

## On possible flexibility for Interim Relief allocations amongst super-areas for the 2010/2011 season

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An indication of the Interim Relief (IR) takes that could be expected to result in the 2010/2011 season under the assumptions of a 23 week season and 1500 permit holders are provided below. Information on possible flexibility for the IR allocations amongst super-areas for the 2010/2011 season is also provided.

### Estimate of Interim Relief take for the 2010/2011 season

Assuming that the average catch rate of phases II and III (seasons 2007/08 and 2008/09) will apply to the 2010/2011 season, i.e. phase V, a minimum total Interim Relief catch estimate of **285 MT** for the 2010/2011 season results.

i.e.:

$$C_{2010} = T_{2010}P_{2010}\bar{R}$$

where

$C_{2010}$  is the Interim relief catch estimate to be taken for the 2010/2011 season;

$T_{2010}$  is the season length in weeks for the 2010/2011 season (23 weeks);

$P_{2010}$  is the estimated (minimum) number of permits allocated for the 2010/2011 season (we assume 1500); and

$\bar{R}$  is the average catch per permit holder per week over the 2007/08 and 2008/09 seasons (i.e. average of the weekly catch rates for the 2007/08 and the 2008/09 seasons).

Thus for the 2010/2011 season:

$$C_{2010} = (23) \cdot (1500) \cdot (0.008259) = 285 \text{ MT}$$

**Note: The estimate of 285 MT is 85 MT above the intended 200 MT.**

### **Possible flexibility for Interim Relief allocations amongst super-areas for the 2010/2011 season**

Table 1 below reports the OMP TAC allocations per user group for the 2010/2011 season. As the current OMP does not make allowance for Interim Relief allocations, where these may be awarded, they need to be subtracted from the tonnages below. In doing so, the total 2286.22 MT is not to be exceeded, and importantly the total takes for each super-area are each not to be exceeded as these have been based on the sustainability levels for each of those super-areas separately.

Table 1: The OMP TAC allocations (MT) for the 2010/2011 season.

	<b>Offshore commercial</b>	<b>Near-shore commercial</b>	<b>Recreational</b>	<b>Total</b>
Area 1+2	0	24.17	7	<b>31.17</b>
Area 3+4	53.6	72.48	32	<b>158.1</b>
Area 5+6	0	32.2	32	<b>64.2</b>
Area 7	396.55	0	10	<b>406.55</b>
Area 8+	1128.07	322.15	176	<b>1626.22</b>
Total	1578.22	451	257	<b>2286.22</b>

### Interim Relief for 2010/2011

Given the recent decision to subtract 50 MT from the offshore commercial sector and 150 MT from the recreational sector (to create a 200 MT quantum available for Interim relief), then the following is assumed to apply:

- the 150 MT recreational savings will be pro-rata across the five super-areas (see Table 2), being effected by the same proportional effort reduction in each;
- the 50 MT offshore commercial savings can come from Area 3+4, Area 7 and Area 8+ only. This can be done in a number of ways, the three most extreme are.

*Option 1:* The 50 MT savings from offshore commercial comes from **Area 3+4** only.

*Option 2:* The 50 MT savings from offshore commercial comes from **Area 7** only.

*Option 3:* The 50 MT savings from offshore commercial comes from **Area 8+** only.

[Clearly a number of further options between these three exist].

Tables 2, 3 and 4 report the resultant quota allocations for options 1, 2 and 3 respectively.

### Number of IR permit holders

The 2010/2011 IR has 23 weeks. The average catch (MT) per permit holder per week over the 2007/08 and 2008/09 seasons is known (see Fisheries/2010/AUG/SWG-WCRL18) – a value of 0.008259 MT. Using the equation below, it is a simple mathematical calculation to work out the corresponding number of permit holders for each super-area that correspond to the IR quanta to be allocated:

$$p^{area} = \frac{C_{2010}^{area}}{T_{2010}\bar{R}}$$

where

$C_{2010}^{area}$  is the Interim relief catch to be taken for the 2010/2011 season in a given super-area;

$T_{2010}$  is the season length in weeks for the 2010/2011 season (23 weeks);

$p^{area}$  is the estimated number of permits allocated for the 2010/2011 season in a given super-area; and.

$\bar{R}$  is the average catch per permit holder per week over the 2007/08 and 2008/09 seasons (i.e. average of the weekly catch rates for the 2007/08 and the 2008/09 seasons).

**Summary comments**

Whichever of the three allocation options (or intermediate variants) is selected, it is clear that a total number of no more than 1054 permit holders can be accommodated, as that would correspond to an anticipated IR removal of 200 MT for the 2010/2011 season. Table 5 and Figure 1 summarises the admissible flexibility in regards to their distribution amongst the super-areas, and compares this to the estimated 2009/2010 distribution (where distribution percentages are assumed to be the average of the 2007/08 and 2008/09 seasons – see MCM/2009/Aug/SWG/WCRL/16). It is clear from this that the number of IR permits issued to Area 5+6 in particular needs to be substantially reduced compared to the 2009/2010 season.

Table 2: Interim relief takes (MT) created if assuming all savings from offshore commercial comes from Area 3+4 (option 1).

	<b>New Offshore commercial</b>	<b>Near-shore commercial</b>	<b>New Recreational</b>	<b>Savings from recreational</b>	<b>Savings from offshore commercial</b>	<b>Interim Relief</b>	<b>Total</b>
Area 1+2	0	24.17	2.91	<b>4.09</b>	<b>0</b>	<b>4.09</b>	<b>31.17</b>
Area 3+4	<b>3.6</b>	72.48	13.32	<b>18.68</b>	<b>50</b>	<b>68.68</b>	<b>158.1</b>
Area 5+6	0	32.2	13.32	<b>18.68</b>	<b>0</b>	<b>18.68</b>	<b>64.2</b>
Area 7	396.55	0	4.16	<b>5.84</b>	<b>0</b>	<b>5.84</b>	<b>406.55</b>
Area 8+	1128.07	322.15	73.28	<b>102.72</b>	<b>0</b>	<b>102.73</b>	<b>1626.22</b>
Total	1528.22	451	107	<b>150</b>	<b>50</b>	<b>200</b>	<b>2286.22</b>

Table 3: Interim relief takes (MT) created if assuming all savings from offshore commercial comes from Area 7 (option 2).

	<b>New Offshore commercial</b>	<b>Near-shore commercial</b>	<b>New Recreational</b>	<b>Savings from recreational</b>	<b>Savings from offshore commercial</b>	<b>Interim Relief</b>	<b>Total</b>
Area 1+2	0	24.17	2.91	<b>4.09</b>	<b>0</b>	<b>4.09</b>	<b>31.17</b>
Area 3+4	53.6	72.48	13.32	<b>18.68</b>	<b>0</b>	<b>18.68</b>	<b>158.1</b>
Area 5+6	0	32.2	13.32	<b>18.68</b>	<b>0</b>	<b>18.68</b>	<b>64.2</b>
Area 7	<b>346.55</b>	0	4.16	<b>5.84</b>	<b>50</b>	<b>55.84</b>	<b>406.55</b>
Area 8+	1128.07	322.15	73.28	<b>102.72</b>	<b>0</b>	<b>102.73</b>	<b>1626.22</b>
Total	1528.22	451	107	<b>150</b>	<b>50</b>	<b>200</b>	<b>2286.22</b>

Table 4: Interim relief takes (MT) created if assuming all savings from offshore commercial comes from Area 8+ (option 3).

	<b>New Offshore commercial</b>	<b>Near-shore commercial</b>	<b>New Recreational</b>	<b>Savings from recreational</b>	<b>Savings from offshore commercial</b>	<b>Interim Relief</b>	<b>Total</b>
Area 1+2	0	24.17	2.91	<b>4.09</b>	<b>0</b>	<b>4.09</b>	<b>31.17</b>
Area 3+4	53.6	72.48	13.32	<b>18.68</b>	<b>0</b>	<b>18.68</b>	<b>158.1</b>
Area 5+6	0	32.2	13.32	<b>18.68</b>	<b>0</b>	<b>18.68</b>	<b>64.2</b>
Area 7	<b>396.55</b>	0	4.16	<b>5.84</b>	<b>0</b>	<b>5.84</b>	<b>406.55</b>
Area 8+	1078.07	322.15	73.28	<b>102.72</b>	<b>50</b>	<b>152.73</b>	<b>1626.22</b>
Total	1528.22	451	107	<b>150</b>	<b>50</b>	<b>200</b>	<b>2286.22</b>

Table 5: The number of IR permit holders allowed for each super-area for the 2010/2011 season that correspond to the IR allocations for the three options, and the corresponding estimates for the 2009/2010 season.

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>	<b>2009/2010</b>
Area 1+2	<b>22</b>	<b>22</b>	<b>22</b>	<b>50</b>
Area 3+4	<b>362</b>	<b>98</b>	<b>98</b>	<b>314</b>
Area 5+6	<b>98</b>	<b>98</b>	<b>98</b>	<b>374</b>
Area 7	<b>31</b>	<b>295</b>	<b>31</b>	<b>0</b>
Area 8+	<b>541</b>	<b>541</b>	<b>804</b>	<b>773</b>
<b>Total</b>	<b>1054</b>	<b>1054</b>	<b>1053</b>	<b>1511</b>

Figure 1: The number of IR permit holders allowed for each super-area for the 2010/2011 season that correspond to the IR allocations for the three options, and those estimated for the 2009/2010 season.

