Wenvoe – 106.00
Type: Main Station

Channel Usage:

Channels Investigated:
21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 43, 46, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62

Optimal Channel for Interleaved Service: 51

Maximum ERP: 10 kW

Maximum Antenna Height: 258m

Permitted Template: Protect populated pixels in the DPSA

Figure 1: Wenvoe template ch51, 10kW ERP at 258m
Coverage:

DTT 6 Core Gross: 616,227
Within DPSA: 146,374 (Wales Only)

Local Gross: 526,520
Local within DPSA: 176,490

Figure 2: Wenvoe coverage ch51, 10kW ERP at 258m a.g.l. QPSK 2/3
**Comments**

Coverage restrictions are detailed in table 1 and the coverage achieved by an antenna matching the template is shown in figure 2. It should be noted that coverage achieved by a real antenna system will probably be lower.

Reducing the antenna height reduces the restrictions required, figure 3.

Templates for the other channels investigated are shown in figure 4

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**Figure 3** : Wenvoe ch51, 10kW templates at reduced height.

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Ch51, 10kW ERP at 129m a.g.l

![Coverage at 129m](image1)

- Local Gross: 467,200
- Local within DPSA: 162,748

Ch51, 10kW ERP at 65m a.g.l

![Coverage at 65m](image2)

- Local Gross: 422,716
- Local within DPSA: 151,694
Other Channel Possibilities

Ch21  

Ch22  

Ch23  

Ch24  

Ch25  

Ch26  

Figure 4 : Wenvoe alternative channel templates at 10 kW ERP 258m a.g.l
Other Channel Possibilities

Ch27

Ch28

Ch29

Ch30

Ch43

Ch46

Figure 4: Wenvoe alternative channel templates at 10 kW ERP 258m a.g.l
Other Channel Possibilities

Figure 4: Wenvoe alternative channel templates at 10 kW ERP 258m a.g.l
Other Channel Possibilities

Ch56

Ch57

Ch58

Ch59

Ch60

Ch61

Figure 4 : Wenvoe alternative channel templates at 10 kW ERP 258m a.g.l
Other Channel Possibilities

Figure 4: Wenvoe alternative channel templates at 10 kW ERP 258m a.g.l
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<th>Name</th>
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<th>Wanted FS dB</th>
<th>Wanted dBμV/m</th>
<th>Wanted % Location</th>
<th>Modified % Location</th>
<th>ERP Reduction dB</th>
<th>Number of points</th>
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Table 1: Restrictions for ch51, 10kW omnidirectional at 258m
Whitehawk Hill – 108.05
Type: Relay

Channel Usage:

Channels Investigated:
43, 44, 45, 46, 47, 49, 50, 52, 54, 55, 58, 59, 61, 62

Optimal Channel for Interleaved Service: Ch54

Maximum ERP: 1 kW

Maximum Antenna Height: 51 m

Permitted Template: Protect populated pixels in the DPSA

Figure 1: Whitehawk Hill template Ch54 with French Restrictions, 1kW ERP at 51 m
Coverage:

DTT 3 Core Gross: 136,073
Within DPSA: 134,312

Local Gross: 221,493
Local within DPSA 136,159

Figure 2: Whitehawk Hill coverage Ch54 with French Restrictions, 1kW ERP at 51m a.g.l. QPSK 2/3
Comments

Coverage restrictions are detailed in table 1 and the coverage achieved by an antenna matching the template with French restrictions is shown in figure 2. It should be noted that coverage achieved by a real antenna system will probably be lower.

The original template without consideration of continental restrictions is shown as well as the template with continental restrictions, used for predictions in this document in figure 3. Restrictions to the Continent and Ireland are based on 45 dBμV/m at the coast. Subject to negotiation with France and Ireland restrictions may be increased or decreased.

Templates for the other channels investigated are shown in figure 4

![Figure 3](image)

**Figure 3**: Whitehawk Hill Ch54 templates with and without continental restrictions.
Other Channel Possibilities

Figure 4: Whitehawk Hill alternative channel templates at 1 kW ERP 51m a.g.l. (UK only restrictions, French restriction may need to be applied).
Figure 4: Whitehawk Hill alternative channel templates at 1 kW ERP 51m a.g.l. (UK only restrictions, French restriction may need to be applied).
Other Channel Possibilities

Ch62

Figure 4: Whitehawk Hill alternative channel templates at 1 kW ERP 51m a.g.l.
(UK only restrictions, French restriction may need to be applied).
Table 1: Restrictions for Ch54, 1kW omnidirectional at 51m (UK only restrictions)