JEPPESEN
Making Every Mission Possible

SAS CMS Project
Per Diem Calculations

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Summary

Carmen CMS will calculate the per diem amounts for all crew and pass the information on to the salary system. This document outlines how the calculations are done and the available reports. It also instructs the end user in how to manually create the reports.

Change History

| Version	Author	Date	Description
1.0	Leo Wentzel	2006-04-06	Initial version based on the Tracking time box 2 delivery (and sub-sequent bug corrections).

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1 Per Diem Reports

This document describes the different per diem reports of the Carmen CMS. There are currently two reports included, which are described below.

1.1 Per Diem Statement report

The per diem statement report is created for a roster month. All trips that end within the same month are included in the roster month, as seen in the picture to the right. Included in the report are all trips entitled to either course or flight per diem. The report includes basic trip and flight data together with the per diem amounts for each stop. The tax deduct amount for each trip is also included. It is possible to create the report for a selection of trips instead of a selection of rosters.
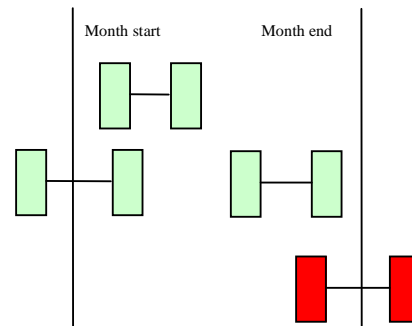
The report is executed on the current crew selection three tables containing per diem amount, exchange rate and tax deduct amount to calculate the correct per diem values. The tables are described in more detail later.

Below is an example of the per diem statement report.

Per Diem Statement   **SAS**

To: leo	Cat: FC	Employment no: 12062	Name: PÆR SIGURD ALNERUD	Base: STO	Issued by: leo	Issued date: 05APR2006	Roster month: Feb 2006

Time (UTC)	Activity	Meal Red	Route	No Per Diem	Stop Time	Amount	Currency	Rate of Exchange	Per Diem per stop	Per Diem without Taxation	Per Diem for Taxation
03FEB2006 09:05	SK 8		ARN 10:05 - 11:20 LLA		0:25						
	SK 9		LLA 11:45 - 13:05 ARN		1:50						
	SK 1555		ARN 14:55 - 16:55 AMS	0.5	1:50	280.00 SEK		1.00000	280.00		
03FEB2006 20:05	SK 1556		AMS 17:35 - 19:35 ARN		0:40						
Total time: 11:00		0.00		0.5					280.00	0.00	280.00
06FEB2006 05:05	SK 573		ARN 6:05 - 8:40 CDG	0.25	1:00	28.25 EUR		9.43000	266.40		
	SK 574		CDG 9:40 - 12:15 ARN	0.25	2:00	140.00 SEK		1.00000	140.00		
	SK 109		ARN 14:15 - 15:20 MMX	0.5	12:50	280.00 SEK		1.00000	280.00		
	SK 130		MMX 5:10 - 6:25 ARN	0.25	1:40	140.00 SEK		1.00000	140.00		
	SK 2615		ARN 8:05 - 10:45 GVA	0.25	0:55	42.00 CHF		6.05800	254.44		
07FEB2006 14:45	SK 2616		GVA 11:40 - 14:15 ARN								
Total time: 33:40		0.00		1.5					1080.84	200.00	880.84
13FEB2006 04:15	SK 101		ARN 5:15 - 6:20 MMX		0:25						
	SK 102		MMX 6:45 - 7:50 ARN	0.5	2:40	280.00 SEK		1.00000	280.00		
	SK 177		ARN 10:30 - 11:30 AGH		0:30						
13FEB2006 13:30	SK 178		AGH 12:00 - 13:00 ARN								
Total time: 9:15		0.00		0.5					280.00	0.00	280.00
14FEB2006 04:05	SK 149		ARN 5:05 - 6:05 GOT	0.25	0:25	140.00 SEK		1.00000	140.00		
14FEB2006 08:05	SK 144		GOT 6:30 - 7:35 ARN								
Total time: 4:00		0.00		0.25					140.00	0.00	140.00
16FEB2006 05:35	SK 2547		ARN 6:35 - 9:05 MAN	0.5	0:50	41.50 GBP		13.73250	569.90		
16FEB2006 12:45	SK 2548		MAN 9:55 - 12:15 ARN								
Total time: 7:10		0.00		0.5					569.90	0.00	569.90
21FEB2006 06:35	SK 7665		ARN 7:35 - 8:25 GOT	0.5	10:40	280.00 SEK		1.00000	280.00		
	SK 7666		GOT 20:05 - 21:00 ARN	0.25	1:00	140.00 SEK		1.00000	140.00		
	SK 9027		ARN 22:00 - 23:00 GOT	0.25	7:30	140.00 SEK		1.00000	140.00		
22FEB2006 08:05	SK 144		GOT 6:30 - 7:35 ARN								
Total time: 25:30		0.00		1.0					560.00	200.00	360.00
23FEB2006 05:05	SK 589		ARN 6:05 - 8:25 BRU	0.25	1:00	32.75 USD		7.95250	260.44		
	SK 590		BRU 9:25 - 11:35 ARN	0.25	2:30	140.00 SEK		1.00000	140.00		
	SK 52		ARN 14:05 - 14:55 SDL		0:30						
	SK 51		SDL 15:25 - 16:15 ARN		0:40						
	SK 121		ARN 16:55 - 18:00 MMX	0.75	14:25	420.00 SEK		1.00000	420.00		
	SK 7647		MMX 9:25 - 14:20 HRG	0.5	1:00	65.50 USD		7.95250	520.89		
	SK 7648		HRG 15:20 - 20:15 MMX	0.75	17:15	420.00 SEK		1.00000	420.00		
25FEB2006 16:05	SK 116		MMX 14:30 - 16:35 ARN								
Total time: 59:00		0.00		2.5					1761.33	400.00	1361.33
	Total Meal Reduction:	0.00				Saldo Per Diem (To be settled on next month salary):			4672.07		
						Per Diem Without Taxation:				800.00	
						Per Diem for Taxation:					3872.07

Created 05APR2006 17:23 by leo   9(251)

1.2 Per Diem Yearly Tax Statement report

The per diem yearly tax statement report is a compilation of all the per diem statement runs for a whole year. The report is presented with the amount of per diem for every month of the period for each crew. Below is a snapshot of the report.

Yearly Tax Statment

SAS

Employment no: 85135	Name: ILLONA AALYKKE	Homebase: CPH	Cat: AH	Issued by: leo	Issued date: 06APR2006

Year, Month	Per Diem	Per Diem without Tax	Per Diem for Tax
Oct 2005	8620.77	4159.85	4460.91
Nov 2005	8620.77	4159.85	4460.91
Dec 2005	8620.77	4159.85	4460.91
Jan 2006	8620.77	4159.85	4460.91
Feb 2006	8620.77	4159.85	4460.91
Mar 2006	8620.77	4159.85	4460.91
Sum:	51724.62	24968.10	26765.46

2 Instructions

To be able to create the reports Carmen Studio has to be started.

2.1 Create Per Diem Statement Report

A per diem statement report can be generated for either trips or rosters. The report can also be created for a specific object or for all items (trips or rosters) in a window.

[1]   Open a pairing, roster or tracking plan.
[2]   Show the trips or rosters.
[3]   Choose assignment/trip object or general.
[4]   In the object or general menu choose 'Generate Report…'
[5]   Select report name 'PerDiemStatementReport.py'
[6]   Click 'Generate & View'

2.2 Create Yearly Tax Statement Report

A yearly tax statement report can be generated for a specific crew, a selection of a roster or a whole roster. The current implementation runs the report for one year back from the previous month.

[7]   Open a roster or tracking plan.
[8]   Show the rosters.
[9]   Choose assignment object or general.
[10]   In the object or general menu choose 'Generate Report…'
[11]   Select report name 'PerDiemYearlyTaxStatement.py'
[12]   Click 'Generate & View'

3 Tables

The following tables are used by the per diem statement report to calculate the correct per diem amounts for the crew.

3.1 Exchange Rate table

This table contains conversion rates between currencies. The columns include the currency to convert from and the currency to convert to, the exchange rate, the unit of the exchange rate and when the exchange rate is valid. The columns of the exchange rate table are described below.

Field	Data type	Description
cur	String	The current currency to convert from.
ref	String	The reference currency to convert to.
validfrom	Date	The date from which the exchange rate is valid.
validto	Date	The date to which the exchange rate is valid.
rate	Integer	The exchange rate as an integer including the decimal part.
unit	Integer	The unit of the exchange rate. The rate is divided with the unit to get the exchange rate used for the currency conversion.

Below is an example of a row in the exchange rate table, which is used to convert from US Dollar to Swedish Krona. To get the correct conversion rate 795250 is divided with 100000, which gives 7.95250.

Cur	ref	validfrom	validto	rate	unit
"USD"	"SEK"	01JAN2006	21JAN2006	795250	100000

3.2 Per Diem Compensation table

This table contains compensation amounts for flight and cabin crew from different home bases for different stops. The table also contains meal reduction amounts. It is also possible to have a default value if the stop country requested does not exist in the table. Below are the columns described.

Field	Data type	Description
stop_country	String	The country where the stop is. (Country code or "MEAL" for meal reduction or * for default country.)
home_country	String	The home country of the crew member.
category	String	Indicates if the crew member is flight or cabin crew ('F' or 'C').
currency	String	The currency of the compensation used at the stop.
compensation	Integer	The compensation amount for one per diem.
valid_from	Date	The start of the time period for which the per diem compensation is valid.
valid_to	Date	The end of the time period for which the per diem compensation is valid.

The example below shows how much a Swedish flight crew member will get if he/she has a stop in Great Britain between the 1st of January 2005 and 31st of December 2006.

Stop country	Home country	category	currency	amount	valid_from	valid_to
"GB"	"SE"	"F"	"GBP"	83	01JAN2005	31DEC2006

3.3 Per Diem Tax table

This table contains tax deduction amounts. Tax amounts are given for Danish, Norwegian and Swedish crew as an amount for a country or with a wildcard (*) as default amount. Start and end of the period for which the amount is valid are also included. The columns are described below.

Field	Data type	Description
stop_country	String	The country where the tax deduct rate is valid. (Country code or '*' as the default.)
home_country	String	The home country of the crew member.
Rate	Integer	The tax deduct amount per diem.
valid_from	Date	The start of the time period for which the per diem tax deduction rate is valid.
valid_to	Date	The end of the time period for which the per diem tax deduction rate is valid.

The example below shows the tax deduction rate for Danish crew for any stop country, which is not explicitly defined on another row, between the 1st of January and 31st December 2006.

Stop country	Home country	rate	valid_from	valid_to
"*"	"DK"	417	01JAN2006	31DEC2006

4 Parameters

The parameters available for the per diem reports are the names of the tables used for the reports. The parameters are the exchange rate table name, per diem compensation name and per diem tax deduct name. The parameters are found under the 'Financial' tab in the rule parameters. See the screenshot below for an example.