice, Eircom was asked why additional Smallworld end-user licenses would be required for Access Seekers, and whether the information be exported for the Access Seekers to use in their own GIS.

In Eircom's response to the 13D notice, it confirmed that it has previously provided digital extracts, for example: (i) in the case of major infrastructure programmes such as the NBP; and (ii) when utilities are planning major infrastructure projects such as power and gas networks. For the former case, Eircom has created a bureau service within the infrastructure access team to facilitate requests and the format used is autocad interchange format (DXF).⁸

Eircom also stated: "We assume the issue of licences is required where the same level of access required for all access seekers including eir. Access seekers using their own GIS would appear to be a sensible approach but by definition they will not have the same level of access to eir's GIS Smallworld system."⁹

From this response, Cartesian concludes that additional end-user licenses for Smallworld would not be required if Eircom adopted a solution that exported data from Smallworld for the Access Seekers to use in their own GIS. We expect that Access Seekers would already have their own GIS, to store and manage their own geospatial information.

Cartesian's Report did not state what level of access would be required by Access Seekers. Specifically, it did not assume that the exactly the same level of access would be required.

Cartesian considers that the important factors to consider when assessing the adequacy of access to the information are: completeness, accuracy, currency, and the ability to modify the data.

We see no reason why an export of Eircom's GIS data could not provide information to Access Seekers that is equivalent in terms of completeness and accuracy.

In terms of data currency, we accept that the live records may include changes that have occurred since the data export. The scale of this difference will depend upon the rate of change within Eircom's network

⁶ Eircom Non-Confidential Response, page 33

⁷ Eircom Non-Confidential Response, page 32

⁸ Eircom response to S13D Information Requirement dated 25th May 2017, Question 3(d) and Question 6

⁹ Eircom response to S13D Information Requirement dated 25th May 2017, Question 3(c)

and the frequency of the GIS exports. Cartesian believes that it should be possible to achieve a frequency that would avoid material difference, i.e. the difference would not materially impact the usability of the data.

With regards to updating the data, potential options for improving the CEI processes in the Cartesian Report include allowing the OAO to conduct its own field surveys and RRT (rod, rope and test) with the results communicated back to Eircom. This information could be used by Eircom to update the GIS records. Cartesian does not believe that it is necessary for the Access Seekers to be able to directly update the live GIS data.

2.4. Access seeker licenses for Ordnance Survey Ireland (OSI) data

In Eircom's Response to the Consultation, Eircom stated: "There will also be substantial on-going licensing fees payable by each Access Seeker. Open eir pays [redacted] per annum to Ordnance [sic] Survey Ireland (OSI) for electronic background mapping and that licence is neither transferrable nor available for third party use."¹⁰

Cartesian's Report did not envisage a need for Eircom to transfer OSI data to third parties as we understand that OAOs are able to license this data directly from OSI.

Eircom acknowledges this in its response to the Section 13D notice: "Access seekers with a GIS will typically have their own mapping licences."¹¹

2.5. Automation of billing and other processes/systems.

Eircom states in its Response to the Consultation that: "there is no estimate in the Cartesian report for IT system changes to eir's BSS/OSS including: Ordering; SLA management; Assurance; Billing; [redacted]"¹²

Eircom later adds: "This could have a serious impact on our Billing systems as we may require some complex algorithms to be developed to automate pricing rules."¹³

The above points were followed up by ComReg in its Section 13D notice.

In its response to the Section 13D notice, Eircom outlined the potential to re-use its existing Universal Gateway (UG) for CEI order handling. In its answer, Eircom responded that a potential approach would be to "systemise the order capture and acknowledgment elements of the existing manual CEI Access Products processes. This would allow all order capture for Provide, Change, Cease and Fault Handling to be entered via the UG interface. All other steps in the order processes (survey, validation, delivery, completion) would be delivered manually, as per existing processes."¹⁴

In Cartesian's opinion, re-use of the UG in this way could provide a cost-effective solution for order management, and may also enable generation of order process KPIs for SLA management.

On the topic of billing, Eircom was asked in the Section 13D notice what differences it saw in CEI billing for EOI vs. EOO. Eircom replied that: "CEI billing is currently conducted manually. If a self-service model

¹⁰ Eircom Non-Confidential Response, page 33

¹¹ Eircom response to S13D Information Requirement dated 25th May 2017, Question 3(d)

¹² Eircom Non-Confidential Response, page 33

¹³ Eircom Non-Confidential Response, page 34

¹⁴ Eircom response to S13D Information Requirement dated 25th May 2017, Question 4(a)(i)

was to be implemented there would need to be development to the billing systems to allow for quotations to be generated on the UG in a real-time manner during the pre-ordering phase.”¹⁵

Billing is an interesting aspect in the context of equivalence, as we would not expect Eircom to self-bill for consumption of CEI. Given this, Cartesian considers that the timeliness of the quotation would be more important than the method of generation. If Eircom is able to generate a manual quotation in a timespan that did not materially delay the Access Seeker in the order journey, then we would not see a need for automation of this function on the UG.

3. Conclusion

Cartesian has reviewed Eircom’s Response to the Consultation and its response to the clarifying questions in the Section 13D notice. Based on this information we do not find reason to change the analysis and conclusions in our Report.

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¹⁵ Eircom response to S13D Information Requirement dated 25th May 2017, Question 4(d)

4. Appendix – Clarifying Questions sent to Eircom

The following questions were sent from ComReg to Eircom in a Section 13D notice, dated 25 May 2017.

Question 1: With respect to eir Response to Com Reg Consultation & Draft Decision Paper:

The Eol proposal would require Eircom to follow the same processes with Access Seekers as per self-supply orders/requests.

(a) Why is it necessary to duplicate teams (e.g. network design team) to achieve Eol?

(b) Why is it necessary that Access Seekers would need to migrate to the same GIS system as Eircom to achieve Eol?

Question 2: With respect to eir Response to ComReg Consultation & Draft Decision Paper and response to Section 13D on 3 March 2016:

(a) Why is it necessary for a full survey of the network to be undertaken to achieve Eol?

(b) Confirm that occupancy information is accumulated and recorded over time as surveys for self-supply are performed.

(c) Confirm that occupancy information would be accumulated and recorded over time when surveys are conducted for Access Seekers?

(d) Does Eircom make available the following CEI PAR13 information to Access Seekers (i) 7-way sub duct routes (ii) 3-way sub duct routes (iii) 7-way sub duct capacity and (iv) 3-way sub duct capacity?

Question 3: With respect to eir Response to Com Reg Consultation & Draft Decision Paper:

In the consultation, it is proposed that Eircom shares network information with Access Seekers.

(a) Specify what additional licensing costs (if any) are required for new software modules? Explain why these licences are required including proof of requirement from relevant vendor(s). Were alternatives solutions considered which would eliminate additional licensing costs?

(b) For what reasons would Eircom not reserved routes as "to be built" records within its GIS?

(c) Why are additional end-user licenses required? Can the information be exported for the Access Seekers to use in their own GIS? If not, provide the reasons why.

(d) Does Eircom provide network digital extracts to Contractors? If Yes, what formats (e.g. DXF) are used?

Question 4: With respect to eir Response to ComReg Consultation & Draft Decision Paper:

(a) The delivery of a request for a NGN Ethernet service e.g. a WSEA new provide consists of provisioning and configuration of the active equipment and installation of the required passive infrastructure such as sub-duct installation or reuse and the installation of fibre cables etc. Therefore, a request for CEI

access e.g. rod & rope sub-duct or installation of sub-duct is a subset of NGN Ethernet service delivery tasks. In this context:

(i) What necessary additional UG functionality or modifications to the existing UG functionality (including UG FTP Channel) are required in relation to order acknowledgement, acceptance and validation to process requests for CEI access?

(ii) Explain the reason(s) why each change identified (if any) is justified?

(b) Once an Access Seeker submits a CEI Order, is there a reason why subsequent process steps (i.e. after order acceptance) could not be carried out on a manual basis, as is the case today when processing NGN Ethernet Orders once an Operator submits an order on the UG?

(c) FTTx Programme Managers relay information packs/templates to Designers. Is there a reason why Access Seekers could not transmit (via UG FTP Channel) information packs/templates to Eircom?

(d) What are the differences in CEI billing for Eol vs. EoO?

Question 5: Provide an electronic copy of the Training Guide(s) and User Manual for the PDAM.

Question 6: The following is an extract from eir Response to ComReg Consultation & Draft Decision Paper: 30th January 2017: "Making this data available to OAOs in a 'usable' format on a self-service basis and subsequently receiving and recording 'OAO Designs' and documentation for import and update into Smallworld is a very significant undertakingThe ability of Access Seekers to review GIS data in real time and to reserve space is something that will require integration of order management systems and GIS systems however the driver for any such investment is again likely to be driven by order volumes. As noted above, this capability is not without significant capital investment and licensing costs to the Access Seeker."

Eircom appears to have assumed that a real-time, self-service interface to the network data would be required. Has Eircom considered the option of providing regular, off-line copies of the data?

Question 7: The following is an extract from eir Response to ComReg Consultation & Draft Decision Paper: 30th January 2017: "There will also be substantial on-going licensing fees payable by each Access Seeker. Open eir pays [€< [REDACTED]] per annum to Ordnance Survey Ireland (OSI) for electronic background mapping and that licence is neither transferrable nor available for third party use."

Does Eircom foresee any obstacles to Access Seekers obtaining map data directly from OSI?

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