

DCC Notice

Update on Communications Hub size and number of Communications Hubs per pallet for Central Region and South Region

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Classification: DCC Public

VERSION FINAL

1. Purpose of Notice

DCC updates Parties on the size of the Mesh variant Communications Hub (Toshiba SKU2) for the Central Region and South Region. For completeness the Notice also restates the size of the Central Region and South Region Cellular variant Communications Hub (Toshiba SKU1).

DCC also informs Parties that it intends to consult on the number of Mesh variant Communications Hubs per pallet for the Central Region and the South Region in early March 2016. At this point DCC can inform Parties that it believes the most efficient number of Mesh variant Communications Hubs per pallet is going to be 640 (for reasons set out below). It issues this Notice in advance of consultation to provide early sight and transparency.

2. Key messages

- i. **Communications Hub size:** at section 4 DCC updates Parties on Communications Hub sizes and provides links to updated data sheets containing detailed specifications. This Notice is an update to the size of Communications Hubs which DCC is already committed to procure.
- ii. **Communications Hubs per pallet:** DCC considers that 640 (10 boxes x 64 cartons) for Mesh variant Communications Hubs in the Central Region and the South Region is optimal. This number is therefore different to the number of Communications Hubs per pallet in the North Region, where there are 896 (28 boxes x 32 cartons) Communications Hubs per pallet and for the Cellular variant in the Central Region and South Region where there are also 896 (14 boxes x 64 cartons) Communications Hubs per pallet.
- iii. **Consultation:** DCC will consult on the number of Mesh variant Communications Hubs per pallet for the Central Region and the South Region along with other changes to the CH Handover Support Materials¹ in early March 2016. DCC intends that this consultation will coincide with consultations on changes to the CH Installation and Maintenance Support Materials and the CH Supporting Information.
- iv. **Forecasts and Orders:** the current Forecasting requirements for the minimum Order quantity of 896 Communications Hubs remains unchanged. All approved Orders from February 2016 will be fulfilled in accordance with the CH Handover Support Materials.

3. Background

The CH Handover Support Materials² sets out at Annex B 'Communications Hub Pallet and Carton Quantities' that consignments will be delivered in accordance with packaging quantities. The current text states that there are to be 896 Communications Hub boxes per pallet for the North Region, Central Region and South Region. This quantity is based on the fact that the Communications Hubs are of broadly the same size for all three Regions. The Mesh variant Communications Hub for Central Region and South Region is slightly larger due to external aerial connectors and as a result of the addition of a tamper-proof cover to protect these connectors. This does mean however that fewer

¹ DCC's CH Handover Support Materials consultation will also take account of Special Installation Mesh Communications Hubs, two types of aerial and changes to the ASN.

² See the SECAS website for the latest designated version of the SEC (4.8) <https://www.smartenergycodecompany.co.uk/sec/sec-and-guidance-documents>. The CH Handover Support Materials can be found at Appendix H <https://www.smartenergycodecompany.co.uk/docs/default-source/sec-documents/smart-energy-code-4.8/sec-4-8-appendix-h---ch-handover-support-materials.pdf?sfvrsn=3>.

Communications Hubs can be fitted onto a pallet. The size of the Communications Hubs is set out below at table 1.

The changes to the design were made for the following reasons:

- i. To address concerns over tampering with the connectors
- ii. To ensure the antennae ports lie flat, rather than protruding horizontally (as in the previous design)
- iii. To give the connectors protection against the effect of being knocked so that they have greater longevity and retain their intended performance throughout the installation lifetime

4. Communications Hub size

The size of the Mesh Communications Hub has changed due to improvements in its design. The inclusion of a tamper protector for the Mesh Communications Hubs' aerial connectors has necessitated an increase in the maximum depth of the design (and a change to the packaging requirements).

The key changes are:

- i. the positioning, size and orientation of the external aerial ports have been changed to improve the Communications Hub's performance
- ii. a tamper-resistant cover has been added to protect these connectors

The implications of the localised antenna connector and the antenna connector cover are set out in table 1 below, with the size of the Cellular Communications Hub provided alongside for comparison.

Table 1: Cellular and Mesh Communications Hubs variants Central Region and South Region

	Height (mm)	Width (mm)	Depth (mm)
Cellular (SKU1)	78	130	64
Mesh (SKU2)	85	130	Face: 65 Localised antenna connector: 12 Antenna connector cover: 6.5 Total: 83.5

DCC provides data sheets for both variants of Communications Hub for the Central Region and South Region Mesh at www.smartdcc.co.uk/implementation/design-and-assurance/communications-hubs.³

³ Whilst not directly related to this Notice, DCC informs Parties that it has also published a range of other Communications Hub information at the same link, including other Communications Hub datasheets, the Communications Hub product range and the aerial range.

5. Packaging information – revised text

Below DCC sets out how its proposal to the Department for Energy and Climate Change for inclusion at Annex B of the CH Handover Support Materials would appear in the event of proceeding with 640 Communications Hubs per pallet for the Central Region and South Region. DCC notes that it is the column 'Central Region and South Region – Mesh (SKU2)' which is new.

Table 2: Communications Hub delivery packaging

Packaging Information	North Region	Central Region and South Region	Central Region and South Region
		Mesh (SKU2)	Cellular (SKU1)
DCC Pallet size	Standard 4 Way L:1.2m, w:1m, H: 1m	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	10	14
Cartons per layer	8	16	16
Maximum layers per pallet	4	4	4
Cartons per full pallet	32	64	64
Boxes per full pallet	896 (28 boxes x 32 cartons)	640 (10 boxes x 64 cartons)	896 (14 boxes x 64 cartons)
Maximum pallet height (incl. Pallet base)	1m	1m	1m
Maximum volume (m ³) per pallet	1.2 m ³	1.2 m ³	1.2 m ³
Maximum Pallets per trailer	52	40	40
Maximum packaged Communications Hubs per trailer	46,592	25,600	35,840

6. The Mesh Communications Hub – packaging

As set out above, the design of the Mesh Communications Hub hardware has been improved. The design improvement leads to a proposed change in pallet configuration.

We have been informed of this by the Communications Hub manufacturer, Toshiba, which suggests that it implements the 640 per pallet option, as it will give DCC greater efficiency as it gets the optimal number of Communications Hubs on a pallet, with a consistent pallet size.

As set out in the table above, the proposed change for Parties will be that instead of the Mesh Hubs being 14 per carton and 896 per pallet, it will now be 10 per carton and 640 per pallet.

To assist Parties in their understanding of this new option, the data sheets at www.smartdcc.co.uk/implementation/design-and-assurance/communications-hubs/ contain packaging information diagrams. These show the different approaches to the packaging for Mesh Communications Hubs for the Central Region and South Region and the packaging for Cellular Communications Hubs for the Central Region and South Region.

7. Forecasting and Ordering

The current Forecasting requirements for the minimum Order quantity of 896 Communications Hubs remains unchanged. This quantity will remain the same until any change is made to the CH Handover Support Materials. In line with previous communications, forecasting for Central Region and South Region Communications Hubs can be placed via the enduring Order Management System (OMS) for the Central Region and South Region or the interim DCC Order Management System⁴.

All approved Orders from February 2016 will be fulfilled in accordance with the CH Handover Support Materials.

DCC notes that it intends to consult on the revision to the minimum Order quantity from 896 to 640 Communications Hubs. The outcome of such a consultation would also be reflected in DCC's Communications Hub Orders Policy. The earliest date that DCC anticipates the revision of the minimum Order quantity to change from 896 to 640 Communications Hubs would be at the re-designation of the CH Handover Support Materials, which is anticipated to be immediately before Release 1.2 Live (20 July 2016 according to the Joint Industry Plan). DCC stresses that all Orders placed before July 2016 should therefore use the current (896) minimum order. Orders placed after July 2016 should use the adjusted minimum quantity (640).

8. Mixed variant pallet layers

The current designated version of the CH Handover Support Materials allows mixed variant Communications Hubs within a pallet layer (see Section 3.14). DCC informs Parties that mixed variant Communications Hubs within a pallet layer will remain an option, despite different box sizes. This is because the

⁴ See DCC OMS Notice of 08 January 2016 for more details of the enduring and interim OMS: https://www.smartdcc.co.uk/media/348123/dcc_notice_-_oms_update_-_final.pdf

cartons containing 10 or 14 Communications Hubs boxes are of a similar size, and have the same carton stacking configuration on a pallet.

For example, the change to the calculation of the number of Communications Hubs within a full pallet, assuming four cartons (6.25%) are Mesh, is as follows:

Previous calculation:

60 cartons x 14 cellular CH = 840 CH
4 cartons x 14 mesh CH = 56 CH
Total = 896 CH

Revised calculation:

60 cartons x 14 cellular CH = 840 CH
4 cartons x 10 Mesh CH = 40 CH
Total = 880 CH

9. Cost

DCC notes that the mixed variant pallet orders will continue to be fulfilled in accordance with the CH Handover Support Materials, and there will be no additional cost to Parties.

10. Contact

If you would like to discuss this Notice, please contact your Industry Partnership Manager.

If you have questions about our approach to DCC Notices, please contact our Regulation Manager at richard.sullivan@smartdcc.co.uk.