

Version H 2.0

APPENDIX H

CH Handover Support Materials

Definitions

Advanced Shipment Notification (or ASN)	means, in relation to a Region, the notification containing the information listed in Annex A of this document under ‘Advanced Shipment Notification’ identified as being provided in relation to that Region.
Cellular Communications Hub	means a WAN Variant in the Central Region and the South Region which is capable of using mobile cellular radio technology to connect to the SM WAN.
Central Region	means the Region which covers the majority of Wales and the majority of central England.
CH Delivery and Returns	means the OMS Account profile which enables the user of an OMS Account with this profile or the DCC on their behalf to carry out the following activities on the OMS: <ul style="list-style-type: none"> a. the viewing and amendment of Communication Hub Consignments; b. the viewing and downloading of Advanced Shipment Notifications; c. the creation, acceptance and rejection of requests to return Communications Hubs and Communications Hub Auxiliary Equipment to the DCC; and d. the maintenance of Delivery Location information and Party contact details in relation to Communications Hub Orders.
CH Ordering	means the OMS Account profile which enables the user of an OMS Account with this profile or the DCC on their behalf to carry out the following activities on the OMS: <ul style="list-style-type: none"> a. the creation, submission, viewing, and amendment of Communications Hub Forecasts, Communications Hub Orders; b. the creation of Delivery Location information; and c. all activities that can be carried out under an OMS Account with the CH Delivery and Returns profile.
CH Supporting Information	means the materials identified as such which: <ul style="list-style-type: none"> a. are published by the DCC on the DCC Website; and b. contain the information required by clause 1.4 of this document.
CH Query	means the OMS Account profile which enables the user of an OMS Account with this profile or the DCC on their behalf to carry out the following activities on the OMS: <ul style="list-style-type: none"> a. the viewing of Communication Hub Consignments, Communications Hub Forecasts, Communications Hub Orders; and b. the viewing and downloading of Advanced Shipment Notifications.
CHF Identifier	has the meaning given to that term in the CHTS.
Communications Hub Variants	means variations of Communications Hubs describing their HAN and WAN communications characteristics.

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Coverage Area	means the geographical coverage of the SM WAN at a point in time.
Delivery Issues Report Notification (or DIRN)	means the report provided to a Party by the DCC pursuant to clause 6.23.
Delivery Note	means, in relation to a Region, the documentation containing the information listed in Annex A under ‘Delivery Note’ identified as being provided in relation to that Region.
Dual Band Communications Hub	a HAN Variant which is capable of using 2.4GHz and Sub GHz frequencies for communication on the Home Area Network (HAN).
GPF Identifier	has the meaning given to that term in the CHTS.
Installation Location	means the location of the premises at which a Communications Hub is planned to be, or has been, installed.
Mesh Communications Hub	means a WAN Variant in the Central Region and the South Region which is capable of using both mobile cellular radio technology and wireless mesh radio technology to connect to the SM WAN.
North Region	means the Region which covers the majority of Scotland and the majority of northern England.
OMS Account	means an arrangement by which a user is given access to an OMS profile by entering a unique username and password.
OMS Order Reference	means a reference that is unique to a Communications Hub Order and which is first notified as set out in clause 3.19.
Order Management System (or OMS)	means the systems comprising part of the CH Ordering System and which are used for: <ul style="list-style-type: none"> a. the submission of information comprising Communications Hub Forecasts and Communications Hub Orders; b. the management and tracking of Communications Hub Orders and deliveries of Communications Hubs and Communications Hub Auxiliary Equipment; and c. the rejection, return or replacement of Communications Hubs and Communications Hub Auxiliary Equipment.
Significant Metallic Obstruction	has the meaning given to that term in the CH Installation and Maintenance Support Materials.
Single Band Communications Hub	means a HAN Variant which is only capable of using 2.4GHz frequency for communication on the Home Area Network (HAN).

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South Region	means the Region which covers the majority of southern England.
Special Installation Mesh Communications Hub	means a WAN Variant in the Central Region and the South Region which provides two external aerial ports on the front face to enable connection of two external aerials – one cellular (either a T1 Aerial Type, T2 Aerial Type or T3 Aerial Type) and one mesh (either an M1 Aerial Type or M2 Aerial Type). This WAN variant may not be ordered by Parties but is supplied and fitted directly by DCC
T1 Aerial Type	means the low gain aerial type in the Central Region and the South Region further described in the Communications Hub Supporting Information and which do not comprise part of the Communications Hub and may be ordered as Communications Hub Auxiliary Equipment.
T2 Aerial Type	means the high gain aerial type in the Central Region and the South Region further described in the Communications Hub Supporting Information and which do not comprise part of the Communications Hub and may be ordered as Communications Hub Auxiliary Equipment.
T3 Aerial Type	means the high gain aerial type in the Central Region and the South Region further described in the Communications Hub Supporting Information and which may not be ordered by Parties but is supplied and fitted directly by DCC.
M1 Aerial Type	means the low gain mesh aerial type in the Central Region and the South Region further described in the Communications Hub Supporting Information and which may not be ordered by Parties but is supplied and fitted directly by DCC.
M2 Aerial Type	means the high-gain mesh aerial type in the Central Region and the South Region further described in the Communications Hub Supporting Information and which may not be ordered by Parties but is supplied and fitted directly by DCC.
Working Hours	for the purposes of this document, means the period between 07:00 and 17:00 during a Working Day.

1. INTRODUCTION

Document purpose

- 1.1 This document is the CH Handover Support Materials, and forms Appendix H of the Code.

General clarifications

- 1.2 Unless expressly stated otherwise, the obligations in this document are applicable in relation to all Regions.
- 1.3 Unless expressly stated otherwise, none of the obligations in this document apply to Test Communications Hubs.

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- 1.4 The DCC shall publish the CH Supporting Information on the DCC website, which shall include the following information:
- (a) information regarding Advance Shipment Notification format for Communications Hubs and Aerial Types that can be ordered through OMS;
 - (b) additional diagrammatical information supporting the definition of Significant Metallic Obstruction;
 - (c) a description of the way in which LED indicators depict the operational status of a Communications Hub; and
 - (d) a description of the aerial types DCC makes available within the South Region and Central Region (T1 Aerial Type, T2 Aerial Type, T3 Aerial Type, M1 Aerial Type and M2 Aerial Type).
- 1.5 Prior to first publication of, and any subsequent modification to the CH Supporting Information the DCC shall:
- (a) undertake reasonable consultation with Parties regarding its content or any proposed modification thereto;
 - (b) give due consideration to, and take into account, any consultation responses received; and
 - (c) publish a statement of its reasons for including or modifying content, as applicable, together with copies of any consultation responses received that are not marked as confidential.
- 1.6 The DCC shall publish the initial CH Supporting Information and any subsequently modified versions on the DCC Website as soon as reasonably practicable following the completion of the activities set out in clause 1.5.

2. ORDER MANAGEMENT SYSTEM

- 2.1 Subject to the remaining provisions set out in clauses 2.1 to 2.7 of this document, the DCC shall provide each Party with access to the Order Management System (OMS) for each Region via:
- (a) the Self-Service Interface; and
 - (b) a public internet link.

Access to the OMS

- 2.2 A Party other than the DCC shall only access the OMS via an OMS Account.
- 2.3 Any Party first seeking to access the OMS for a Region shall submit a valid request for one or more OMS Accounts via the Service Desk.
- 2.4 Each Party may request access for OMS Accounts in relation to each Region. DCC shall provide four OMS Accounts per Region at no additional Charge. A Party may request more than four OMS Accounts per Region, subject to Section F5.23.
- 2.5 A request for an OMS Account shall be considered valid if it includes:
- (a) the Party Signifier for the Party making the request;

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- (b) a username comprised of an email address for each OMS Account being requested, which shall not be used for any other accounts accessing the OMS for that Region;
 - (c) the OMS profile(s) to be associated with each OMS Account being requested; and
 - (d) the Region for which access is being requested.
- 2.6 The DCC shall provide a password to be associated with each individual OMS Account to the requesting Party no later than four Working Days following the receipt of a valid request for an OMS Account. The requesting Party may then use the combination of username and password to access the relevant instance of the OMS.
- 2.7 A Party may request a change to the OMS profile(s) that are available via an OMS Account, modify the OMS Account or close the OMS Account by submitting a request to the Service Desk. The DCC shall implement such a change no later than four Working Days following the receipt of such a request and shall notify the Party on the day of completion.

3. FORECASTING AND ORDERING COMMUNICATIONS HUBS

Communications Hub Forecasts

- 3.1 Following receipt of a Communications Hub Forecast or the deeming of a Communications Hub Forecast by the DCC in accordance with Section F5.6, the DCC shall notify via email to all OMS Accounts associated with that Party that the following information is available via the OMS:
- (a) a unique reference for the relevant Communications Hub Forecast; and
 - (b) the associated date, which shall be:
 - (i) where a Communication Hub Forecast has been submitted by a Party, the date of submission; or
 - (ii) where the Communications Hub forecast has not been submitted by a Party, the date at which the DCC has deemed that forecast.

SM WAN coverage information

- 3.2 The DCC shall provide Parties with information regarding SM WAN coverage at potential Installation Locations and the WAN Variant (and, where applicable, the Communications Hub Auxiliary Equipment) required for each Installation Location via the SM WAN Coverage Database. The DCC shall make the SM WAN Coverage Database information available via:
- (a) the Self Service Interface;
 - (b) responses to Service Request 12.1 (Request WAN matrix); or
 - (c) a reasonable alternative method, as specified by the DCC, where the methods specified in clauses 3.2(a), 3.2(b) are not available.
- 3.3 Where a Party requires SM WAN coverage information for an Installation Location where there is no associated postcode in DCC Systems, the Party may raise a Service Management Service Request with the DCC, and in so doing shall provide the geographic latitude and longitude, for the Installation Location. The DCC shall resolve the Service Management Service Request by providing SM WAN coverage information for

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the Installation Location to the Party which raised the matter, and by additionally allocating the Installation Location to a Region.

Delivery Locations

- 3.4 A Party shall provide Delivery Locations on the OMS using the CH Ordering profile and shall provide and maintain the following information for each Delivery Location:
- (a) the full delivery address;
 - (b) operating hours; and
 - (c) the name, email address, and telephone number for a nominated contact in relation to Communications Hubs Orders.
- 3.5 The DCC shall ensure that the OMS allows each Party using the CH Ordering profile to select a maximum of two Delivery Locations for each Communications Hub Order.

Deemed Communications Hub Orders

- 3.6 Where, in accordance with Section F5.13(c), the DCC deems the quantities of Communications Hubs to be included in a Communications Hub Order for a Party, it shall inform via email notification to all OMS Accounts associated with that Party that a deemed order has been made and make available, via the OMS, details of the deemed quantity of each Device Model and of any Communications Hub Auxiliary Equipment.
- 3.7 Where a Party receives a notification in accordance with clause 3.6, that Party shall specify a Delivery Location or Delivery Locations for the Communications Hub Order within two Working Days and shall comply with, and provide the further information set out in, clauses 3.13 and 3.14.
- 3.8 Where a Party has not specified a Delivery Location or Delivery Locations, or provided the other information required, in accordance with clause 3.7, the DCC shall specify the Communications Hub Order Delivery Location or Delivery Locations using Delivery Locations provided for any previous orders and, specify the further information set out in, clauses 3.13 and 3.14.
- 3.9 Where the DCC has determined the Delivery Location(s) pursuant to clause 3.8 and the relevant Party has not notified the DCC within 30 days of the DCC's notification pursuant to clause 3.6, that the extant delivery details are correct, then the relevant Party shall be deemed to have requested cancellation of the Consignment or Consignments (and Section F5.19 shall be deemed to apply). The DCC shall notify that such a request has been deemed, via an email to all OMS Accounts associated with that Party.

Submitting Communications Hub Orders

- 3.10 When submitting a Communications Hub Order, each Party shall ensure that only such Communications Hub Variants and Communications Hub Auxiliary Equipment are ordered as it may reasonably require to:
- (a) complete planned installations using the WAN Variants and Communication Hub Auxiliary Equipment that are indicated as required for the relevant Installation Location(s) on the SM WAN Coverage Database;
 - (b) conform to the proportions of T1 Aerial Type and T2 Aerial Type estimated as necessary within the CH Supporting Information to provide for Mesh Communications Hub installations; and

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- (c) maintain sufficient stock to resolve coverage Incidents and Communication Hub faults as described in the CH Installation and Maintenance Support Materials.
- 3.11 Where a Party submits a Communications Hub Order for the Central Region or the South Region that results in greater than 10% of the total number of Communications Hubs in the Communications Hub Order being Mesh Communications Hubs, the DCC may request an explanation why the quantity of Mesh Communications Hubs ordered is required and where such an explanation is requested the Party shall provide the explanation via email promptly.
- 3.12 Each Party shall ensure that its Communications Hubs Order is such that it would not result in a requirement for the DCC to deliver a single Consignment that comprises only Communications Hub Auxiliary Equipment.
- 3.13 In addition to complying with the requirements set out in Section F5.8, for each Communications Hub Order that it submits, a Party shall:
- (a) request delivery to no more than two Delivery Locations per Region;
 - (b) request delivery to each Delivery Location no more than once in any single week; and
 - (c) specify a Delivery Date and associated Delivery Window that is within Working Hours.
- 3.14 A Party submitting a Communications Hub Order shall ensure that for each delivery that will result from that Communications Hub Order and in relation to the Region to which the Order relates:
- (a) the number of each Communications Hub Variant is an integer multiple of the quantity of Communications Hubs that are contained in a carton for that Communications Hub Variant, as specified in Annex B of this document;
 - (b) the total number of Communications Hubs ordered is such that a pallet layer contains the total number of cartons for that pallet layer as specified in Annex B of this document and only contains a single Communications Hub Variant; and
 - (c) the total number of Communications Hubs is greater than or equal to the quantity of Communications Hubs contained in a complete standard pallet, as specified in Annex B of this document.
- 3.15 The DCC shall package and load Communications Hubs as described in Annex D of this document.
- 3.16 The DCC shall make available to a Party via the CH Ordering System at least one contact telephone number and email address for the DCC which is relevant to each Communications Hub Order placed by that Party for the purposes of allowing a Party to request amendments to Delivery Locations, Delivery Dates, or Delivery Windows in relation to a Communications Hub Order that it has submitted.
- 3.17 A Party shall make available to the DCC via the CH Ordering System at least one contact telephone number and email address for that Party which is relevant to each of its Communications Hub Orders, which shall be used by the DCC for any email or telephone communications regarding the order.
- 3.18 For each Communications Hub Order, where the DCC identifies an opportunity for consolidation of a Party's Consignments into a single delivery vehicle, the DCC may request permission to amend a Communications Hub Order to enable such consolidation. The agreement of the Party to such a request shall not be unreasonably withheld.

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Order Verification and Acceptance

- 3.19 The notification that the DCC is required to provide pursuant to Section F5.16 shall be provided by the DCC via email to all OMS Accounts associated with that Party notifying that information is available via the OMS. Such information will consist of the following;
- (a) an OMS Order Reference; and
 - (b) confirmation that the Communications Hub Order is:
 - (i) compliant with the requirements of Section F5 (and therefore accepted without amendment); or
 - (ii) not compliant with the requirements of Section F5.
- 3.20 Where a notification has been made of the type set out in clause 3.19(b)(ii), the further notification that DCC is required to provide pursuant to Section F5.17 shall be provided by the DCC via email to all OMS Accounts associated with that Party notifying that information is available via the OMS. The information on the OMS shall state whether the Order is:
- (a) accepted, in full and is not subject to amendment;
 - (b) accepted, in part or is subject to amendment; or
 - (c) rejected;
- and in each case
- (d) the reason for the decision.
- 3.21 In the event that a Party submits a Communications Hub Order, or subsequently seeks to amend that order pursuant to clause 4.3, that would result in one or more deliveries that do not meet the conditions set out in clause 3.12, 3.13 and 3.14, such an order shall be deemed to be a request for non-standard delivery instructions in accordance with Section F6.17.
- 3.22 Where a Party has or has been deemed to have requested non-standard delivery instructions, the DCC shall provide a non-binding estimate of any applicable Charge for that Communications Hub Order to that Party within five Working Days of receipt of such request.
- 3.23 On receipt of an estimate of the applicable non-standard delivery Charge pursuant to clause 3.22, the relevant Party shall, within five Working Days, either;
- (a) leave the non-standard delivery order unchanged on the OMS, and therefore be deemed to have agreed to pay any applicable Explicit Charges pursuant to Sections F6.17 and K7.5(k); or
 - (b) amend the relevant Communications Hub Order via the OMS using the CH Ordering profile such that it no longer results in non-standard delivery instructions.

4. ORDER MANAGEMENT

Non-standard cancellation of Consignments

- 4.1 Pursuant to Section F5.19, a Party wishing to obtain an estimate of costs and expenses in relation to the cancellation of a Consignment shall submit a request for this estimate by contacting the Service Desk.
- 4.2 Where pursuant to Section F5.19 a Party wishes to cancel a Consignment, its notification to this effect must be provided to the Service Desk.

Delivery Date and Time Amendments

- 4.3 Following acceptance of a Communications Hub Order by the DCC, a Party may request amendments to the Delivery Date or Delivery Window for a Consignment up to 30 days prior to the original Delivery Date. Such requests shall be submitted via the OMS through a direct update to the order details using the CH Ordering profile.
- 4.4 Any request by a Party for an amendment pursuant to clause 4.3, in addition to the provisions in clauses 3.13 and 3.14, is subject to the following restrictions:
 - (a) the revised Delivery Date for a Consignment must be a Working Day within five days of the original Delivery Date and within the same Delivery Month; and
 - (b) the revised Delivery Window for a Consignment must be within Working Hours.
- 4.5 In the event that a Party wishes to request an amendment to the Delivery Date or Delivery Window for a Consignment within 30 days of the Delivery Date, or where the Party wishes to request an amendment to the Delivery Location because exceptional circumstances mean that delivery to the original specified Delivery Location is no longer practicable, that Party shall contact the DCC directly using the contact details set out in clause 3.16; in this event the restrictions as detailed in clause 4.4 shall apply and DCC may specify further reasonable restrictions which shall be notified via telephone or email and may deem such a request to be a request for non- standard delivery instructions.
- 4.6 Where the DCC deems such a request to be a request for non-standard delivery instructions, clause 3.22 shall apply. Upon receipt of an estimate of the applicable non-standard delivery Charge, the relevant Party shall, within five Working Days, either:
 - (a) leave the non-standard delivery order unchanged on the OMS, in which case, the Party shall be deemed to have withdrawn its request for an amendment pursuant to 4.5; or
 - (b) notify the DCC of its agreement to pay any applicable Explicit Charges pursuant to Sections F6.17 and K7.5(k) and the DCC shall update the OMS accordingly.
- 4.7 The DCC may consider an amendment to the Delivery Date or Delivery Window for a Consignment made within five Working Days of the Delivery Date, but shall not be obliged to do so.
- 4.8 Where the DCC has not deemed a request pursuant to clause 4.5 to be a request for non-standard delivery instructions, the DCC shall confirm acceptance of any request made by a Party in accordance with clause 4.5 and the DCC shall update the OMS to reflect the amendments agreed with the Party, as soon as is reasonably practical and in any event within five Working Days of the request having been made.

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- 4.9 Where pursuant to clause 4.8 the DCC confirms to a Party that a change to the Delivery Date or Delivery Window, or Delivery Location is accepted; the DCC shall be obliged to deliver the Communications Hub Order in accordance with those updated instructions.

Monitoring Order Status

- 4.10 The DCC shall ensure that the following information is available to a Party via the OMS for all OMS Accounts associated with that Party in relation to each Communications Hub Order that it submitted in the previous 12 months:
- (a) The Communications Hub Order status, being one of:
 - (i) Submitted – order submitted to the DCC;
 - (ii) Accepted – order (where appropriate, as amended) accepted by the DCC;
 - (iii) Rejected – full order rejected by DCC;
 - (iv) Partially Delivered – partial order delivered and accepted by the Party; or
 - (v) Delivered – all Consignments for the order accepted by the Party.
 - (b) the status of each Consignment within a Communications Hub Order, being one of:
 - (i) In Progress – Consignment scheduled for delivery within 30 days or less;
 - (ii) Shipped - Advance Shipment Notification (ASN) issued and Consignment in transit;
 - (iii) Delivered – Consignment delivered to Delivery Location;
 - (iv) Rejected – the Party has rejected all of the Consignment;
 - (v) Partially Delivered – partial Consignment acceptance by the Party;
 - (vi) Accepted – the Party has accepted delivery of all Communications Hubs in the Consignment; or
 - (vii) Cancelled – The Party has cancelled delivery of the Consignment.

5. DELIVERY DOCUMENTATION AND PACKAGING

Pre-handover delivery documentation

- 5.1 At least two Working Days prior to the Delivery Date for a Consignment, the DCC shall:
- (a) notify the relevant Party via email that an ASN for that Consignment is available via the OMS; and
 - (b) ensure that the ASN is available for that Party to download from the OMS under all OMS Accounts associated with that Party in a Comma Separated Values (CSV) file format. The DCC shall ensure that the content of this CSV file is such that:
 - (i) the first row contains the column headings for each data item;

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- (ii) the first column in each subsequent row contains the unique CHF Identifier for a Communications Hub, with all other data items in that row being associated to that CHF Identifier;
- (iii) the column headings contain the information listed under the header Advanced Shipment Notification in Annex A of this document for the relevant Region;
- (iv) fields shall be comma-separated;
- (v) fields shall only contain ASCII characters;
- (vi) text fields shall be enclosed with opening and closing double quotation marks, but no quotation marks shall be used in date and numeric fields;
- (vii) a (double) quote character within a text field must be represented by two (double) quote characters;
- (viii) blank fields shall not contain characters other than opening and closing double quotation marks for text fields; and
- (ix) records shall be terminated with a line feed (ASCII 10) character.

Delivery documentation and labelling

- 5.2 The DCC shall ensure that in relation to each Consignment, each carton and pallet will be labelled with identification information as listed under the columns titled “Carton Labels” and “Pallet Labels” in Annex A of this document.
- 5.3 The DCC shall ensure that a hard copy of the Delivery Note is provided to the Party on the arrival of the Consignment at the Delivery Location.

Communications Hub packaging and labelling information

- 5.4 The DCC shall permanently mark the identification information listed under the header CH Marking in Annex A of this document onto the front face of each Communications Hub, where that front face is the face of the Communications Hub which contains the M4 retaining screw.

Carton Packaging

- 5.5 The DCC shall provide packaged Communications Hubs in cardboard boxes within cartons, each carton containing the quantities of Communications Hubs for the relevant Region as set out in Annex B of this document.
- 5.6 The DCC shall provide cartons that contain only a single Communications Hub Variant.

Pallet Sizes

- 5.7 The DCC shall ensure that:
 - (a) cartons are loaded onto pallets of the relevant dimensions for a Region as set out in Annex B of this document;

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- (b) pallets are wrapped such that cartons are safely secured for transit, and that pallet and carton labelling is visible through the wrapping materials; and
- (c) pallets are packed so as not to exceed the maximum specifications as set out in Annex B of this document.

6. HANDOVER PROCEDURE

Pre-delivery Checks

- 6.1 The DCC shall ensure that, prior to making the ASN for a Consignment available to a Party in accordance with clause 5.1(b), such ASN correctly identifies the total quantity of Communications Hub Device Models requested in that Consignment.
- 6.2 Each Party (other than the DCC) shall validate the content of an ASN provided to it against the relevant Consignment details derived from its submitted Communications Hub Order to check that the ASN correctly identifies the total quantity of Communications Hub Device Models requested in that Consignment by that Party.
- 6.3 Where a Party identifies that the ASN is incorrect, it shall notify the DCC using contact details provided in accordance with clause 3.16. The Party shall ensure that this notification is sent to the DCC at least 5 Working Hours before the Delivery Window for that Consignment.
- 6.4 Where the DCC receives a notification in accordance with clause 6.3, and where DCC agrees that the ASN does not reflect the Consignment, the DCC shall amend the ASN to correctly reflect the requested Consignment promptly and may propose amendments to the Delivery Date. The DCC shall notify the Party via email and via telephone of the steps that it has taken.

Delivery Changes

- 6.5 Where, prior to the Delivery Date, the DCC becomes aware that it will be unable to deliver the Consignment on the specified Delivery Date, it shall notify the affected Party of the delay and explain the reasons for the delay as soon as reasonably practicable via email and telephone and shall propose amendments to the Delivery Date.
- 6.6 Where DCC seeks to change a Delivery Date and Delivery Window in accordance with clause 6.4 or 6.5 the DCC shall list reasonable potential options for revised Delivery Dates and Delivery Windows and request a revised Delivery Date and Delivery Window from the affected Party.
- 6.7 Where a Party is notified in accordance with clause 6.6, the Party shall indicate which one of the potential Delivery Dates and Delivery Windows it prefers, and the DCC shall update the OMS with the Party's preferred rescheduled Delivery Date and Delivery Window for the affected Consignment.
- 6.8 Where, on or prior to the Delivery Date, the DCC considers that the Consignment will be delivered outside of the Delivery Window, the DCC shall notify the Party as soon as reasonably practicable via notification email and telephone. The DCC shall explain the reason for the delay and provide an estimate for a revised delivery time.
- 6.9 Where the Party is not able to accept the Consignment at the revised delivery time proposed pursuant to clause 6.8, the DCC shall provide a list of reasonable potential options for revised Delivery Dates and Delivery Windows and request a revised Delivery Date and Delivery Window from the Party. The Party shall

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indicate which one of the potential Delivery Dates and Delivery Windows offered by the DCC it prefers, and the DCC shall update the OMS accordingly.

Unloading

6.10 On the Delivery Date the Party shall:

- (a) ensure that there is access for the DCC to the Delivery Location during the Delivery Window; and
- (b) provide a dry receiving area large enough to receive all the pallets in the Consignment.

6.11 When the Consignment arrives at a Party's Delivery Location that Party shall:

- (a) check the Delivery Note information to confirm that the Consignment matches the relevant ASN prior to unloading;
- (b) protect the Consignment from moisture and extremes of temperature during unloading in accordance with the environmental conditions set out in Annex C of this document, and as amended from time to time;
- (c) except where not required to do so pursuant to clause 6.12, unload pallets from the delivery vehicle; and
- (d) unload the vehicle within two hours of the later of:
 - (i) the agreed Delivery Window: or
 - (ii) the delayed delivery arrival time where the delivery is delayed.

6.12 A Party:

- (a) shall not unload pallets that are not identified on the ASN;
- (b) may decline to unload pallets where pursuant to clause 6.18 they are going to reject a complete pallet; and
- (c) may decline to unload pallets where to do so would present a health and safety risk.

6.13 Any pallets that are not unloaded for the reasons set out in clause 6.12 of this document shall be deemed to be rejected by the relevant Party, and that Party shall provide a notification to the DCC in accordance with clause 6.20 of this document.

Consignment Reconciliation

6.14 Following unloading, and without removing any packaging or breaking any security seals on the delivered pallets or Communications Hubs, the Party shall take reasonable steps to:

- (a) scan or visually inspect the label on each unloaded pallet, and confirm that the
 - (i) pallet identifier;
 - (ii) OMS Order Reference;

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- (iii) Consignment reference; and
 - (iv) any carton identifiers that are visible,
match those shown on the ASN; and
 - (b) verify that the quantity of cartons on each pallet matches the quantity shown on the ASN.
- 6.15 The Party shall sign the Delivery Note to confirm completion of delivery prior to the delivery vehicle departing the Delivery Location.
- 6.16 If the Party is aware of any discrepancies that exist between the pallets or cartons of Communications Hubs unloaded and the information contained within the ASN or the Delivery Note, the Party shall note this on the Delivery Note prior to signing it.
- 6.17 The DCC shall ensure that the Party is provided with a hard copy of the signed Delivery Note as proof of delivery prior to the delivery vehicle leaving the Delivery Location.

Visual Inspection

- 6.18 In addition to the right to reject pursuant to Section F6.9 (a) to (c), a Party shall reject a complete pallet where any of the following is identified:
- (a) heat or smoke damage to the external wrapping or packaging;
 - (b) evidence of tampering or interference with any packaging tamper seals; or
 - (c) damage, which is estimated to affect more than 50% of the cartons on that pallet as a result of:
 - (i) fork lift truck/handling damage or outer-wrapping damage where there are notable signs of packaging or product damage such as crushing, puncturing or scraping;
 - (ii) water ingress, or other liquid or chemical damage; or
 - (iii) signs of infestation by pests or mould.
- 6.19 Pursuant to Section F6.9 (d), a Party receiving a Consignment may reject individual damaged cartons where it has not rejected the whole pallet as set out in clause 6.18.

Delivery Confirmation Procedure

- 6.20 Pursuant to Section F6.7, a Party shall provide confirmation of whether or not a delivery of Communications Hubs Products has been made in compliance with the order by notifying the DCC via the OMS using either the CH Ordering or the CH Delivery and Returns profile. Such notification shall include details of any pallets or where applicable, individual cartons of Communications Hubs that are rejected, and provide the following:
- (a) OMS Order Reference;
 - (b) Consignment reference;
 - (c) where a complete pallet is rejected:

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- (i) the pallet identifier;
 - (ii) quantity of cartons on the pallet; and
 - (iii) a description of the reason for rejection as listed in clause 6.21; and
- (d) where a carton is rejected that is not part of a complete pallet:
- (i) carton identifier; and
 - (ii) a description of the reason for rejection as listed in clause 6.21.

6.21 For the purposes of the notification under clause 6.20, the reason for rejection of all or part of a Consignment is one of those listed in Section F6.9 (a) to (c), or one of the following:

- (a) pallet not unloaded for the reasons set out in clause 6.12;
- (b) pallet rejected in accordance with clause 6.13;
- (c) missing pallet from the Consignment as unloaded;
- (d) pallet not identified within the Party's ASN for that Consignment;
- (e) pallet rejected in accordance with clause 6.18;
- (f) carton missing from the Consignment as unloaded;
- (g) carton not identified within the Party's ASN for that Consignment; or
- (h) carton rejected in accordance with clause 6.19.

6.22 A Party may only reject whole cartons of Communications Hubs.

Rejected Delivery Return Procedure

6.23 Following the receipt of a notification via the OMS in accordance with clause 6.20 of this document, the DCC shall notify the Party via an email to all OMS Accounts associated with that Party, that a Delivery Issues Report Notification (DIRN) for rejected Communications Hubs is available via the OMS, or include the DIRN within the email notification, within one Working Day. The DIRN shall contain the following:

- (a) a unique DIRN reference;
- (b) the date and time for collecting the Communications Hubs to be returned which shall be within five Working Days of the receipt of the notification.

6.24 Where the Party is unable to accommodate the collection date and time specified in the DIRN, it shall notify the DCC within one Working Day of receipt of the notification in accordance with clause 6.23 using the contact details published via the OMS for this purpose, and the DCC shall list reasonable potential options for revised collection dates and times and request a revised collection date and time from the Party, and that Party shall notify the DCC using the contact details published via the OMS for this purpose of its preferred collection date and time from the options presented.

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- 6.25 The DCC make a printable DIRN label available via the CH Ordering System for each unique DIRN reference within one Working Day of either:
- (a) the receipt of the notification of rejection in accordance with clause 6.20; or
 - (b) notification by the Party of its preferred collection date and time in accordance with clause 6.24.
- 6.26 Parties shall ensure that rejected Communications Hubs are packaged in the cartons in which they were originally received and loaded so as not to exceed the maximum number of Communications Hubs per layer and layers per pallet as set out in Annex B of this document. The Party shall print and securely attach the DIRN label to the outside of each complete pallet or where the pallet is not complete on the outside of each carton that is to be returned.

Rejected Delivery Return Handover Procedure

- 6.27 When the collection vehicle arrives at a Party's Delivery Location, that Party shall:
- (a) load the vehicle within two hours of the collection time; or
 - (b) load the vehicle within two hours of the time that the collection vehicle arrives at the Delivery Location, where the delivery vehicle arrives within two hours of the collection time and the arrival time is during Working Hours and where the Party can reasonably be expected to have completed loading during Working Hours;
 - (c) take reasonable steps to load the vehicle within two hours where the arrival time is later than two hours of the collection time and the arrival time is during Working Hours and where the Party can reasonably be expected to have completed loading during Working Hours;
 - (d) during loading, protect the goods from moisture and extremes of temperature in accordance with the environmental conditions set out in Annex C of this document, and as amended from time to time; and
 - (e) only load pallets or cartons with IDs that are included on the DIRN and that have a valid DIRN label attached onto the collection vehicle.
- 6.28 Where it is not possible to fulfil the collection and the DCC (or a Party) seeks to rearrange a collection date and collection window, the DCC shall list reasonable potential options for revised collection dates and collection windows and request a revised collection date and collection window from the affected Party. The Party shall choose a revised date and time from the options provided.
- 6.29 Where requested to do so the DCC shall sign the Party's collection note to confirm completion of collection prior to the collection vehicle departing the Delivery Location and the Party may provide a hard copy of the collection note to the DCC prior to the collection vehicle leaving the Delivery Location.

Delivery of Replacement Communications Hubs

- 6.30 Pursuant to Section F6.13, where a Party notifies the DCC of rejection for non-compliance of all or part of a Consignment in accordance with clause 6.20 of this document, the DCC shall by the next Working Day provide to the Party a list of reasonable potential options for revised Delivery Dates and Delivery Windows in respect of replacement goods and request a revised Delivery Date and Delivery Window from the Party. The Party shall indicate which one of the potential Delivery Dates and Delivery Windows offered by the DCC it prefers, and the DCC shall update the OMS accordingly.

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- 6.31 Following the receipt of the DCC notification in accordance with clause 6.30, the replacement goods shall be treated as if a Consignment being delivered as part of a Valid Communications Hub Order and Sections 5 and 6 of this document shall apply accordingly.

7. HANDOVER PROCEDURE – SPECIAL INSTALLATION MESH COMMUNICATIONS HUBS (SOUTH REGION AND CENTRAL REGION)

- 7.1 Where the DCC is in attendance at a premises in accordance with the special installations and modifications procedure as described in the CH Installation and Maintenance Support Materials, the DCC shall, subject to Section F7.4A(b), provide the Party with such Special Installation Mesh Communications Hubs as are required to complete the installation.
- 7.2 The DCC shall provide Special Installation Mesh Communications Hubs in individual packaging as described in Annex D of this document.
- 7.3 On receipt of a Special Installation Mesh Communications Hub, the Party shall undertake a visual inspection of the device packaging. In addition to the right to reject pursuant to Section F7.4A, a Party shall reject a Special Installation Mesh Communications Hub where any of the following is identified:
- (a) heat or smoke damage to the external packaging;
 - (b) evidence of tampering or interference with any packaging tamper seals; or
 - (c) other damage, which may be reasonably identified as a result of:
 - (i) handling damage or outer-wrapping damage where there are notable signs of packaging or product damage such as crushing, puncturing or scraping;
 - (ii) water ingress, or other liquid or chemical damage; or
 - (iii) signs of infestation by pests or mould.
- 7.4 The DCC shall also make available any aerial that it plans to install with the Special Installation Mesh Communications Hub for inspection by the Party. This shall include any of the following variants (T1 Aerial Type, T2 Aerial Type, T3 Aerial Type, M1 Aerial Type and M2 Aerial Type) as deemed necessary.
- 7.5 The completion of hand over of the Special Installation Mesh Communications Hub for the purposes of Section F7.4A (c), shall be deemed to have occurred following the inspection and acceptance of the Special Installation Mesh Communications Hub by the Party.
- 7.6 In the event that a Special Installation Mesh Communications Hub is rejected and the DCC is in attendance and where the Party wishes to hand back the Special Installation Mesh Communications Hub the DCC shall accept the rejected Special Installation Mesh Communications Hub and shall provide a replacement immediately, subject to Section F7.4A(b). In the event that the Supplier considers that any of the aerials provided by the DCC is damaged and requests a replacement, the DCC shall make available a replacement for inspection.

8. COMMUNICATIONS HUB STORAGE AND TRANSIT REQUIREMENTS

Storage Conditions

- 8.1 Parties shall ensure that whilst the Party is in possession of the Communications Hub, Communications Hubs shall be handled, stored and delivered in accordance with the environmental conditions detailed in Annex C of this document.

Transit to and from Consumer Premises

- 8.2 Parties shall ensure that when transporting Communications Hubs, they meet the specifications as described in Annex D.1.1 and D.1.2 of this document.
- 8.3 Parties shall take reasonable steps to install Communications Hubs from stock on a ‘first-in-first out’ basis such that Communications Hubs are not held in storage for longer than is necessary.

Annex A. Consignment Information

A.1. Consignment labelling and information

- A.1.1 Table 1 below describes the information provided for each Communications Hub, each carton containing a Communications Hub and each pallet of Communications Hubs for delivery, depending upon the Region to which the associated Communications Hub Order relates. A summary of data items included in the Advance Shipment Notification and the associated Delivery Note is also provided.

Table 1; Consignment labelling and information

	CH Marking		Carton Labels	Pallet Labels	Advanced Shipment Notification		Delivery Note	
	North Region	Central & South Regions			North Region	Central & South Regions	North Region	Central & South Regions
CHF Identifier (EUI-64 unique number)	Y	Y	Y		Y	Y		
Communications Hub Variant	Y	Y	Y	Y	Y	Y	Y	Y
GPF identifier (EUI-64 unique number)	Y	Y			Y	Y		
Zigbee MAC address	Y	Y			Y	Y		
SM WAN identifier					Y			
OMS Order Reference				Y	Y	Y	Y	Y
Party order reference				Y	Y	Y	Y	Y
Consignment reference				Y	Y	Y	Y	Y
Delivery Location					Y	Y	Y	Y

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Scheduled Delivery Date and Time					Y	Y	Y	Y
Firmware version number					Y	Y		
Hardware version number	Y				Y	Y		
Device configuration identifier	Y				Y			
Manufacturer, country and date of manufacture	Y	Y			Y	Y		
Batch number					Y	Y		
Reconditioned status (Y/N)					Y	Y		
Pallet identifier				Y	Y	Y	Y	Y
Quantity of Cartons on the pallet				Y	Y	Y	Y	Y
Carton identifier			Y	Y	Y	Y	Y	Y
Quantity of Communications Hubs in carton			Y		Y	Y	Y	Y
Pallets in delivery					Y	Y	Y	Y

Annex B. Communications Hub Pallet and Carton Quantities

B.1. Communications Hub Packaging

B.1.1 Consignments will be delivered in accordance with the packaging quantities set out in Table 2 below. Maximum delivery volumes assume double stacked pallets. Individual Communications Hub Consignments may therefore include pallets in different pallet layers.

B.1.2 Where Communications Hub Orders in the North Region are placed for multiple Communications Hub Variants, these Communications Hub Variants will be delivered on separate pallets. Pallets will not contain a mix of different Communications Hub Variants.

Table 2; Communications Hub delivery packaging

Packaging Information	North Region	Central Region and South Region
DCC Pallet size	Standard 4 Way L:1.2m, w:1m, H: 1m	Standard 4 Way L:1.2m, w:1m, H: 1m
Packaged Communications Hubs per carton	28	Either: 14 – Single Band Cellular Communications Hub Variant or 10 – all Communications Hub Variants except the Single Band Cellular Communications Hub Variant
Cartons per layer	8	16
Maximum layers per pallet	4	4

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Cartons per full pallet	32	64
Boxes per full pallet	896 (28 boxes x 32 cartons)	Between 640 and 896 (64 cartons, each containing either 10 or 14 boxes)
Actual weight per full pallet	333 kg for Single Band Communications Hubs 200 kg for Dual Band Communications Hubs - Standard 420 DB Variant (est.)	
Maximum weight per pallet		Max 500 kg
Maximum pallet height (incl. Pallet base)	1m	1m
Maximum volume (m3) per pallet	1.2 m3	1.2 m3
Maximum Pallets per trailer	52	40
Maximum packaged Communications Hubs per trailer	46,592	Between 25,600 and 35,840

Annex C. Annex C.Communications Hub storage and installation environmental conditions

C.1. Storage and installation environmental conditions

C.1.1 Communications Hubs are designed to be stored and operated within a defined range of environmental conditions; exposure to conditions outside this range may lead to premature failure of the device.

C.1.2 Communications Hubs are designed to be stored under the following conditions:

- (a) individual Communications Hubs should be kept in the original packaging provided for shipment prior to installation;
- (b) any storage environment should meet European Telecoms Standards Institute ETSI EN 300 019-1-.1 Class 1.2 (Weather protected not temperature- controlled storage locations), or any equivalent standard that replaces this; and
- (c) Good Industry Practices suitable for the handling, storage, preservation and internal delivery of the inventory of Communications Hubs that prevent damage, deterioration or misuse during internal processing should be followed.

C.1.3 Communications Hubs are designed to be transported in the following conditions:

- (a) individual Communications Hubs should be transferred between locations packaged in their original packaging such that they are protected from damage during normal handling; and
- (b) the transport environment should meet the European Telecoms Standards Institute ETSI EN 300 019-1-.2 Class 2.3 (Public Transportation), or any equivalent standard that replaces this.

C.1.4 Communications Hubs are designed to be installed and operated under the following conditions:

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- (a) the Communications Hub should not be subject to moisture ingress or foreign object ingress during the installation process;
- (b) following correct installation onto an ICHS-compliant host, moisture or foreign object ingress conditions should not exceed that specified in the IP53 Code under IEC standard 60529 or any equivalent standard that replaces this;
- (c) the Communications Hub should not be subject to humidity outside the range of 10% to 90% non-condensing; and
- (d) the Communications Hub should not be exposed to extremes of temperature of below -20°C or above +55°C.

Annex D. Communications Hub Packaging

D.1.1. Communications Hubs will be individually packaged in a cardboard box that:

- (a) is robust enough to protect the ICHIS connector pins during transport and handling; and
- (b) allows for both the CHF Identifier and Communications Hub Variant information to be visible directly through a cut-out without removing any of the packaging.

D.1.2. Individually boxed Communications Hubs will be grouped and packed in cardboard cartons that:

- (a) protect the Communications Hub from damage during transport and handling;
- (b) will contain the quantities set out in Annex B;
- (c) are labelled in accordance with Annex A; and
- (d) contain a single Communications Hub Variant.

D.1.3. Cartons of Communication Hub will be delivered on UK standard pallets in the quantities per pallet set out in Annex B. The pallets will be wrapped in industrial pallet or stretch wrap material.