First TUFMAN Training Workshop (TTW-1) 3-7 December 2012 SPC, Noumea, New Caledonia

Session 10

TUFMAN VDS Management Module

What it does and doesn't do

The TUFMAN VDS Management Module is a basic VDS system designed to help you manage purse seine vessel days. It is not designed to replace the online PNA system and should be used in conjunction with that system, the main advantage of the TUFMAN VDS module is that it is stored locally on your network and is linked to the rest of your TUFMAN data.

What it does

- Allows you to assign vessel days to companies, via agreements.
- Allows you to view the vessel days assigned to your country and how they have been distributed among companies
- Allows you to view the days used by agreement, company, and /or vessel
- Provides a number of flexible reports
- Uses processed VMS data, provided by SPC, for calculating days used

What it doesn't do

- Doesn't allow you to enter non-fishing days
- Doesn't use live VMS data
- Doesn't connect to the PNA system
- Doesn't manage days for gears other than purse seine

Allocations

'Allocations' is the term we use to describe the number of vessel days that can be fished in your countries EEZ for a year, or the total number of days allocated to your EEZ for the year. The allocations for the VDS module are accessed by going to 'VDS Management->Allocations' from the TUFMAN main menu. You can view different years, or add new years, by changing the 'Year' box on the top of the allocations screen. To assign the allocated number of days for the year, simply enter the number of days into the 'Total number of days allocated to EEZ' box.

VDS			VDS Management	
Allocations	Year	2012		
Usage Return to Main Menu	VDS allocation	Total number of days allocated 1000 to EEZ	Comments	×

Distributions

'Distributions' is the term we use to describe how the number of days have been assigned, or distributed, to the companies and agreements fishing in your EEZ. So in theory the total number of days distributed should equal the number of days allocated to your EEZ, unless you go over or under your allocation.

The distributions are viewed and edited on the same screen as the allocations. To enter a new distribution you add a new line under 'VDS distributions'. Distributions are done by agreement, so you first select the company, then the agreement, and enter the number of days that have been allocated to the company for the year. Note in the example below that there are 2 distributions totalling 250 days, so quite a lot below the 1000 days available for the year.

In some cases a company may have 2 agreements active during the year, for example if Agreement1 expired 30-June-2012, and Agreement2 ran from 1-July-2012 to 30-Jun-2013. In this case you would have to enter 2 distributions for the company, one for Agreement1 and one for Agreement2, and you would have to apportion the correct number of days to each agreement 9but this should be easy since management will have done this already).

VDS		VDS Management
Allocations	Year	2012
Usage Return to Main	VDS allocation	Total number of days allocated 1000 Comments
	VDS distribution	Company Agreement EEZ days Comments
		JP Company 25 FMO001 100
		CN Company 6 CHM005 💌 150
		Total 250

Usage

The VDS Management module has an interactive interface for usage, which allows you to view distributions and usage in a number of ways and also to produce reports and graphs. The screenshot below shows the options available for this, with a combination of filters and option selections:

	VDS Usage														
Forecasting method	Year	Company		•	Year 🔽	Company 🔽	Vessel	Produce	Apply filter						
None	2012 💌	Agreement	▼ Licensed	All 👻	Month 🥅	Agreement 🔽	Cumulative 🔽	Report	Reset Filter						

- Forecasting method For the year in progress you can have the system forecast usage to the end of the year. There are 2 forecasting methods:
 - Linear for the current year
 - Historical Monthly trend
 - \circ $\;$ Note that the forecasts generally work better later in the year.
- Year filters the data shown by year. Can be left blank to show all years.
- **Company** filters the data for a specific company, or leave blank for all companies.
- Agreement filters the data for a specific agreement, or leave blank for all agreements.
- Licensed filters the data for data linked to a license, not linked to a license, or all.
- Year checkbox If checked then the data shown will include a 'year' column
- Month checkbox If checked then the data shown will include a 'month' column
- Company checkbox If checked then the data will include a 'company' column

- Agreement checkbox If checked then the data shown will include an 'agreement' column
- Vessel checkbox If checked then the data will be shown by vessel
- **Cumulative** For views by month, if checked then the monthly figures will keep adding to the previous month, i.e. it's a running total for the year. If not checked then it displays the allocation/usage only for that month
- Apply Filter Apply the selections above and refresh the display
- **Produce Report** For monthly views only, will create an Excel file with a table and charts of the displayed data.

You can select any number of the options above in any combination you like, so this results in many different ways of viewing the data. There is an 'Export to Excel' button to export the currently displayed data to Excel. Some examples are shown below. Most reports show the amount for distribution and usage, with a balance column showing the difference between what was allocated and what was used. The exception is for reports by vessel which only show usage, since days are distributed by agreement and not to individual vessels. For all views there are totals at the bottom of the screen. Where usage exceeds distribution, the usage value is highlighted in red.

Usage by year:

	VDS Usage														
F N	orecasti one	ng method Year 2012 V	Company	Licen:	sed All 🗸	Year 🔽 Month 🗖	Compan Agreemen	ny 🔽 Ves nt 🗖 Cumula	ssel	Apply filter Reset Filter					
	VDS us	age summary by year													
	Year	Company		Agreement	Vessel	VDS di	stribution	EEZ days	Balance						
	2012	CN Company 3		ALL	ALL		50.0	46.0	4.0						
	2012	FM Company 16		ALL	ALL		400.0	329.0	71.0						
	2012	FM Company 29		ALL	ALL		70.0	41.0	29.0						
	2012	FM Company 33		ALL	ALL		210.0	131.0	79.0						
	2012	KR Company 53		ALL	ALL		6,000.0	4,879.0	1,121.0						
	2012	No license		ALL	ALL		0.0	925.0	-925.0						
	2012	PG Company 54		ALL	ALL		100.0	103.0	-3.0						
	2012	PG Company 74		ALL	ALL		260.0	151.0	109.0						
	2012	TW Company 67		ALL	ALL		1,380.0	1,003.0	377.0						
	2012	TW Company 70		ALL	ALL		4,530.0	4,148.0	382.0						
	Export	to Excel			Т	otals 1	3,000.0	11,756.0	1,244.0						

Usage by month (cumulative):

Forecasting method Year Company None 2012 Agreement Licensed					d	All	•	M	Year 🖟 Ionth 🖟	⊽ (⊽ Ag	Compai reeme	ny 🔽 nt 🗆	Cum	Vessel ulative	ר ק	Prod Rep	luce ort			R	o ply filter eset Filter							
	VDS u	sage sumn	nary b	y mon	th																							
			Ja	n	Fe	eb	Ma	ar	A	pr	Ma	ay	Ju	IN	Ju	ul 👘	Αι	ıg	Se	ep 🛛	00	ct	No	v	De	c	To	tal
_	Year	Agreement	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used
▶	2012	ALL	4	34	8	46	13	46	17	46	21	46	25	46	29	46	33	46	38	46	42	46	46	46	50	46	50	46
	2012	ALL	33	31	67	53	100	64	133	84	167	97	200	141	233	196	267	236	300	283	333	329	367	329	400	329	400	329
	2012	ALL	6	20	12	41	18	41	23	41	29	41	35	41	41	41	47	41	53	41	58	41	64	41	70	41	70	41
	2012	ALL	18	20	35	48	53	64	70	72	88	72	105	75	123	94	140	94	158	125	175	131	193	131	210	131	210	131
	2012	ALL	500	542	1,000	974	1,500	1,425	2,000	1,865	2,500	2,347	3,000	2,945	3,500	3,428	4,000	3,931	4,500	4,390	5,000	4,879	5,500	4,879	6,000	4,879	6,000	4,879
	2012	ALL	0	122	0	245	0	364	0	481	0	588	0	749	0	806	0	844	0	877	0	925	0	925	0	925	0	925
	2012	ALL	8	22	17	40	25	67	33	73	42	103	50	103	58	103	67	103	75	103	83	103	92	103	100	103	100	103
	2012	ALL	22	11	43	36	65	53	87	80	108	100	130	122	152	127	173	151	195	151	217	151	238	151	260	151	260	151
	2012	ALL	115	97	230	189	345	300	460	363	575	437	690	522	805	626	920	764	1,035	879	1,150	1,003	1,265	1,003	1,380	1,003	1,380	1,003
	2012	ALL	378	691	755	1,340	1,133	1,968	1,510	2,577	1,888	3,197	2,265	3,782	2,643	4,096	3,020	4,147	3,398	4,148	3,775	4,148	4,153	4,148	4,530	4,148	4,530	4,148
		Totals	1,083	1,590	2,167	3,012	3,250	4,392	4,333	5,682	5,417	7,028	6,500	8,526	7,583	9,563	8,667	10,357	9,750	11,043	10,833	11,756	11,917	11,756	13,000	11,756	13,000	11,756

Usage by vessel (year):

Fe Ne	orecasti	ng method Year Company 2012 Y Agreement	▼ Licen	sed All V Mo	fear 🔽 Comp onth 🗌 Agreem	any 🔽 Ves ent 🗖 Cumula	ssel 🔽 Productive 🔽
	Year	Company	Aareement	Vessel	VDS distribution	EEZ davs	Balance
►	2012	CN Company 3	ALL	CN VESSEL 32775	0.0	46.0	0.0
	2012	FM Company 16	ALL	FM VESSEL 22772	0.0	179.0	0.0
	2012	FM Company 16	ALL	FM VESSEL 22780	0.0	150.0	0.0
	2012	FM Company 29	ALL	SB VESSEL 33176	0.0	41.0	0.0
	2012	FM Company 33	ALL	FM VESSEL 32590	0.0	131.0	0.0
	2012	KR Company 53	ALL	KR VESSEL 16949	0.0	236.0	0.0
	2012	KR Company 53	ALL	KR VESSEL 16956	0.0	194.0	0.0
					1		

Usage by vessel (month):

	Forecas None	ting metho	d Year 2012 v	Compan Agreemen	nt		 Licer 	Licensed All] Year 🔽 Company] Month 🔽 Agreemen			Vessel Imulative		roduce Report	
	VDS u	usage sumr	nary by month														
	Year	Agreement	Vessel		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Γ	2012	ALL	CN VESSEL 32775		34.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.0
	2012	ALL	FM VESSEL 22772		0.0	13.0	11.0	20.0	13.0	16.0	24.0	31.0	24.0	27.0	0.0	0.0	179.0
	2012	ALL	FM VESSEL 22780		31.0	9.0	0.0	0.0	0.0	28.0	31.0	9.0	23.0	19.0	0.0	0.0	150.0
	2012	ALL	SB VESSEL 33176		20.0	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0
	2012	ALL	FM VESSEL 32590		20.0	28.0	16.0	8.0	0.0	3.0	19.0	0.0	31.0	6.0	0.0	0.0	131.0
	2012	ALL	KR VESSEL 16949		21.0	6.0	19.0	27.0	24.0	28.0	28.0	28.0	26.0	29.0	0.0	0.0	236.0
	2012	ALL	KR VESSEL 16956		20.0	8.0	0.0	4.0	27.0	29.0	29.0	30.0	28.0	19.0	0.0	0.0	194.0
	2012	ALL	KR VESSEL 17491		28.0	11.0	0.0	30.0	28.0	26.0	22.0	30.0	28.0	26.0	0.0	0.0	229.0
	2012	ALL	KR VESSEL 17715		0.0	0.0	23.0	20.0	4.0	28.0	26.0	2.0	0.0	5.0	0.0	0.0	108.0
	2012	ALL	KR VESSEL 20099		29.0	24.0	7.0	13.0	18.0	16.0	11.0	29.0	29.0	0.0	0.0	0.0	176.0

Report

The report is by month, so is only available when the month box is checked. The report is like the main view in that it adapts according to the options that have been selected. Graphs will be shown unless the data is selected by vessel, in which case only a table will be produced.



Here is an example of a report generated for year, month, company, and agreement:

A closer look at one of the charts shows the days distributed and used by month (cumulative) for a particular company/agreement:



There is a chart produced for each company/agreement in main results, and the 'used' plot will include forecasted usage if that option has been selected.



Here is the same chart but with the 'cumulative' option unchecked:

Forecasting

The forecasting function is useful for estimating usage to the end of the year. At present there is one main method for calculating this 'Current year – Linear', which basically calculates a linear trend of usage for the year to date and projects that to the end of the year. This method is most effective later in the year.

The forecast data are shown in the main display (forecast months shown in green), and also on the charts produced in reporting:

Forecasting method Year Company Current Year - Linear 2012 Agreement Licensed All										•	Yea Month		Comp	oany (nent (⊽ - Cu	Vess mulati	ive 🗖	Pr	oduce eport						Ap Re	o ply filter eset Filter		
	VDS forecasting summary by month												_		_		_		_		_	_			_		_	
			Ja	in	Fe	eb	Ma	ar	A	pr	Ma	зу	Ju	IN	Ju	1	Au	ıg	Se	2p	00	t	No	v	De	C	Tot	tal
	Year	Company	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used	dist	used
►	2012	CN Company 3	4	34	4	12	4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0	4	0	50	46
	2012	FM Company 16	33	31	33	22	33	11	33	20	33	13	33	44	33	55	33	40	33	47	33	46	33	24	33	25	400	378
	2012	FM Company 29	6	20	6	21	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	70	41
	2012	FM Company 33	18	20	18	28	18	16	18	8	18	0	18	3	18	19	18	0	18	31	18	6	18	6	18	5	210	143
	2012	KR Company 53	500	542	500	432	500	451	500	440	500	482	500	598	500	483	500	503	500	459	500	489	500	45	500	40	6,000	4,964
	2012	No license	0	122	0	123	0	119	0	117	0	107	0	161	0	57	0	38	0	33	0	48	0	0	0	0	0	925
	2012	PG Company 54	8	22	8	18	8	27	8	6	8	30	8	0	8	0	8	0	8	0	8	0	8	0	8	0	100	103
	2012	PG Company 74	22	11	22	25	22	17	22	27	22	20	22	22	22	5	22	24	22	0	22	0	22	4	22	3	260	158
	2012	TW Company 67	115	97	115	92	115	111	115	63	115	74	115	85	115	104	115	138	115	115	115	124	115	33	115	33	1,380	1,069
	2012	TW Company 70	378	691	378	649	378	628	378	609	378	620	378	585	378	314	378	51	378	1	378	0	378	0	378	0	4,530	4,148

