



UNIVERSITAT DE BARCELONA



**ANÀLISI DE L'EFICIÈNCIA DE L'EMPRESA AEROPORTUÀRIA
EN L'ACTUAL MARC DESREGULADOR**

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per a optar al títol de Doctor

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ANNEX C.

Resultats dels programaris DEA-Solver i SPSS

Indústries Aeroportuàries 2001	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	156961	50398	932	5195792	53548760	186400	217570
NARITA A A	756884	74475	915	6637260	42188370	124600	338937
APACld. MELB.	16525	11260	211	863773	20837250	187400	73440
AUCKLAND lAltd	9676	11774	282	508257	10293540	147900	49952
BRISBANE ACLtd	15186	5774	127	958876	14492100	175800	51827
WACLtd PERTH	9712	4466	112	409632	5546490	57600	27056
SYDNEY ACLtd.	50940	27257	482	1999183	28742200	317300	151889
ADMTL	41506	23869	595	314358	11786210	232400	45139
CALGARY A A	18726	5833	145	233142	8659900	138400	23104
GTA A	194700	46783	705	2160404	31082880	406300	111617
OTTAWA IA	14934	5483	148	53365	3391000	72600	10182
YVR AS	34380	19490	294	491155	17763740	312100	87936
ASUR	30358	7864	658	807457	11719790	194900	13867
INDIANAPOLIS A A	7473	10295	300	960350	18391720	244800	79344
MWAA NATIONAL	35909	28648	510	694797	13418880	244000	44811
MWAA DUILLES	55658	39440	703	1392935	20863510	396900	71053
AD ROMA SpA	156573	174207	2318	2449154	26906697	283700	165400
SAGA TORINO SpA	19750	19096	425	29551	2970632	64900	11329
AD FIRENZE SpA	8984	8404	200	24059	1535929	31000	4253
AER RIANITA	228981	135993	2511	654679	20534530	284500	290914
BRUSSELS AIC	134556	57458	767	1014618	25522157	305500	106132
COPENH. AIRPORTS A/S	30220	68515	1347	991109	21926644	288800	86026
OSLO F A/S	64090	35286	588	1320376	14614756	194800	108730
CZECH A A	36687	18488	1589	792245	6937774	115500	39043
BAA STANSTED	66282	35639	676	1335978	14107480	148900	82243
MANCHESTER AG Plc.	143876	102079	1639	1710993	20211770	181000	141319
F MUNCHEN GmbH	214646	184488	4472	2063566	25747259	321800	180500
F HAMBURG GmbH	39182	79840	809	220285	10271352	158600	65494
AI GENÈVE	41793	38823	539	140740	8030944	163200	61335
UNIQUE ZURICH A	70784	83156	1215	1582881	25941591	309200	151454
F WIEN GROUP	68298	139733	342	475719	13448250	185400	116984
ATHENS IA	52500	15800	520	1930202	10884204	138000	37236

FULLA AEROPORTS 2001

Model Name = CCR(CCR-I)			2001		
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,6			
	DONOL	156.961,0	56.854	-100.106,75	-63,78%
	DOL	50.398,0	31.436	-18.962,41	-37,63%
	E	932,0	581	-350,67	-37,63%
	AF	5.195.792,0	3.240.859	-1.954.933,29	-37,63%
	WLU's	53.548.760,0	60.911.217	7.362.457,39	13,75%
	ATM	186.400,0	640.181	453.781,05	243,44%
	INOA	217.570,0	217.570	0,00	0,00%
2	NARITA A A	0,9			
	DONOL	756.884,0	103.320	-653.564,33	-86,35%
	DOL	74.475,0	52.682	-21.792,63	-29,26%
	E	915,0	837	-77,93	-8,52%
	AF	6.637.260,0	6.071.958	-565.301,75	-8,52%
	WLU's	42.188.370,0	92.506.414	50.318.043,82	119,27%
	ATM	124.600,0	1.124.794	1.000.193,83	802,72%
	INOA	338.937,0	338.937	0,00	0,00%
3	APACLtd. MELB.	1,0			
	DONOL	16.525,0	16.525	0,00	0,00%
	DOL	11.260,0	11.260	0,00	0,00%
	E	211,0	211	0,00	0,00%
	AF	863.773,0	863.773	0,00	0,00%
	WLU's	20.837.250,0	20.837.250	0,00	0,00%
	ATM	187.400,0	187.400	0,00	0,00%
	INOA	73.440,0	73.440	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	9.676,0	9.504	-172,39	-1,78%
	DOL	11.774,0	7.967	-3.806,86	-32,33%
	E	282,0	182	-100,21	-35,53%
	AF	508.257,0	499.202	-9.055,44	-1,78%
	WLU's	10.293.540,0	11.097.044	803.503,94	7,81%
	ATM	147.900,0	161.618	13.717,59	9,27%
	INOA	49.952,0	49.952	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	15.186,0	15.186	0,00	0,00%
	DOL	5.774,0	5.774	0,00	0,00%
	E	127,0	127	0,00	0,00%
	AF	958.876,0	958.876	0,00	0,00%
	WLU's	14.492.100,0	14.492.100	0,00	0,00%
	ATM	175.800,0	175.800	0,00	0,00%
	INOA	51.827,0	51.827	0,00	0,00%
6	WACLtd PERTH	0,8			
	DONOL	9.712,0	4.029	-5.682,88	-58,51%
	DOL	4.466,0	3.673	-792,84	-17,75%
	E	112,0	92	-19,88	-17,75%
	AF	409.632,0	336.911	-72.720,76	-17,75%
	WLU's	5.546.490,0	6.799.526	1.253.036,26	22,59%
	ATM	57.600,0	79.586	21.986,42	38,17%
	INOA	27.056,0	27.056	0,00	0,00%
7	SYDNEY ACLtd.	0,9			
	DONOL	50.940,0	34.961	-15.979,40	-31,37%
	DOL	27.257,0	24.584	-2.672,78	-9,81%
	E	482,0	435	-47,26	-9,81%
	AF	1.999.183,0	1.803.146	-196.036,58	-9,81%
	WLU's	28.742.200,0	42.841.054	14.098.854,06	49,05%
	ATM	317.300,0	389.652	72.351,54	22,80%
	INOA	151.889,0	151.889	0,00	0,00%
8	ADMTL	0,9			
	DONOL	41.506,0	36.110	-5.396,45	-13,00%
	DOL	23.869,0	15.951	-7.917,93	-33,17%
	E	595,0	340	-255,47	-42,94%
	AF	314.358,0	273.486	-40.871,58	-13,00%
	WLU's	11.786.210,0	12.104.598	318.387,69	2,70%
	ATM	232.400,0	232.400	0,00	0,00%
	INOA	45.139,0	49.916	4.776,57	10,58%

9	CALGARY A A	1,0			
	DONOL	18.726,0	18.726	0,00	0,00%
	DOL	5.833,0	5.833	0,00	0,00%
	E	145,0	145	0,00	0,00%
	AF	233.142,0	233.142	0,00	0,00%
	WLU _s	8.659.900,0	8.659.900	0,00	0,00%
	ATM	138.400,0	138.400	0,00	0,00%
	INOA	23.104,0	23.104	0,00	0,00%
10	GTAA	0,6			
	DONOL	194.700,0	40.857	-153.843,29	-79,02%
	DOL	46.783,0	23.589	-23.193,79	-49,58%
	E	705,0	394	-310,73	-44,08%
	AF	2.160.404,0	1.208.195	-952.208,85	-44,08%
	WLU _s	31.082.880,0	31.082.880	0,00	0,00%
	ATM	406.300,0	406.300	0,00	0,00%
	INOA	111.617,0	128.671	17.054,50	15,28%
11	OTTAWA IA	1,0			
	DONOL	14.934,0	14.934	0,00	0,00%
	DOL	5.483,0	5.483	0,00	0,00%
	E	148,0	148	0,00	0,00%
	AF	53.365,0	53.365	0,00	0,00%
	WLU _s	3.391.000,0	3.391.000	0,00	0,00%
	ATM	72.600,0	72.600	0,00	0,00%
	INOA	10.182,0	10.182	0,00	0,00%
12	YVR AS	1,0			
	DONOL	34.380,0	34.380	0,00	0,00%
	DOL	19.490,0	19.490	0,00	0,00%
	E	294,0	294	0,00	0,00%
	AF	491.155,0	491.155	0,00	0,00%
	WLU _s	17.763.740,0	17.763.740	0,00	0,00%
	ATM	312.100,0	312.100	0,00	0,00%
	INOA	87.936,0	87.936	0,00	0,00%
13	ASUR	0,9			
	DONOL	30.358,0	21.037	-9.320,67	-30,70%
	DOL	7.864,0	7.200	-663,82	-8,44%
	E	658,0	169	-489,27	-74,36%
	AF	807.457,0	739.297	-68.159,71	-8,44%
	WLU _s	11.719.790,0	14.360.692	2.640.901,66	22,53%
	ATM	194.900,0	194.900	0,00	0,00%
	INOA	13.867,0	46.476	32.609,11	235,16%
14	INDIANAPOLIS A A	1,0			
	DONOL	7.473,0	7.473	0,00	0,00%
	DOL	10.295,0	10.295	0,00	0,00%
	E	300,0	300	0,00	0,00%
	AF	960.350,0	960.350	0,00	0,00%
	WLU _s	18.391.720,0	18.391.720	0,00	0,00%
	ATM	244.800,0	244.800	0,00	0,00%
	INOA	79.344,0	79.344	0,00	0,00%
15	MWAA NATIONAL	0,7			
	DONOL	35.909,0	24.093	-11.816,25	-32,91%
	DOL	28.648,0	14.524	-14.124,08	-49,30%
	E	510,0	240	-270,23	-52,99%
	AF	694.797,0	466.166	-228.630,60	-32,91%
	WLU _s	13.418.880,0	14.524.810	1.105.929,69	8,24%
	ATM	244.000,0	244.000	0,00	0,00%
	INOA	44.811,0	70.230	25.419,30	56,73%
16	MWAA DULLES	0,6			
	DONOL	55.658,0	35.110	-20.548,47	-36,92%
	DOL	39.440,0	22.580	-16.859,89	-42,75%
	E	703,0	405	-298,46	-42,46%
	AF	1.392.935,0	878.675	-514.259,96	-36,92%
	WLU _s	20.863.510,0	24.559.948	3.696.438,50	17,72%
	ATM	396.900,0	396.900	0,00	0,00%
	INOA	71.053,0	116.410	45.357,21	63,84%

17	AD ROMA SpA	0,4			
	DONOL	158.573,0	62.334	-94.239,27	-60,19%
	DOL	174.207,0	35.937	-138.270,04	-79,37%
	E	2.318,0	556	-1.761,57	-76,00%
	AF	2.449.154,0	975.040	-1.474.114,25	-60,19%
	WLU's	26.906.697,0	33.646.140	6.739.443,14	25,05%
	ATM	283.700,0	583.388	299.688,01	105,64%
	INOA	165.400,0	165.400	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	19.750,0	19.750	0,00	0,00%
	DOL	19.098,0	19.098	0,00	0,00%
	E	425,0	425	0,00	0,00%
	AF	29.551,0	29.551	0,00	0,00%
	WLU's	2.970.632,0	2.970.632	0,00	0,00%
	ATM	64.900,0	64.900	0,00	0,00%
	INOA	11.329,0	11.329	0,00	0,00%
19	AD FIRENZE SpA	0,9			
	DONOL	8.984,0	7.918	-1.067,74	-11,88%
	DOL	8.404,0	4.953	-3.450,94	-41,06%
	E	200,0	118	-81,93	-40,97%
	AF	24.059,0	21.200	-2.859,38	-11,88%
	WLU's	1.535.929,0	1.535.929	0,00	0,00%
	ATM	31.000,0	33.108	2.108,25	6,80%
	INOA	4.253,0	5.028	775,14	18,23%
20	AER RIANTA	1,0			
	DONOL	228.981,0	228.981	0,00	0,00%
	DOL	135.993,0	135.993	0,00	0,00%
	E	2.511,0	2.511	0,00	0,00%
	AF	654.679,0	654.679	0,00	0,00%
	WLU's	20.534.530,0	20.534.530	0,00	0,00%
	ATM	284.500,0	284.500	0,00	0,00%
	INOA	290.914,0	290.914	0,00	0,00%
21	BRUSSELS AIC	0,7			
	DONOL	134.556,0	58.106	-76.449,55	-56,82%
	DOL	57.458,0	26.847	-30.611,02	-53,28%
	E	767,0	503	-263,56	-34,36%
	AF	1.014.618,0	665.970	-348.647,84	-34,36%
	WLU's	25.522.157,0	25.522.157	0,00	0,00%
	ATM	305.500,0	449.654	144.153,85	47,19%
	INOA	106.132,0	106.132	0,00	0,00%
22	COPENH. AIRPORTS A	0,8			
	DONOL	30.220,0	25.510	-4.709,98	-15,59%
	DOL	68.515,0	18.689	-51.825,93	-75,64%
	E	1.347,0	303	-1.043,82	-77,49%
	AF	991.109,0	836.638	-154.470,80	-15,59%
	WLU's	21.926.644,0	21.926.644	0,00	0,00%
	ATM	288.800,0	288.800	0,00	0,00%
	INOA	86.026,0	92.815	6.788,68	7,89%
23	OSLO F A/S	0,8			
	DONOL	64.090,0	35.530	-28.559,75	-44,56%
	DOL	35.286,0	21.615	-13.670,87	-38,74%
	E	588,0	360	-227,81	-38,74%
	AF	1.320.376,0	808.822	-511.553,72	-38,74%
	WLU's	14.614.756,0	23.904.630	9.289.874,40	63,57%
	ATM	194.800,0	360.930	166.129,80	85,28%
	INOA	108.730,0	108.730	0,00	0,00%
24	CZECH A.A	0,4			
	DONOL	36.687,0	10.929	-25.758,11	-70,21%
	DOL	18.488,0	7.311	-11.176,92	-60,46%
	E	1.589,0	137	-1.452,07	-91,38%
	AF	792.245,0	313.293	-478.951,86	-60,46%
	WLU's	6.937.774,0	8.322.172	1.384.398,05	19,95%
	ATM	115.500,0	131.794	16.293,73	14,11%
	INOA	39.043,0	39.043	0,00	0,00%

25	BAA STANSTED	0,5			
	DONOL	66.282,0	25.483	-40.799,11	-61,55%
	DOL	35.639,0	16.163	-19.476,31	-54,65%
	E	676,0	285	-391,20	-57,87%
	AF	1.335.978,0	605.881	-730.096,92	-54,85%
	WLU's	14.107.480,0	17.283.351	3.175.870,80	22,51%
	ATM	148.900,0	281.467	132.567,19	89,03%
	INOA	82.243,0	82.243	0,00	0,00%
26	MANCHESTER AG Plc.	0,4			
	DONOL	143.876,0	60.946	-82.929,55	-57,64%
	DOL	102.079,0	39.388	-62.690,69	-61,41%
	E	1.639,0	579	-1.059,75	-64,66%
	AF	1.710.993,0	724.783	-986.209,51	-57,64%
	WLU's	20.211.770,0	27.153.717	6.941.946,75	34,35%
	ATM	181.000,0	484.143	303.143,48	167,48%
	INOA	141.319,0	141.319	0,00	0,00%
27	F MÜNCHEN GmbH	0,4			
	DONOL	214.646,0	86.312	-128.334,30	-59,79%
	DOL	184.488,0	62.302	-122.186,32	-66,23%
	E	4.472,0	899	-3.573,41	-79,91%
	AF	2.063.568,0	829.784	-1.233.781,68	-59,79%
	WLU's	25.747.259,0	32.609.938	6.862.678,82	26,65%
	ATM	321.800,0	592.471	270.671,41	84,11%
	INOA	180.500,0	180.500	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	39.182,0	39.182	0,00	0,00%
	DOL	79.840,0	79.840	0,00	0,00%
	E	809,0	809	0,00	0,00%
	AF	220.285,0	220.285	0,00	0,00%
	WLU's	10.271.352,0	10.271.352	0,00	0,00%
	ATM	158.600,0	158.600	0,00	0,00%
	INOA	65.494,0	65.494	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	41.793,0	41.793	0,00	0,00%
	DOL	38.823,0	38.823	0,00	0,00%
	E	539,0	539	0,00	0,00%
	AF	140.740,0	140.740	0,00	0,00%
	WLU's	8.030.944,0	8.030.944	0,00	0,00%
	ATM	163.200,0	163.200	0,00	0,00%
	INOA	61.335,0	61.335	0,00	0,00%
30	UNIQUE ZURICH A	0,7			
	DONOL	70.784,0	48.425	-22.359,28	-31,59%
	DOL	83.156,0	30.228	-52.928,27	-63,65%
	E	1.215,0	522	-692,73	-57,01%
	AF	1.582.881,0	1.082.880	-500.001,21	-31,59%
	WLU's	25.941.591,0	31.677.779	5.736.188,27	22,11%
	ATM	309.200,0	520.673	211.473,50	68,39%
	INOA	151.454,0	151.454	0,00	0,00%
31	F WIEN GROUP	1,0			
	DONOL	68.298,0	68.298	0,00	0,00%
	DOL	139.733,0	139.733	0,00	0,00%
	E	342,0	342	0,00	0,00%
	AF	475.719,0	475.719	0,00	0,00%
	WLU's	13.448.250,0	13.448.250	0,00	0,00%
	ATM	185.400,0	185.400	0,00	0,00%
	INOA	116.984,0	116.984	0,00	0,00%
32	ATHENS IA	0,3			
	DONOL	52500	13.322	-39.178,48	-0,7463
	DOL	15800	5.053	-10.746,77	-0,6802
	E	520	115	-405,00	-0,7789
	AF	1930202	617.326	-1.312.875,57	-0,6802
	WLU's	10884204	10.884.204	0,00	0
	ATM	138000	138.000	0,00	0
	INOA	37236	37.236	0,00	0

**DEA model = CCR(CCR-I)
Problem = Industries Aeroportuàries 2001**

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32

Average of scores = 0,78008473
 No. of efficient DMUs = 11
 No. of inefficient DMUs = 21
 No. of over iteration DMUs = 0

Reference	Frequency in Reference Set	Frequency to other DMUs
APACLtd. MELB.	7	7
BRISBANE ACLtd	7	7
CALGARY A A	3	3
OTTAWA IA	3	3
YVR AS	14	14
INDIANAPOLIS A A	11	11
SAGA TORINO SpA	1	1
AER RIANTA	0	0
F HAMBURG GmbH	0	0
AI GENÈVE	2	2
F WIEN GROUP	3	3

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)
 Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	756884	184488	4472	6637260	53548760	406300	338937
Min	7473	4466	112	24059	1535929	31000	4253
Average	88335,3125	49066,0625	846,125	1263027,84	17572447,16	206693,75	95191,125
SD	135394,985	49057,6483	876,1029388	1385863,54	11088529,88	94351,63597	77572,85194

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0,42894175	0,357469587	0,80786467	0,625616702	0,103890537	0,816011482
DOL	0,42894175	1	0,808814282	0,28499643	0,399587336	0,394038576	0,648006115
E	0,35746959	0,80881428	1	0,25712698	0,332714325	0,377063257	0,531800986
AF	0,80786467	0,28499643	0,25712698	1	0,85913711	0,158562482	0,751655182
WLUs	0,6256167	0,39958734	0,332714325	0,85913711	1	0,526219346	0,795369468
ATM	0,10389054	0,39403858	0,377063257	0,15856248	0,526219346	1	0,363552971
INOA	0,81601148	0,64800612	0,531800986	0,75165518	0,795369468	0,363552971	1

Average 0,78008473
 SD 0,22985438
 Maximum 1
 Minimum 0,31982478

Model Name = CCR(CCR-I) 2001									
No.	DMU	Score	Rank	Reference set (lambda)	2001	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)
1	HKIA	0.6237	24	APACld. MELB.	1,5169	BRISBANE ACLtd	2,0035	F WIEN GROUP	0,0199
2	NARITA A A	0.9148	14	BRISBANE ACLtd	6,2739	F WIEN GROUP	0,1178		
3	APACld. MELB.	1,0000	1	APACld. MELB.	1,0000				
4	AUCKLAND IALtd	0.9822	12	YVR AS	0,1839	INDIANAPOLIS A A	0,4258		
5	BRISBANE ACLtd	1,0000	1	BRISBANE ACLtd	1,0000				
6	WACLtd PERTH	0.8225	19	APACld. MELB.	0,1143	BRISBANE ACLtd	0,0371	INDIANAPOLIS A A	0,2109
7	SYDNEY ACLtd	0.9019	15	APACld. MELB.	1,9934	BRISBANE ACLtd	0,0788	F WIEN GROUP	0,0120
8	ADMTL	0.8700	17	OTTAWA IA	1,5150	YVR AS	0,3922		
9	CALGARY A A	1,0000	1	CALGARY A A	1,0000				
10	GTA A	0.5592	26	APACld. MELB.	0,6558	BRISBANE ACLtd	0,2869	YVR AS	0,7464
11	OTTAWA IA	1,0000	1	OTTAWA IA	1,0000				
12	YVR AS	1,0000	1	YVR AS	1,0000				
13	ASUR	0.9156	13	BRISBANE ACLtd	0,6201	CALGARY A A	0,6205		
14	INDIANAPOLIS A A	1,0000	1	INDIANAPOLIS A A	1,0000				
15	MWAA NATIONAL	0.6709	21	YVR AS	0,6697	INDIANAPOLIS A A	0,1429		
16	MWAA DULLES	0.6308	23	YVR AS	0,9252	INDIANAPOLIS A A	0,4418		
17	AD ROMA SpA	0.3981	30	YVR AS	1,7916	INDIANAPOLIS A A	0,0990		
18	SAGA TORINO SpA	1,0000	1	SAGA TORINO SpA	1,0000				
19	AD FIRENZE SpA	0.8812	16	OTTAWA IA	0,3016	SAGA TORINO SpA	0,1728		
20	AER RIANTA	1,0000	1	AER RIANTA	1,0000				
21	BRUSSELS AIC	0.6564	22	CALGARY A A	0,7323	OTTAWA IA	0,8686	YVR AS	0,9139
22	COPENH. AIRPORTS A/S	0.8441	18	APACld. MELB.	0,4385	YVR AS	0,4811	INDIANAPOLIS A A	0,2307
23	OSLO F A/S	0.6126	25	APACld. MELB.	0,2594	YVR AS	0,8735	INDIANAPOLIS A A	0,1621
24	CZECH A A	0.3954	31	YVR AS	0,2779	INDIANAPOLIS A A	0,1841		
25	BAA STANSTED	0.4535	27	YVR AS	0,6796	INDIANAPOLIS A A	0,2833		
26	MANCHESTER AG Plc.	0.4236	28	YVR AS	1,3841	AI GENÈVE	0,3197		
27	F MÜNCHEN GmbH	0.4021	29	YVR AS	1,4362	AI GENÈVE	0,8837		
28	F HAMBURG GmbH	1,0000	1	F HAMBURG GmbH	1,0000				
29	AI GENÈVE	1,0000	1	AI GENÈVE	1,0000				
30	UNIQUE ZÜRICH A	0.6841	20	YVR AS	1,3089	INDIANAPOLIS A A	0,4582		
31	F WIEN GROUP	1,0000	1	F WIEN GROUP	1,0000				
32	ATHENS IA	0.3198	32	APACld. MELB.	0,0351	BRISBANE ACLtd	0,5385	CALGARY A A	0,2374
									INDIANAPOLIS A A 0,0159

AEROPORTS 2001.VRS

Model Name = BCC(BCC-I)		2001			
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	DONOL	156.961,0	156.961	0,00	0,00%
	DOL	50.398,0	50.398	0,00	0,00%
	E	932,0	932	0,00	0,00%
	AF	5.195.792,0	5.195.792	0,00	0,00%
	WLUUs	53.548.760,0	53.548.760	0,00	0,00%
	ATM	186.400,0	186.400	0,00	0,00%
	INOA	217.570,0	217.570	0,00	0,00%
2	NARITA A A	1,0			
	DONOL	756.884,0	756.884	0,00	0,00%
	DOL	74.475,0	74.475	0,00	0,00%
	E	915,0	915	0,00	0,00%
	AF	6.637.260,0	6.637.260	0,00	0,00%
	WLUUs	42.188.370,0	42.188.370	0,00	0,00%
	ATM	124.600,0	124.600	0,00	0,00%
	INOA	338.937,0	338.937	0,00	0,00%
3	APACLtd. MELB.	1,0			
	DONOL	16.525,0	16.525	0,00	0,00%
	DOL	11.260,0	11.260	0,00	0,00%
	E	211,0	211	0,00	0,00%
	AF	863.773,0	863.773	0,00	0,00%
	WLUUs	20.837.250,0	20.837.250	0,00	0,00%
	ATM	187.400,0	187.400	0,00	0,00%
	INOA	73.440,0	73.440	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	9.676,0	9.676	0,00	0,00%
	DOL	11.774,0	11.774	0,00	0,00%
	E	282,0	282	0,00	0,00%
	AF	508.257,0	508.257	0,00	0,00%
	WLUUs	10.293.540,0	10.293.540	0,00	0,00%
	ATM	147.900,0	147.900	0,00	0,00%
	INOA	49.952,0	49.952	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	15.186,0	15.186	0,00	0,00%
	DOL	5.774,0	5.774	0,00	0,00%
	E	127,0	127	0,00	0,00%
	AF	958.876,0	958.876	0,00	0,00%
	WLUUs	14.492.100,0	14.492.100	0,00	0,00%
	ATM	175.800,0	175.800	0,00	0,00%
	INOA	51.827,0	51.827	0,00	0,00%
6	WACLtd PERTH	1,0			
	DONOL	9.712,0	9.712	0,00	0,00%
	DOL	4.466,0	4.466	0,00	0,00%
	E	112,0	112	0,00	0,00%
	AF	409.632,0	409.632	0,00	0,00%
	WLUUs	5.546.490,0	5.546.490	0,00	0,00%
	ATM	57.600,0	57.600	0,00	0,00%
	INOA	27.056,0	27.056	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	DONOL	50.940,0	50.940	0,00	0,00%
	DOL	27.257,0	27.257	0,00	0,00%
	E	482,0	482	0,00	0,00%
	AF	1.999.183,0	1.999.183	0,00	0,00%
	WLUUs	28.742.200,0	28.742.200	0,00	0,00%
	ATM	317.300,0	317.300	0,00	0,00%
	INOA	151.889,0	151.889	0,00	0,00%
8	ADMTL	1,0			
	DONOL	41.506,0	41.506	0,00	0,00%
	DOL	23.869,0	23.869	0,00	0,00%
	E	595,0	595	0,00	0,00%
	AF	314.358,0	314.358	0,00	0,00%
	WLUUs	11.786.210,0	11.786.210	0,00	0,00%
	ATM	232.400,0	232.400	0,00	0,00%
	INOA	45.139,0	45.139	0,00	0,00%

9	CALGARY A A	1,0			
	DONOL	18.726,0	18.726	0,00	0,00%
	DOL	5.833,0	5.833	0,00	0,00%
	E	145,0	145	0,00	0,00%
	AF	233.142,0	233.142	0,00	0,00%
	WLU's	8.659.900,0	8.659.900	0,00	0,00%
	ATM	138.400,0	138.400	0,00	0,00%
	INOA	23.104,0	23.104	0,00	0,00%
10	GTAA	1,0			
	DONOL	194.700,0	194.700	0,00	0,00%
	DOL	46.783,0	46.783	0,00	0,00%
	E	705,0	705	0,00	0,00%
	AF	2.160.404,0	2.160.404	0,00	0,00%
	WLU's	31.082.880,0	31.082.880	0,00	0,00%
	ATM	406.300,0	406.300	0,00	0,00%
	INOA	111.617,0	111.617	0,00	0,00%
11	OTTAWA IA	1,0			
	DONOL	14.934,0	14.934	0,00	0,00%
	DOL	5.483,0	5.483	0,00	0,00%
	E	148,0	148	0,00	0,00%
	AF	53.365,0	53.365	0,00	0,00%
	WLU's	3.391.000,0	3.391.000	0,00	0,00%
	ATM	72.600,0	72.600	0,00	0,00%
	INOA	10.182,0	10.182	0,00	0,00%
12	YVR AS	1,0			
	DONOL	34.380,0	34.380	0,00	0,00%
	DOL	19.490,0	19.490	0,00	0,00%
	E	294,0	294	0,00	0,00%
	AF	491.155,0	491.155	0,00	0,00%
	WLU's	17.763.740,0	17.763.740	0,00	0,00%
	ATM	312.100,0	312.100	0,00	0,00%
	INOA	87.936,0	87.936	0,00	0,00%
13	ASUR	1,0			
	DONOL	30.358,0	12.896	-17.462,18	-57,52%
	DOL	7.864,0	7.633	-230,89	-2,94%
	E	658,0	202	-456,05	-69,31%
	AF	807.457,0	783.750	-23.706,98	-2,94%
	WLU's	11.719.790,0	14.671.173	2.951.383,25	25,18%
	ATM	194.900,0	194.900	0,00	0,00%
	INOA	13.867,0	56.101	42.233,59	304,56%
14	INDIANAPOLIS AA	1,0			
	DONOL	7.473,0	7.473	0,00	0,00%
	DOL	10.295,0	10.295	0,00	0,00%
	E	300,0	300	0,00	0,00%
	AF	960.350,0	960.350	0,00	0,00%
	WLU's	18.391.720,0	18.391.720	0,00	0,00%
	ATM	244.800,0	244.800	0,00	0,00%
	INOA	79.344,0	79.344	0,00	0,00%
15	MWAA NATIONAL	0,7			
	DONOL	35.909,0	24.688	-11.240,97	-31,30%
	DOL	28.648,0	15.686	-12.961,61	-45,24%
	E	510,0	276	-233,90	-45,86%
	AF	694.797,0	477.297	-217.499,64	-31,30%
	WLU's	13.418.880,0	14.603.691	1.184.811,47	8,83%
	ATM	244.000,0	244.000	0,00	0,00%
	INOA	44.811,0	69.618	24.807,47	55,36%
16	MWAA DULLES	1,0			
	DONOL	55.658,0	55.658	0,00	0,00%
	DOL	39.440,0	39.440	0,00	0,00%
	E	703,0	703	0,00	0,00%
	AF	1.392.935,0	1.392.935	0,00	0,00%
	WLU's	20.863.510,0	20.863.510	0,00	0,00%
	ATM	396.900,0	396.900	0,00	0,00%
	INOA	71.053,0	71.053	0,00	0,00%

17	AD ROMA SpA	0,8			
	DONOL	156.573,0	101.229	-55.343,72	-35,35%
	DOL	174.207,0	52.695	-121.511,87	-69,75%
	E	2.318,0	893	-1.425,24	-61,49%
	AF	2.449.154,0	1.583.454	-865.700,26	-35,35%
	WLUs	26.906.697,0	26.906.697	0,00	0,00%
	ATM	283.700,0	307.602	23.902,17	8,43%
	INOA	165.400,0	165.400	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	19.750,0	19.750	0,00	0,00%
	DOL	19.096,0	19.096	0,00	0,00%
	E	425,0	425	0,00	0,00%
	AF	29.551,0	29.551	0,00	0,00%
	WLUs	2.970.632,0	2.970.632	0,00	0,00%
	ATM	64.900,0	64.900	0,00	0,00%
	INOA	11.329,0	11.329	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	DONOL	8.984,0	8.984	0,00	0,00%
	DOL	8.404,0	8.404	0,00	0,00%
	E	200,0	200	0,00	0,00%
	AF	24.059,0	24.059	0,00	0,00%
	WLUs	1.535.929,0	1.535.929	0,00	0,00%
	ATM	31.000,0	31.000	0,00	0,00%
	INOA	4.253,0	4.253	0,00	0,00%
20	AER RIANTA	1,0			
	DONOL	228.981,0	228.981	0,00	0,00%
	DOL	135.993,0	135.993	0,00	0,00%
	E	2.511,0	2.511	0,00	0,00%
	AF	654.679,0	654.679	0,00	0,00%
	WLUs	20.534.530,0	20.534.530	0,00	0,00%
	ATM	284.500,0	284.500	0,00	0,00%
	INOA	290.914,0	290.914	0,00	0,00%
21	BRUSSELS AIC	1,0			
	DONOL	134.556,0	134.556	0,00	0,00%
	DOL	57.458,0	57.458	0,00	0,00%
	E	767,0	767	0,00	0,00%
	AF	1.014.618,0	1.014.618	0,00	0,00%
	WLUs	25.522.157,0	25.522.157	0,00	0,00%
	ATM	305.500,0	305.500	0,00	0,00%
	INOA	106.132,0	106.132	0,00	0,00%
22	COPENH. AIRPORTS A	1,0			
	DONOL	30.220,0	30.220	0,00	0,00%
	DOL	68.515,0	68.515	0,00	0,00%
	E	1.347,0	1.347	0,00	0,00%
	AF	991.109,0	991.109	0,00	0,00%
	WLUs	21.926.644,0	21.926.644	0,00	0,00%
	ATM	288.800,0	288.800	0,00	0,00%
	INOA	86.026,0	86.026	0,00	0,00%
23	OSLO F A/S	0,7			
	DONOL	64.090,0	42.543	-21.546,67	-33,62%
	DOL	35.286,0	23.812	-11.473,60	-32,52%
	E	588,0	387	-201,17	-34,21%
	AF	1.320.376,0	891.043	-429.333,50	-32,52%
	WLUs	14.614.758,0	20.705.843	6.091.087,23	41,68%
	ATM	194.800,0	312.928	118.127,89	60,64%
	INOA	108.730,0	108.730	0,00	0,00%
24	CZECH A A	0,5			
	DONOL	36.687,0	16.725	-19.961,51	-54,41%
	DOL	18.488,0	8.429	-10.059,38	-54,41%
	E	1.589,0	200	-1.389,14	-87,42%
	AF	792.245,0	361.182	-431.062,85	-54,41%
	WLUs	6.937.774,0	9.998.367	3.060.592,62	44,11%
	ATM	115.500,0	159.279	43.779,29	37,90%
	INOA	39.043,0	39.043	0,00	0,00%

25	BAA STANSTED	0,5			
	DONOL	66.282,0	26.094	-40.188,06	-60,83%
	DOL	35.639,0	16.235	-19.403,69	-54,45%
	E	676,0	288	-387,92	-57,38%
	AF	1.335.978,0	608.604	-727.374,43	-54,45%
	WLUs	14.107.480,0	17.474.899	3.367.418,70	23,87%
	ATM	148.900,0	284.523	135.622,94	91,08%
	INOA	82.243,0	82.243	0,00	0,00%
26	MANCHESTER AG Plc.	0,5			
	DONOL	143.876,0	73.905	-69.970,65	-48,83%
	DOL	102.079,0	44.647	-57.432,33	-56,26%
	E	1.639,0	826	-812,64	-49,58%
	AF	1.710.993,0	878.892	-832.100,53	-48,83%
	WLUs	20.211.770,0	20.211.770	0,00	0,00%
	ATM	181.000,0	288.937	107.936,98	59,83%
	INOA	141.319,0	141.319	0,00	0,00%
27	F MÜNCHEN GmbH	0,7			
	DONOL	214.646,0	146.765	-67.881,45	-31,62%
	DOL	184.488,0	69.958	-114.530,36	-62,08%
	E	4.472,0	1.211	-3.260,72	-72,91%
	AF	2.063.566,0	1.410.967	-652.599,40	-31,62%
	WLUs	25.747.259,0	25.747.259	0,00	0,00%
	ATM	321.800,0	321.800	0,00	0,00%
	INOA	180.500,0	180.500	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	39.182,0	39.182	0,00	0,00%
	DOL	79.840,0	79.840	0,00	0,00%
	E	809,0	809	0,00	0,00%
	AF	220.285,0	220.285	0,00	0,00%
	WLUs	10.271.352,0	10.271.352	0,00	0,00%
	ATM	158.600,0	158.600	0,00	0,00%
	INOA	65.494,0	65.494	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	41.793,0	41.793	0,00	0,00%
	DOL	38.823,0	38.823	0,00	0,00%
	E	539,0	539	0,00	0,00%
	AF	140.740,0	140.740	0,00	0,00%
	WLUs	8.030.944,0	8.030.944	0,00	0,00%
	ATM	163.200,0	163.200	0,00	0,00%
	INOA	61.335,0	61.335	0,00	0,00%
30	UNIQUE ZURICH A	1,0			
	DONOL	70.784,0	69.735	-1.048,60	-1,48%
	DOL	83.156,0	44.913	-38.242,70	-45,99%
	E	1.215,0	808	-406,51	-33,46%
	AF	1.582.881,0	1.559.432	-23.448,98	-1,48%
	WLUs	25.941.591,0	25.941.591	0,00	0,00%
	ATM	309.200,0	309.200	0,00	0,00%
	INOA	151.454,0	151.454	0,00	0,00%
31	F WIEN GROUP	1,0			
	DONOL	68.298,0	68.298	0,00	0,00%
	DOL	139.733,0	139.733	0,00	0,00%
	E	342,0	342	0,00	0,00%
	AF	475.719,0	475.719	0,00	0,00%
	WLUs	13.448.250,0	13.448.250	0,00	0,00%
	ATM	185.400,0	185.400	0,00	0,00%
	INOA	116.984,0	116.984	0,00	0,00%
32	ATHENS IA	0,3			
	DONOL	52.500,0	14.550	-37.949,56	-72,28%
	DOL	15.800,0	5.456	-10.344,29	-65,47%
	E	520,0	127	-392,99	-75,57%
	AF	1.930.202,0	666.496	-1.263.706,33	-65,47%
	WLUs	10.884.204,0	10.996.478	112.274,29	1,03%
	ATM	138.000,0	138.000	0,00	0,00%
	INOA	37.236,0	39.488	2.252,21	6,05%

Model Name = BCC(BCC-I)		2001									
No.	DMU	Score	Excess DONOL S-(1)	Excess DOL S-(2)	Excess E S-(3)	Excess AF S-(4)	Shortage WLUs S+(1)	Shortage ATM S+(2)	Shortage INOA S+(3)		
1	HKIA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
2	NARITA A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
3	APACLtd. MELB.	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
4	AUCKLAND IALtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
5	BRISBANE ACLtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
6	WACLtd PERTH	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
7	SYDNEY ACLtd.	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
8	ADMTL	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
9	CALGARY A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
10	GTA A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
11	OTTAWA IA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
12	YVR AS	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
13	ASUR	0,97	16.570,87	0,00	436,73	0,00	2.951.383,25	0,00	42.233,59		
14	INDIANAPOLIS A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
15	MWAA NATIONAL	0,69	0,00	3.993,62	74,25	0,00	1.184.811,47	0,00	24.807,47		
16	MWAA DUILLES	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
17	AD ROMA SpA	0,65	0,00	59.935,08	605,90	0,00	0,00	23.902,17	0,00		
18	SAGA TORINO SpA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
19	AD FIRENZE SpA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
20	AER RIANTA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
21	BRUSSELS AIC	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
22	COPENH. AIRPORTS A/S	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
23	OSLO F A/S	0,67	707,16	0,00	9,98	0,00	6.091.087,23	118.127,89	0,00		
24	CZECHA A	0,46	0,00	0,00	524,56	0,00	3.060.592,62	43.779,29	0,00		
25	BAA STANSTED	0,46	4.100,76	0,00	19,87	0,00	3.367.418,70	135.622,94	0,00		
26	MANCHESTER AG Plc.	0,51	0,00	7.788,65	15,56	0,00	0,00	107.936,98	0,00		
27	F MÜNCHEN GmbH	0,68	0,00	56.186,32	1.846,46	0,00	0,00	0,00	0,00		
28	F HAMBURG GmbH	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
29	AI GENEVE	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
30	UNIQUE ZURICH A	0,99	0,00	37.010,81	388,51	0,00	0,00	0,00	0,00		
31	F WIEN GROUP	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
32	ATHENS IA	0,35	3.577,72	0,00	52,54	0,00	112.274,29	0,00	2.252,21		

DEA model = BCC(BCC-I)**Problem = Indústries Aeroportuàries 2001**

No. of DMUs = 32

No. of Input items = 4

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLUs

Output(2) = ATM

Output(3) = INOA

Returns to Scale = Variable (Sum of Lambda = 1)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	756.884,00	184.488,00	4.472,00	6.637.260,00	53.548.760,00	406.300,00	338.937,00
Min	7.473,00	4.466,00	112,00	24.059,00	1.535.929,00	31.000,00	4.253,00
Average	88.335,31	49.066,06	846,13	1.263.027,84	17.572.447,16	206.693,75	95.191,13
SD	135.394,99	49.057,65	876,10	1.385.863,54	11.088.529,88	94.351,64	77.572,85

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1,00	0,43	0,36	0,81	0,63	0,10	0,82
DOL	0,43	1,00	0,81	0,28	0,40	0,39	0,65
E	0,36	0,81	1,00	0,26	0,33	0,38	0,53
AF	0,81	0,28	0,26	1,00	0,86	0,16	0,75
WLUs	0,63	0,40	0,33	0,86	1,00	0,53	0,80
ATM	0,10	0,39	0,38	0,16	0,53	1,00	0,36
INOA	0,82	0,65	0,53	0,75	0,80	0,36	1,00

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None

No. of DMUs	32
Average	0,888072694
SD	0,200506649
Maximum	1
Minimum	0,345298402

Frequency in Reference Set

Reference	Frequency to other DMUs
HKIA	1
NARITA A A	0
APACld. MELB.	0
AUCKLAND IALtd	0
BRISBANE ACLtd	2
WACLtd PERTH	1
SYDNEY ACLtd.	5
ADMTL	0
CALGARY A A	4
GTAA	1
OTTAWA IA	1
YVR AS	7
INDIANAPOLIS A A	5
MWAA DULLES	0
SAGA TORINO SpA	0
AD FIRENZE SpA	1
AER RIANTA	5
BRUSSELS AIC	3
COPENH. AIRPORTS.	1
F HAMBURG GmbH	0
AI GENÈVE	0
F WIEN GROUP	0

No. of DMUs in Data =	32,00
No. of DMUs with inappropriate Data =	0,00
No. of evaluated DMUs =	32,00
Average of scores =	0,89
No. of efficient DMUs =	22,00
No. of inefficient DMUs =	10,00
No. of over iteration DMUs =	0,00

Model Name = BCC(BCC-I) 2001										
No.	DMU	Score	Rank	Reference set. (lambda)						
1	HKIA	1,00	1	HKIA						
2	NARITA.AA	1,00	1	NARITA.AA						
3	APACltd.MELB.	1,00	1	APACltd.MELB.						
4	AUCKLAND.lAltd	1,00	1	AUCKLAND.lAltd						
5	BRISBANE.ACId	1,00	1	BRISBANE.ACId						
6	WACLId.PERTH	1,00	1	WACLId.PERTH						
7	SYDNEY.ACId.	1,00	1	SYDNEY.ACId.						
8	ADMTL	1,00	1	ADMTL						
9	CALGARY.AA	1,00	1	CALGARY.AA						
10	GTAA	1,00	1	GTAA						
11	OTTAWA.lA	1,00	1	OTTAWA.lA						
12	YVR.AS	1,00	1	YVR.AS						
13	ASUR	0,97	24	BRISBANE.ACId	CALGARY.AA	0,24	INDIANAPOLIS.AA	0,41		
14	INDIANAPOLIS.AA	1,00	1	INDIANAPOLIS.AA						
15	MWAA.NATIONAL	0,69	25	YVR.AS	INDIANAPOLIS.AA	0,17	AD.FIRENZE.SpA	0,20		
16	MWAA.DULLES	1,00	1	MWAA.DULLES						
17	AD.ROMA.SpA	0,65	28	HKIA	SYDNEY.ACId.	0,59	AER.RIANTA	0,17	BRUSSELS.AIC	0,23
18	SAGA.TORINO.SpA	1,00	1	SAGA.TORINO.SpA						
19	AD.FIRENZE.SpA	1,00	1	AD.FIRENZE.SpA						
20	AER.RIANTA	1,00	1	AER.RIANTA						
21	BRUSSELS.AIC	1,00	1	BRUSSELS.AIC						
22	COPENH.AIRPORTS.AVS	1,00	1	COPENH.AIRPORTS.AVS						
23	OSLO.F.AVS	0,67	27	SYDNEY.ACId.	YVR.AS	0,72	AER.RIANTA	0,02		
24	CZECH.AA	0,46	30	CALGARY.AA	0TTAWA.lA	0,38	YVR.AS	0,13	INDIANAPOLIS.AA	0,23
25	BAA.STANSTED	0,46	31	CALGARY.AA	YVR.AS	0,67	INDIANAPOLIS.AA	0,28		
26	MANCHESTER.AG.Plc.	0,51	29	SYDNEY.ACId.	YVR.AS	0,38	INDIANAPOLIS.AA	0,28	AER.RIANTA	0,23
27	F.MUNCHEN.GmbH	0,68	26	SYDNEY.ACId.	GTAA	0,19	YVR.AS	0,03	AER.RIANTA	0,32
28	F.HAMBURG.GmbH	1,00	1	F.HAMBURG.GmbH						0,14
29	AI.GENEVE	1,00	1	AI.GENEVE						
30	UNIQUE.ZURICH.A	0,99	23	SYDNEY.ACId.	YVR.AS	0,08	AER.RIANTA	0,11	BRUSSELS.AIC	0,04
31	F.WIEN.GROUP	1,00	1	F.WIEN.GROUP						
32	ATHENS.lA	0,35	32	BRISBANE.ACId	WACLId.PERTH	0,25	CALGARY.AA	0,21		

Indústries Aeroportuàries 2001	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	156961	50398	932	5195792	53548760	186400	217570
NARITA A A	756884	74475	915	6637260	42188370	124600	338937
APACLtd. MELB.	16525	11260	211	863773	20837250	187400	73440
AUCKLAND IALtd	9676	11774	282	508257	10293540	147900	49952
BRISBANEACLtd	15186	5774	127	958876	14492100	175800	51827
WACLtd PERTH	9712	4466	112	409632	5546490	57600	27056
SYDNEY ACLtd.	50940	27257	482	1999183	28742200	317300	151889
ADMTL	41506	23869	595	314358	11786210	232400	45139
CALGARY A A	18726	5833	145	233142	8659900	138400	23104
GTA	194700	46783	705	2160404	31082880	406300	111617
OTTAWA IA	14934	5483	148	53365	3391000	72600	10182
YVR AS	34380	19490	294	491155	17763740	312100	87936
ASUR	30358	7864	658	807457	11719790	194900	13867
INDIANAPOLIS A A	7473	10295	300	960350	18391720	244800	79344
MWAA NATIONAL	35909	28648	510	694797	13418880	244000	44811
MWAA DULLES	55658	39440	703	1392935	20863510	396900	71053
AD ROMA SpA	156573	174207	2318	2449154	26906697	283700	165400
SAGA TORINO SpA	19750	19096	425	29551	2970632	64900	11329
AD FIRENZE SpA	8984	8404	200	24059	1535929	31000	4253
AER RIANTA	228981	135993	2511	654679	20534530	284500	290914
BRUSSELS AIC	134556	57458	767	1014618	25522157	305500	106132
COPENH. AIRPORTS A/S	30220	68515	1347	991109	21926644	288800	86026
OSLO F A/S	64090	35286	588	1320376	14614756	194800	108730
CZECH A A	36687	18488	1589	792245	6937774	115500	39043
BAA STANSTED	66282	35639	676	1335978	14107480	148900	82243
MANCHESTER AG Plc.	143876	102079	1639	1710993	20211770	181000	141319
F MÜNCHEN GmbH	214646	184488	4472	2063566	25747259	321800	180500
F HAMBURG GmbH	39182	79840	809	220285	10271352	158600	65494
AI GENÈVE	41793	38823	539	140740	8030944	163200	61335
UNIQUE ZÜRICH A	70784	83156	1215	1582881	25941591	309200	151454
F WIEN GROUP	68298	139733	342	475719	13448250	185400	116984
ATHENS IA	52500	15800	520	1930202	10884204	138000	37236

FULLA AEROPORTS 2001. SENSE E

Model Name = CCR(CCR-I)			Sense E		
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,55571276			
	DONOL	156961	31546,7549	-125414,245	-79,90%
	DOL	50398	28006,8117	-22391,1883	-44,43%
	AF	5195792	2887367,91	-2308424,09	-44,43%
	WLU's	53548760	53548760	0	0,00%
	ATM	186400	671886,651	485486,651	260,45%
	INOA	217570	217570	0	0,00%
2	NARITA A A	0,60585779			
	DONOL	756884	35616,659	-721267,341	-95,29%
	DOL	74475	45121,2587	-29353,7413	-39,41%
	AF	6637260	4021235,66	-2616024,34	-39,41%
	WLU's	42188370	78193878,3	36005508,3	85,34%
	ATM	124600	1051495,81	926895,813	743,90%
	INOA	338937	338937	0	0,00%
3	APACLtd. MELB.	1			
	DONOL	16525	16525	0	0,00%
	DOL	11260	11260	0	0,00%
	AF	863773	863773	0	0,00%
	WLU's	20837250	20837250	0	0,00%
	ATM	187400	187400	0	0,00%
	INOA	73440	73440	0	0,00%
4	AUCKLAND IALtd	0,98218335			
	DONOL	9676	9503,60607	-172,393926	-1,78%
	DOL	11774	7967,13676	-3806,86324	-32,33%
	AF	508257	499201,562	-9055,43818	-1,78%
	WLU's	10293540	11097043,9	803503,944	7,81%
	ATM	147900	161617,593	13717,593	9,27%
	INOA	49952	49952	0	0,00%
5	BRISBANE ACLtd	1			
	DONOL	15186	15186	0	0,00%
	DOL	5774	5774	0	0,00%
	AF	958876	958876	0	0,00%
	WLU's	14492100	14492100	0	0,00%
	ATM	175800	175800	0	0,00%
	INOA	51827	51827	0	0,00%
6	WACLtd PERTH	0,79360524			
	DONOL	9712	2657,06334	-7054,93666	-72,64%
	DOL	4466	3544,241	-921,759001	-20,64%
	AF	409632	325086,101	-84545,8986	-20,64%
	WLU's	5546490	6260585,28	714095,279	12,87%
	ATM	57600	83645,9161	26045,9161	45,22%
	INOA	27056	27056	0	0,00%
7	SYDNEY ACLtd.	0,82294824			
	DONOL	50940	23101,4273	-27838,5727	-54,65%
	DOL	27257	22431,1001	-4825,89994	-17,71%
	AF	1999183	1645224,12	-353958,877	-17,71%
	WLU's	28742200	34324566,8	5582366,84	19,42%
	ATM	317300	482370,97	165070,97	52,02%
	INOA	151889	151889	0	0,00%
8	ADMTL	0,86998396			
	DONOL	41506	36109,5543	-5396,44574	-13,00%
	DOL	23869	15951,0748	-7917,92521	-33,17%
	AF	314358	273486,418	-40871,5822	-13,00%
	WLU's	11786210	12104597,7	318387,688	2,70%
	ATM	232400	232400	0	0,00%
	INOA	45139	49915,5738	4776,57382	10,58%

9	CALGARY A A	1			
	DONOL	18726	18726	0	0,00%
	DOL	5833	5833	0	0,00%
	AF	233142	233142	0	0,00%
	WLUs	8659900	8659900	0	0,00%
	ATM	138400	138400	0	0,00%
	INOA	23104	23104	0	0,00%
10	GTAA	0,47880261			
	DONOL	194700	47387,3953	-147312,605	-75,66%
	DOL	46783	22399,8225	-24383,1775	-52,12%
	AF	2160404	1034407,07	-1125996,93	-52,12%
	WLUs	31082880	31082880	0	0,00%
	ATM	406300	416478,768	10178,7678	2,51%
	INOA	111617	111617	0	0,00%
11	OTTAWA IA	1			
	DONOL	14934	14934	0	0,00%
	DOL	5483	5483	0	0,00%
	AF	53365	53365	0	0,00%
	WLUs	3391000	3391000	0	0,00%
	ATM	72600	72600	0	0,00%
	INOA	10182	10182	0	0,00%
12	YVR AS	1			
	DONOL	34380	34380	0	0,00%
	DOL	19490	19490	0	0,00%
	AF	491155	491155	0	0,00%
	WLUs	17763740	17763740	0	0,00%
	ATM	312100	312100	0	0,00%
	INOA	87936	87936	0	0,00%
13	ASUR	0,9155872			
	DONOL	30358	21037,3337	-9320,66633	-30,70%
	DOL	7864	7200,17772	-663,822278	-8,44%
	AF	807457	739297,292	-68159,7082	-8,44%
	WLUs	11719790	14360691,7	2640901,66	22,53%
	ATM	194900	194900	0	0,00%
	INOA	13867	46476,1092	32609,1092	235,16%
14	INDIANAPOLIS A A	1			
	DONOL	7473	7473	0	0,00%
	DOL	10295	10295	0	0,00%
	AF	960350	960350	0	0,00%
	WLUs	18391720	18391720	0	0,00%
	ATM	244800	244800	0	0,00%
	INOA	79344	79344	0	0,00%
15	MWAA NATIONAL	0,670939			
	DONOL	35909	24092,7484	-11816,2516	-32,91%
	DOL	28648	14523,9159	-14124,0841	-49,30%
	AF	694797	466166,401	-228630,599	-32,91%
	WLUs	13418880	14524809,7	1105929,69	8,24%
	ATM	244000	244000	0	0,00%
	INOA	44811	70230,2963	25419,2963	56,73%
16	MWAA DULLES	0,63080836			
	DONOL	55658	35109,5315	-20548,4685	-36,92%
	DOL	39440	22580,1137	-16859,8863	-42,75%
	AF	1392935	878675,039	-514259,961	-36,92%
	WLUs	20863510	24559948,5	3696438,5	17,72%
	ATM	396900	396900	0	0,00%
	INOA	71053	116410,215	45357,2145	63,84%
17	AD ROMA SpA	0,39811288			
	DONOL	156573	62333,7276	-94239,2724	-60,19%
	DOL	174207	35936,9641	-138270,036	-79,37%
	AF	2449154	975039,747	-1474114,25	-60,19%
	WLUs	26906697	33646140,1	6739443,14	25,05%
	ATM	283700	583388,01	299688,01	105,64%
	INOA	165400	165400	0	0,00%

18	SAGA TORINO SpA	1			
	DONOL	19750	19750	0	0,00%
	DOL	19096	19096	0	0,00%
	AF	29551	29551	0	0,00%
	WLUs	2970632	2970632	0	0,00%
	ATM	64900	64900	0	0,00%
	INOA	11329	11329	0	0,00%
19	AD FIRENZE SpA	0,8811514			
	DONOL	8984	7916,26422	-1067,73578	-11,88%
	DOL	8404	4953,06371	-3450,93629	-41,06%
	AF	24059	21199,6216	-2859,37836	-11,88%
	WLUs	1535929	1535929	0	0,00%
	ATM	31000	33108,2538	2108,25383	6,80%
	INOA	4253	5028,14278	775,142778	18,23%
20	AER RIANTA	1			
	DONOL	228981	228981	0	0,00%
	DOL	135993	135993	0	0,00%
	AF	654679	654679	0	0,00%
	WLUs	20534530	20534530	0	0,00%
	ATM	284500	284500	0	0,00%
	INOA	290914	290914	0	0,00%
21	BRUSSELS AIC	0,576847			
	DONOL	134556	74363,4628	-60192,5372	-44,73%
	DOL	57458	33144,4749	-24313,5251	-42,32%
	AF	1014618	585279,35	-429338,65	-42,32%
	WLUs	25522157	25522157	0	0,00%
	ATM	305500	486778,67	181278,67	59,34%
	INOA	106132	106132	0	0,00%
22	COPENH. AIRPORTS A/S	0,84414348			
	DONOL	30220	25510,0158	-4709,98416	-15,59%
	DOL	68515	16689,0689	-51825,9311	-75,64%
	AF	991109	836638,196	-154470,804	-15,59%
	WLUs	21926644	21926644	0	0,00%
	ATM	288800	288800	0	0,00%
	INOA	86026	92814,6754	6788,67539	7,89%
23	OSLO F A/S	0,60594143			
	DONOL	64090	33732,6267	-30357,3733	-47,37%
	DOL	35286	21381,2493	-13904,7507	-39,41%
	AF	1320376	800070,522	-520305,478	-39,41%
	WLUs	14614756	22845296,1	8230540,06	56,32%
	ATM	194800	372182,74	177382,74	91,06%
	INOA	108730	108730	0	0,00%
24	CZECH A A	0,39544981			
	DONOL	36687	10928,8868	-25758,1132	-70,21%
	DOL	18488	7311,07617	-11176,9238	-60,46%
	AF	792245	313293,138	-478951,862	-60,46%
	WLUs	6937774	8322172,05	1384398,05	19,95%
	ATM	115500	131793,727	16293,7267	14,11%
	INOA	39043	39043	0	0,00%
25	BAA STANSTED	0,45351127			
	DONOL	66282	25482,8948	-40799,1052	-61,55%
	DOL	35639	16162,6883	-19476,3117	-54,65%
	AF	1335978	605881,084	-730096,916	-54,65%
	WLUs	14107480	17283350,8	3175870,8	22,51%
	ATM	148900	281467,189	132567,189	89,03%
	INOA	82243	82243	0	0,00%
26	MANCHESTER AG Plc.	0,42360401			
	DONOL	143876	60946,4498	-82929,5502	-57,64%
	DOL	102079	39388,3075	-62690,6925	-61,41%
	AF	1710993	724783,487	-986209,513	-57,64%
	WLUs	20211770	27153716,7	6941946,75	34,35%
	ATM	181000	484143,477	303143,477	167,48%
	INOA	141319	141319	0	0,00%

27	F MÜNCHEN GmbH	0,40211185			
	DONOL	214646	86311,7	-128334,3	-59,79%
	DOL	184488	62301,6844	-122186,316	-66,23%
	AF	2063566	829784,34	-1233781,66	-59,79%
	WLUs	25747259	32609937,8	6862678,82	26,65%
	ATM	321800	592471,413	270671,413	84,11%
	INOA	180500	180500	0	0,00%
28	F HAMBURG GmbH	1			
	DONOL	39182	39182	0	0,00%
	DOL	79840	79840	0	0,00%
	AF	220285	220285	0	0,00%
	WLUs	10271352	10271352	0	0,00%
	ATM	158600	158600	0	0,00%
	INOA	65494	65494	0	0,00%
29	AI GENÈVE	1			
	DONOL	41793	41793	0	0,00%
	DOL	38823	38823	0	0,00%
	AF	140740	140740	0	0,00%
	WLUs	8030944	8030944	0	0,00%
	ATM	163200	163200	0	0,00%
	INOA	61335	61335	0	0,00%
30	UNIQUE ZURICH A	0,68411952			
	DONOL	70784	48424,716	-22359,284	-31,59%
	DOL	83156	30227,7318	-52928,2682	-63,65%
	AF	1582881	1082879,79	-500001,211	-31,59%
	WLUs	25941591	31677779,3	5736188,27	22,11%
	ATM	309200	520673,495	211473,495	68,39%
	INOA	151454	151454	0	0,00%
31	F WIEN GROUP	0,93761241			
	DONOL	68298	64037,0523	-4260,94769	-6,24%
	DOL	139733	51846,9506	-87886,0494	-62,90%
	AF	475719	446040,038	-29678,9624	-6,24%
	WLUs	13448250	19153243,6	5704993,63	42,42%
	ATM	185400	359217,655	173817,655	93,75%
	INOA	116984	116984	0	0,00%
32	ATHENS IA	0,31982478			
	DONOL	52500	13321,5243	-39178,4757	-74,63%
	DOL	15800	5053,23153	-10746,7685	-68,02%
	AF	1930202	617326,431	-1312875,57	-68,02%
	WLUs	10884204	10884204	0	0,00%
	ATM	138000	138000	0	0,00%
	INOA	37236	37236	0	0,00%

Model Name = CCR(CCR-I)

Rank	DMU	Score
1	AI GENEVE	1,00
1	F HAMBURG GmbH	1,00
1	AER RIANTA	1,00
1	APACLtd. MELB.	1,00
1	SAGA TORINO SpA	1,00
1	BRISBANE ACLtd	1,00
1	INDIANAPOLIS A A	1,00
1	YVR AS	1,00
1	OTTAWA IA	1,00
1	CALGARY A A	1,00
11	AUCKLAND IALtd	0,98
12	F WIEN GROUP	0,94
13	ASUR	0,92
14	AD FIRENZE SpA	0,88
15	ADMTL	0,87
16	COPENH. AIRPORTS A/S	0,84
17	SYDNEY ACLtd.	0,82
18	WACLtd PERTH	0,79
19	UNIQUE ZURICH A	0,68
20	MWAA NATIONAL	0,67
21	MWAA DULLES	0,63
22	OSLO F A/S	0,61
23	NARITA A A	0,61
24	BRUSSELS AIC	0,58
25	HKIA	0,56
26	GTAA	0,48
27	BAA STANSTED	0,45
28	MANCHESTER AG Plc.	0,42
29	F MÜNCHEN GmbH	0,40
30	AD ROMA SpA	0,40
31	CZECH A A	0,40
32	ATHENS IA	0,32

**DEA model = CCR(CCR-I)
Problem = Indústriaes Aeroportuàries 2001
Sense E**

No. of DMUs = 32

No. of Input items = 3

Input(1) = DONOL

Input(2) = DOL

Input(3) = AF

No. of Output items = 3

Output(1) = WLU s

Output(2) = ATM

Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

Frequency in Reference Set	
Reference	Frequency to other DMUs
APACLtd. MELB.	4
BRISBANE ACLtd	3
CALGARY A A	4
OTTAWA IA	3
YVR AS	18
INDIANAPOLIS A A	14
SAGA TORINO SpA	1
AER RIAN TA	0
F HAMBURG GmbH	0
AI GENEVE	3

	DONOL	DOL	AF	WLU s	ATM	INOA
Max	756.884,00	184.488,00	6.637.260,00	53.548.760,00	406.300,00	338.937,00
Min	7.473,00	4.466,00	24.059,00	1.535.929,00	31.000,00	4.253,00
Average	88.335,31	49.066,06	1.263.027,84	17.572.447,16	206.693,75	95.191,13
SD	135.394,99	49.057,65	1.385.863,54	11.088.529,88	94.351,64	77.572,85

Correlation

	DONOL	DOL	AF	WLU s	ATM	INOA
DONOL	1,00	0,43	0,81	0,63	0,10	0,82
DOL	0,43	1,00	0,28	0,40	0,39	0,65
AF	0,81	0,28	1,00	0,86	0,16	0,75
WLU s	0,63	0,40	0,86	1,00	0,53	0,80
ATM	0,10	0,39	0,16	0,53	1,00	0,36
INOA	0,82	0,65	0,75	0,80	0,36	1,00

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None

No. of DMUs 32,00

Average 0,76

SD 0,23

Maximum 1,00

Minimum 0,32

Average of scores = 0,76

No. of efficient DMUs = 10,00

No. of inefficient DMUs = 22,00

No. of over iteration DMUs = 0,00

Model Name = CCR(CCR-I) 2001 sense empleats

No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)
1	HKIA	0.5557	25	APACLtd. MELB.	0.3044	BRISBANE ACLtd	0.7890
2	NARITA A A	0.6059	23	YVR AS	0.1415	INDIANAPOLIS A A	4.1149
3	APACLtd. MELB.	1.0000	1	APACLtd. MELB.	1.0000		
4	AUCKLAND IALtd	0.9822	11	YVR AS	0.1839	INDIANAPOLIS A A	0.4258
5	BRISBANE ACLtd	1.0000	1	BRISBANE ACLtd	1.0000		
6	WAGLIdPERTH	0.7936	18	YVR AS	0.0042	INDIANAPOLIS A A	0.3364
7	SYDNEY ACLtd.	0.8229	17	YVR AS	0.3370	INDIANAPOLIS A A	1.5408
8	ADMTL	0.8700	15	OTTAWA IA	1.5150	YVR AS	0.3922
9	CALGARY A A	1.0000	1	CALGARY A A	1.0000		
10	GTA	0.4788	26	APACLtd. MELB.	0.6343	CALGARY A A	1.1843
11	OTTAWA IA	1.0000	1	OTTAWA IA	1.0000		0.4284
12	YVR AS	1.0000	1	YVR AS	1.0000		
13	ASUR	0.9156	13	BRISBANE ACLtd	0.6201	CALGARY A A	0.6205
14	INDIANAPOLIS A A	1.0000	1	INDIANAPOLIS A A	1.0000		
15	MWAA NATIONAL	0.6709	20	YVR AS	0.6697	INDIANAPOLIS A A	0.1429
16	MWAA DULLES	0.6308	21	YVR AS	0.9252	INDIANAPOLIS A A	0.4418
17	AD ROMA SpA	0.3981	30	YVR AS	1.7916	INDIANAPOLIS A A	0.0990
18	SAGA TORINO SpA	1.0000	1	SAGA TORINO SpA	1.0000		
19	AD FIRENZE SpA	0.8812	14	OTTAWA IA	0.3016	SAGA TORINO SpA	0.1728
20	AER RIANTA	1.0000	1	AER RIANTA	1.0000		
21	BRUSSELS AIC	0.5768	24	CALGARY A A	0.0281	OTTAWA IA	2.9760
22	COPENH. AIRPORTS A/S	0.8441	16	APACLtd. MELB.	0.4385	YVR AS	0.4811
23	OSLO F A/S	0.6059	22	YVR AS	0.9002	INDIANAPOLIS A A	0.3727
24	CZECH A A	0.3954	31	YVR AS	0.2779	INDIANAPOLIS A A	0.1841
25	BAA STANSTED	0.4535	27	YVR AS	0.6796	INDIANAPOLIS A A	0.2833
26	MANCHESTER AG Plc.	0.4236	28	YVR AS	1.3841	AI GENEVE	0.3197
27	F MÜNCHEN GmbH	0.4021	29	YVR AS	1.4362	AI GENEVE	0.8837
28	F HAMBURG GmbH	1.0000	1	F HAMBURG GmbH	1.0000		
29	AI GENEVE	1.0000	1	AI GENEVE	1.0000		
30	UNIQUE ZÜRICH A	0.68412	19	YVR AS	1.3089	INDIANAPOLIS A A	0.4582
31	F WIEN GROUP	0.937612	12	YVR AS	0.6138	AI GENEVE	1.0273
32	ATHENS IA	0.319825	32	APACLtd. MELB.	0.0351	BRISBANE ACLtd	0.5385
						CALGARY A A	0.2374
						INDIANAPOLIS A A	0.0159

Indústries Aeroportuàries 2001	(I)DONOL	(I)DOL	(I)AF	(O)WLU _s	(O)ATM	(O)INO _A
HKIA	156961	50398	5195792	53548760	186400	217570
NARITA A A	756884	74475	6637260	42188370	124600	338937
APAC Ltd. MELB.	16525	11260	863773	20837250	187400	73440
AUCKLAND IALtd	9676	11774	508257	10293540	147900	49952
BRISBANE ACLtd	15186	5774	958876	14492100	175800	51827
WACLtd PERTH	9712	4466	409632	5546490	57600	27056
SYDNEY ACLtd.	50940	27257	1999183	28742200	317300	151889
ADMTL	41506	23869	314358	11786210	232400	45139
CALGARY A A	18726	5833	233142	8659900	138400	23104
GTAA	194700	46783	2160404	31082880	406300	111617
OTTAWA IA	14934	5483	53365	3391000	72600	10182
YVR AS	34380	19490	491155	17763740	312100	87936
ASUR	30358	7864	807457	11719790	194900	13867
INDIANAPOLIS A A	7473	10295	960350	18391720	244800	79344
MWAA NATIONAL	35909	28648	694797	13418880	244000	44811
MWAA DULLES	55658	39440	1392935	20863510	396900	71053
AD ROMA SpA	156573	174207	2449154	26906697	283700	165400
SAGA TORINO SpA	19750	19096	29551	2970632	64900	11329
AD FIRENZE SpA	8984	8404	24059	1535929	31000	4253
AER RIANTA	228981	135993	654679	20534530	284500	290914
BRUSSELS AIC	134556	57458	1014618	25522157	305500	106132
COPENH. AIRPORTS A/S	30220	68515	991109	21926644	288800	86026
OSLO F A/S	64090	35286	1320376	14614756	194800	108730
CZECH A A	36687	18488	792245	6937774	115500	39043
BAA STANSTED	66282	35639	1335978	14107480	148900	82243
MANCHESTER AG Plc.	143876	102079	1710993	20211770	181000	141319
F MÜNCHEN GmbH	214646	184488	2063566	25747259	321800	180500
F HAMBURG GmbH	39182	79840	220285	10271352	158600	65494
AI GENÈVE	41793	38823	140740	8030944	163200	61335
UNIQUE ZURICH A	70784	83156	1582881	25941591	309200	151454
F WIEN GROUP	68298	139733	475719	13448250	185400	116984
ATHENS IA	52500	15800	1930202	10884204	138000	37236

FULLA AEROPORTS 2001. SENSE YVRAS

Model Name = CCR(CCR-I)		2001.sense YVRAS			
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,6			
	DONOL	156.961,0	56.854	-100.106,75	-63,78%
	DOL	50.398,0	31.436	-18.962,41	-37,63%
	E	932,0	581	-350,67	-37,63%
	AF	5.195.792,0	3.240.859	-1.954.933,29	-37,63%
	WLUs	53.548.760,0	60.911.217	7.362.457,39	13,75%
	ATM	186.400,0	640.181	453.781,05	243,44%
INOA	217.570,0	217.570	0,00	0,00%	
2	NARITA A A	0,9			
	DONOL	756.884,0	103.320	-653.564,33	-86,35%
	DOL	74.475,0	52.682	-21.792,63	-29,26%
	E	915,0	837	-77,93	-8,52%
	AF	6.637.260,0	6.071.958	-565.301,75	-8,52%
	WLUs	42.188.370,0	92.506.414	50.318.043,82	119,27%
	ATM	124.600,0	1.124.794	1.000.193,83	802,72%
INOA	338.937,0	338.937	0,00	0,00%	
3	APACLtd. MELB.	1,0			
	DONOL	16.525,0	16.525	0,00	0,00%
	DOL	11.260,0	11.260	0,00	0,00%
	E	211,0	211	0,00	0,00%
	AF	863.773,0	863.773	0,00	0,00%
	WLUs	20.837.250,0	20.837.250	0,00	0,00%
	ATM	187.400,0	187.400	0,00	0,00%
INOA	73.440,0	73.440	0,00	0,00%	
4	AUCKLAND IALtd	1,0			
	DONOL	9.676,0	9.676	0,00	0,00%
	DOL	11.774,0	11.774	0,00	0,00%
	E	282,0	282	0,00	0,00%
	AF	508.257,0	508.257	0,00	0,00%
	WLUs	10.293.540,0	10.293.540	0,00	0,00%
	ATM	147.900,0	147.900	0,00	0,00%
INOA	49.952,0	49.952	0,00	0,00%	
5	BRISBANE ACLtd	1,0			
	DONOL	15.186,0	15.186	0,00	0,00%
	DOL	5.774,0	5.774	0,00	0,00%
	E	127,0	127	0,00	0,00%
	AF	958.876,0	958.876	0,00	0,00%
	WLUs	14.492.100,0	14.492.100	0,00	0,00%
	ATM	175.800,0	175.800	0,00	0,00%
INOA	51.827,0	51.827	0,00	0,00%	
6	WACLtd PERTH	0,8			
	DONOL	9.712,0	4.029	-5.682,88	-58,51%
	DOL	4.466,0	3.673	-792,84	-17,75%
	E	112,0	92	-19,88	-17,75%
	AF	409.632,0	336.911	-72.720,76	-17,75%
	WLUs	5.546.490,0	6.799.526	1.253.036,26	22,59%
	ATM	57.600,0	79.586	21.986,42	38,17%
INOA	27.056,0	27.056	0,00	0,00%	
7	SYDNEY ACLtd.	0,9			
	DONOL	50.940,0	34.961	-15.979,40	-31,37%
	DOL	27.257,0	24.584	-2.672,78	-9,81%
	E	482,0	435	-47,26	-9,81%
	AF	1.999.183,0	1.803.146	-196.036,58	-9,81%
	WLUs	28.742.200,0	42.841.054	14.098.854,06	49,05%
	ATM	317.300,0	389.652	72.351,54	22,80%
INOA	151.889,0	151.889	0,00	0,00%	

8	ADMTL	1,0			
	DONOL	41.506,0	40.177	-1.328,88	-3,20%
	DOL	23.869,0	19.184	-4.685,13	-19,63%
	E	595,0	387	-207,57	-34,89%
	AF	314.358,0	304.293	-10.064,65	-3,20%
	WLUs	11.786.210,0	13.098.981	1.312.770,81	11,14%
	ATM	232.400,0	232.400	0,00	0,00%
	INOA	45.139,0	45.139	0,00	0,00%
9	CALGARY A A	1,0			
	DONOL	18.726,0	18.726	0,00	0,00%
	DOL	5.833,0	5.833	0,00	0,00%
	E	145,0	145	0,00	0,00%
	AF	233.142,0	233.142	0,00	0,00%
	WLUs	8.659.900,0	8.659.900	0,00	0,00%
	ATM	138.400,0	138.400	0,00	0,00%
	INOA	23.104,0	23.104	0,00	0,00%
10	GTAA	0,6			
	DONOL	194.700,0	48.854	-145.845,73	-74,91%
	DOL	46.783,0	28.368	-18.414,83	-39,36%
	E	705,0	427	-277,50	-39,36%
	AF	2.160.404,0	1.310.021	-850.383,19	-39,36%
	WLUs	31.082.880,0	33.237.107	2.154.227,38	6,93%
	ATM	406.300,0	406.300	0,00	0,00%
	INOA	111.617,0	111.617	0,00	0,00%
11	OTTAWA IA	1,0			
	DONOL	14.934,0	14.934	0,00	0,00%
	DOL	5.483,0	5.483	0,00	0,00%
	E	148,0	148	0,00	0,00%
	AF	53.365,0	53.365	0,00	0,00%
	WLUs	3.391.000,0	3.391.000	0,00	0,00%
	ATM	72.600,0	72.600	0,00	0,00%
	INOA	10.182,0	10.182	0,00	0,00%
12	ASUR	0,9			
	DONOL	30.358,0	21.037	-9.320,67	-30,70%
	DOL	7.864,0	7.200	-663,82	-8,44%
	E	658,0	169	-489,27	-74,36%
	AF	807.457,0	739.297	-68.159,71	-8,44%
	WLUs	11.719.790,0	14.360.692	2.640.901,66	22,53%
	ATM	194.900,0	194.900	0,00	0,00%
	INOA	13.867,0	46.476	32.609,11	235,16%
13	INDIANAPOLIS A A	1,0			
	DONOL	7.473,0	7.473	0,00	0,00%
	DOL	10.295,0	10.295	0,00	0,00%
	E	300,0	300	0,00	0,00%
	AF	960.350,0	960.350	0,00	0,00%
	WLUs	18.391.720,0	18.391.720	0,00	0,00%
	ATM	244.800,0	244.800	0,00	0,00%
	INOA	79.344,0	79.344	0,00	0,00%
14	MWAA NATIONAL	0,8			
	DONOL	35.909,0	27.420	-8.489,07	-23,64%
	DOL	28.648,0	10.279	-18.369,26	-64,12%
	E	510,0	265	-244,87	-48,01%
	AF	694.797,0	530.543	-164.253,55	-23,64%
	WLUs	13.418.880,0	15.937.940	2.519.059,53	18,77%
	ATM	244.000,0	244.000	0,00	0,00%
	INOA	44.811,0	49.125	4.313,54	9,63%
15	MWAA DULLES	0,7			
	DONOL	55.658,0	39.143	-16.514,64	-29,67%
	DOL	39.440,0	16.715	-22.724,95	-57,62%
	E	703,0	441	-262,47	-37,34%
	AF	1.392.935,0	979.628	-413.306,57	-29,67%
	WLUs	20.863.510,0	26.579.568	5.716.057,73	27,40%
	ATM	396.900,0	396.900	0,00	0,00%
	INOA	71.053,0	88.097	17.044,23	23,99%

16	AD ROMA SpA	0,4			
	DONOL	156.573,0	69.845	-86.728,17	-55,39%
	DOL	174.207,0	77.711	-96.495,91	-55,39%
	E	2.318,0	1.034	-1.283,98	-55,39%
	AF	2.449.154,0	1.092.530	-1.356.623,75	-55,39%
	WLU	26.906.697,0	28.382.035	1.475.338,30	5,48%
	ATM	283.700,0	453.464	169.763,81	59,84%
	INOA	165.400,0	165.400	0,00	0,00%
17	SAGA TORINO SpA	1,0			
	DONOL	19.750,0	19.750	0,00	0,00%
	DOL	19.096,0	19.096	0,00	0,00%
	E	425,0	425	0,00	0,00%
	AF	29.551,0	29.551	0,00	0,00%
	WLU	2.970.632,0	2.970.632	0,00	0,00%
	ATM	64.900,0	64.900	0,00	0,00%
	INOA	11.329,0	11.329	0,00	0,00%
18	AD FIRENZE SpA	0,9			
	DONOL	8.984,0	7.916	-1.067,74	-11,88%
	DOL	8.404,0	4.953	-3.450,94	-41,06%
	E	200,0	118	-81,93	-40,97%
	AF	24.059,0	21.200	-2.859,38	-11,88%
	WLU	1.535.929,0	1.535.929	0,00	0,00%
	ATM	31.000,0	33.108	2.108,25	6,80%
	INOA	4.253,0	5.028	775,14	18,23%
19	AER RIANTA	1,0			
	DONOL	228.981,0	228.981	0,00	0,00%
	DOL	135.993,0	135.993	0,00	0,00%
	E	2.511,0	2.511	0,00	0,00%
	AF	654.679,0	654.679	0,00	0,00%
	WLU	20.534.530,0	20.534.530	0,00	0,00%
	ATM	284.500,0	284.500	0,00	0,00%
	INOA	290.914,0	290.914	0,00	0,00%
20	BRUSSELS AIC	0,8			
	DONOL	134.556,0	58.514	-76.041,73	-56,51%
	DOL	57.458,0	45.251	-12.207,13	-21,25%
	E	767,0	604	-162,95	-21,25%
	AF	1.014.618,0	799.059	-215.558,68	-21,25%
	WLU	25.522.157,0	25.522.157	0,00	0,00%
	ATM	305.500,0	355.141	49.640,60	16,25%
	INOA	106.132,0	106.132	0,00	0,00%
21	COPENH. AIRPORTS A	0,9			
	DONOL	30.220,0	27.216	-3.004,40	-9,94%
	DOL	68.515,0	27.521	-40.993,73	-59,83%
	E	1.347,0	456	-890,54	-66,11%
	AF	991.109,0	892.575	-98.533,82	-9,94%
	WLU	21.926.644,0	21.926.644	0,00	0,00%
	ATM	288.800,0	288.800	0,00	0,00%
	INOA	86.026,0	86.026	0,00	0,00%
22	OSLO F A/S	0,8			
	DONOL	64.090,0	39.375	-24.714,58	-38,56%
	DOL	35.286,0	27.315	-7.971,45	-22,59%
	E	588,0	455	-132,83	-22,59%
	AF	1.320.376,0	1.022.090	-298.285,80	-22,59%
	WLU	14.614.756,0	25.106.478	10.491.721,87	71,79%
	ATM	194.800,0	235.810	41.009,56	21,05%
	INOA	108.730,0	108.730	0,00	0,00%
23	CZECH A A	0,5			
	DONOL	36.687,0	13.429	-23.258,34	-63,40%
	DOL	18.488,0	8.719	-9.769,42	-52,84%
	E	1.589,0	204	-1.385,36	-87,18%
	AF	792.245,0	373.607	-418.637,72	-52,84%
	WLU	6.937.774,0	8.285.869	1.348.095,03	19,43%
	ATM	115.500,0	115.500	0,00	0,00%
	INOA	39.043,0	39.043	0,00	0,00%

24	BAA STANSTED	0,6			
	DONOL	66.282,0	31.013	-35.268,74	-53,21%
	DOL	35.639,0	19.878	-15.760,84	-44,22%
	E	676,0	377	-298,95	-44,22%
	AF	1.335.978,0	745.161	-590.817,29	-44,22%
	WLUs	14.107.480,0	18.021.876	3.914.395,79	27,75%
	ATM	148.900,0	175.783	26.883,06	18,05%
	INOA	82.243,0	82.243	0,00	0,00%
25	MANCHESTER AG Plc.	0,5			
	DONOL	143.876,0	74.925	-68.950,73	-47,92%
	DOL	102.079,0	53.159	-48.920,05	-47,92%
	E	1.639,0	854	-785,47	-47,92%
	AF	1.710.993,0	891.021	-819.971,50	-47,92%
	WLUs	20.211.770,0	21.935.427	1.723.656,57	8,53%
	ATM	181.000,0	242.711	61.711,10	34,09%
	INOA	141.319,0	141.319	0,00	0,00%
26	F MUNCHEN GmbH	0,4			
	DONOL	214.646,0	95.689	-118.957,36	-55,42%
	DOL	184.488,0	82.244	-102.243,72	-55,42%
	E	4.472,0	1.378	-3.094,23	-69,19%
	AF	2.063.566,0	919.932	-1.143.633,55	-55,42%
	WLUs	25.747.259,0	26.129.853	382.594,42	1,49%
	ATM	321.800,0	434.278	112.478,00	34,95%
	INOA	180.500,0	180.500	0,00	0,00%
27	F HAMBURG GmbH	1,0			
	DONOL	39.182,0	39.182	0,00	0,00%
	DOL	79.840,0	79.840	0,00	0,00%
	E	809,0	809	0,00	0,00%
	AF	220.285,0	220.285	0,00	0,00%
	WLUs	10.271.352,0	10.271.352	0,00	0,00%
	ATM	158.600,0	158.600	0,00	0,00%
	INOA	65.494,0	65.494	0,00	0,00%
28	AI GENÈVE	1,0			
	DONOL	41.793,0	41.793	0,00	0,00%
	DOL	38.823,0	38.823	0,00	0,00%
	E	539,0	539	0,00	0,00%
	AF	140.740,0	140.740	0,00	0,00%
	WLUs	8.030.944,0	8.030.944	0,00	0,00%
	ATM	163.200,0	163.200	0,00	0,00%
	INOA	61.335,0	61.335	0,00	0,00%
29	UNIQUE ZURICH A	0,7			
	DONOL	70.784,0	52.627	-18.157,09	-25,65%
	DOL	83.156,0	61.825	-21.330,68	-25,65%
	E	1.215,0	903	-311,66	-25,65%
	AF	1.582.881,0	1.176.850	-406.031,17	-25,65%
	WLUs	25.941.591,0	27.554.830	1.613.239,41	6,22%
	ATM	309.200,0	422.002	112.801,63	36,48%
	INOA	151.454,0	151.454	0,00	0,00%
30	F WIEN GROUP	1,0			
	DONOL	68.298,0	68.298	0,00	0,00%
	DOL	139.733,0	139.733	0,00	0,00%
	E	342,0	342	0,00	0,00%
	AF	475.719,0	475.719	0,00	0,00%
	WLUs	13.448.250,0	13.448.250	0,00	0,00%
	ATM	185.400,0	185.400	0,00	0,00%
	INOA	116.984,0	116.984	0,00	0,00%
31	ATHENS IA	0,3			
	DONOL	52.500,0	13.322	-39.178,48	-74,63%
	DOL	15.800,0	5.053	-10.746,77	-68,02%
	E	520,0	115	-405,00	-77,89%
	AF	1.930.202,0	617.326	-1.312.875,57	-68,02%
	WLUs	10.884.204,0	10.884.204	0,00	0,00%
	ATM	138.000,0	138.000	0,00	0,00%
	INOA	37.236,0	37.236	0,00	0,00%

DEA model = CCR(CC Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)
 Problem = Indústries Aeroportuàries 2001 Sense YVRAS

Frequency in Reference Set		DMUs with inappropriate Data with respect to the chosen Model	
Reference	Frequency to other DMUs	No.	DMU
APACld. MELB.	10		None
AUCKLAND IALtd	3		
BRISBANE ACLtd	7	No. of DMUs	31
CALGARY A A	9	Average	0,808660927
OTTAWA IA	2	SD	0,207059889
INDIANAPOLIS A A	10	Maximum	1
SAGA TORINO Spa	1	Minimum	0,319824781
AER RIANTA	5		
F HAMBURG GmbH	1		
AI GENÈVE	5		
F WIEN GROUP	9		

No. of DMUs = 31
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	756884	184488	4472	6637260	53548760	406300	338937
Min	7473	4466	112	24059	1535929	31000	4253
Average	90075,80645	50020,12903	863,9354839	1287926,968	17566276,42	203293,5	95425,1613
SD	137208,6452	49549,5615	884,4011619	1400976,174	11265903,54	93911,85	78802,9762

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0,424772235	0,352532174	0,806810659	0,627450667	0,121017	0,81701956
DOL	0,424772235	1	0,806451958	0,277176545	0,402290098	0,426906	0,6501008
E	0,352532174	0,806451958	1	0,248641415	0,33522091	0,410713	0,53340232
AF	0,806810659	0,277176545	0,248641415	1	0,863783842	0,183261	0,75386197
WLUs	0,627450667	0,402290098	0,33522091	0,863783842	1	0,536511	0,79553758
ATM	0,121016747	0,426905922	0,410712612	0,18326148	0,536511043	1	0,37459321
INOA	0,817019557	0,650100798	0,533402319	0,75386197	0,795537579	0,374593	1

No. of DMUs in Data = 31
 Average of scores = 0,808660927

No. of DMUs with inappropriate Data = 0
 No. of efficient DMUs = 11

No. of evaluated DMUs = 31
 No. of inefficient DMUs = 20

No. of over iteration DMUs = 0

Indústries Aeroportuàries 2002	(I)DONOL	(I)DOL	(I)E	(I)JAF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	149720	52813	941	5024828	58927840	197700	207175
NARITA A A	810855	77517	896	6821590	48902220	165800	375425
APACLtd. MELB.	18630	10067	196	859452	19805450	157600	76336
AUCKLAND IALtd	9393	11752	262	635996	10693110	142600	53525
BRISBANE ACLtd	16180	6095	129	962627	13623190	150800	47197
WACLtd PERTH	9194	5126	118	403701	4892810	48600	30262
SYDNEY ACLtd.	56208	29024	409	1965287	28313530	254700	153417
ADMTL	34431	22363	600	387282	11229060	225500	45588
CALGARY A A	17380	6535	161	339945	8947840	133700	27736
G TAA	201733	50722	916	2786382	29013840	383200	108456
OTTAWA IA	16301	5972	150	387282	3217000	68500	9976
YVR AS	33862	20856	310	533555	17227390	296600	76406
ASUR	33118	7993	637	802138	11525420	201200	17872
INDIANAPOLIS A A	10055	13990	400	1126765	15898170	205900	77499
MWAA NATIONAL	38397	31409	245	753124	12908060	215700	50238
MWAA DUILLES	61158	42821	380	1509868	20253480	372600	76070
AD ROMA SpA	151610	152175	2327	2322802	26647933	282800	169340
SAGA TORINO SpA	19492	18817	414	27646	2937561	59900	12057
AD FIRENZE SpA	7814	8569	118	22963	1390494	26900	4112
AER RIANTA	208794	142636	2416	706277	21089494	263700	271010
BRUSSELS AIC	108288	53463	768	1133053	19815130	256900	103461
COPENH. AIRPORTS A/S	33399	70809	1347	1037292	22009113	266900	97144
OSLO F A/S	59000	45166	581	1283355	14034821	177500	108984
CZECHA A	33658	21078	1624	786798	6834739	115400	41795
BAA STANSTED	84842	37151	705	1570303	15880670	166800	112396
MANCHESTER AG Plc.	206203	119245	1924	1704044	25691430	211100	174983
F MÜNCHEN GmbH	221266	193712	4568	2091034	25412805	330900	173100
F HAMBURG GmbH	32192	75966	808	235711	9744955	150200	54798
AI GENÈVE	43251	42548	575	163505	8095767	163800	62306
UNIQUE ZURICH A	68832	89236	1273	1831201	22166168	282200	139249
F WIEN GROUP	68298	120259	336	510902	13574260	186800	118963
ATHENS IA	68500	27900	712	1853899	12817278	159500	49844

FULLA AEROPORTS 2002. REPE

Model Name = CCR(CCR-I)

2002

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,6			
	DONOL	149.720,0	60.086	-89.633,68	-59,87%
	DOL	52.813,0	28.805	-24.008,02	-45,46%
	E	941,0	575	-365,88	-38,88%
	AF	5.024.828,0	3.071.049	-1.953.779,20	-38,88%
	WLU's	58.927.840,0	58.927.840	0,00	0,00%
	ATM	197.700,0	527.564	329.864,39	166,85%
	INOA	207.175,0	219.778	12.602,89	6,08%
2	NARITA A A	1,0			
	DONOL	810.855,0	810.855	0,00	0,00%
	DOL	77.517,0	77.517	0,00	0,00%
	E	896,0	896	0,00	0,00%
	AF	6.821.590,0	6.821.590	0,00	0,00%
	WLU's	48.902.220,0	48.902.220	0,00	0,00%
	ATM	165.800,0	165.800	0,00	0,00%
	INOA	375.425,0	375.425	0,00	0,00%
3	APAC Ltd. MELB.	1,0			
	DONOL	18.630,0	18.630	0,00	0,00%
	DOL	10.067,0	10.067	0,00	0,00%
	E	196,0	196	0,00	0,00%
	AF	859.452,0	859.452	0,00	0,00%
	WLU's	19.805.450,0	19.805.450	0,00	0,00%
	ATM	157.600,0	157.600	0,00	0,00%
	INOA	76.336,0	76.336	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	9.393,0	9.393	0,00	0,00%
	DOL	11.752,0	11.752	0,00	0,00%
	E	262,0	262	0,00	0,00%
	AF	635.996,0	635.996	0,00	0,00%
	WLU's	10.693.110,0	10.693.110	0,00	0,00%
	ATM	142.600,0	142.600	0,00	0,00%
	INOA	53.525,0	53.525	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	16.180,0	16.180	0,00	0,00%
	DOL	6.095,0	6.095	0,00	0,00%
	E	129,0	129	0,00	0,00%
	AF	962.627,0	962.627	0,00	0,00%
	WLU's	13.623.190,0	13.623.190	0,00	0,00%
	ATM	150.800,0	150.800	0,00	0,00%
	INOA	47.197,0	47.197	0,00	0,00%
6	WAAC Ltd PERTH	0,8			
	DONOL	9.194,0	7.628	-1.565,90	-17,03%
	DOL	5.126,0	4.253	-873,05	-17,03%
	E	118,0	81	-36,60	-31,02%
	AF	403.701,0	334.944	-68.757,47	-17,03%
	WLU's	4.892.810,0	7.762.863	2.870.052,68	58,66%
	ATM	48.600,0	65.503	16.902,66	34,78%
	INOA	30.262,0	30.262	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	DONOL	56.208,0	53.921	-2.287,32	-4,07%
	DOL	29.024,0	20.874	-8.150,06	-28,08%
	E	409,0	392	-16,64	-4,07%
	AF	1.965.287,0	1.786.742	-178.544,80	-9,08%
	WLU's	28.313.530,0	38.692.921	10.379.390,78	36,66%
	ATM	254.700,0	302.778	48.078,27	18,88%
	INOA	153.417,0	153.417	0,00	0,00%
8	ADMTL	1,0			
	DONOL	34.431,0	30.724	-3.707,16	-10,77%
	DOL	22.363,0	21.604	-759,43	-3,40%
	E	600,0	374	-226,04	-37,67%
	AF	387.282,0	374.130	-13.151,87	-3,40%
	WLU's	11.229.060,0	12.884.573	1.655.512,83	14,74%
	ATM	225.500,0	225.500	0,00	0,00%
	INOA	45.588,0	56.763	11.174,68	24,51%

9	CALGARY A A	1,0			
	DONOL	17.380,0	17.380	0,00	0,00%
	DOL	6.535,0	6.535	0,00	0,00%
	E	161,0	161	0,00	0,00%
	AF	339.945,0	339.945	0,00	0,00%
	WLUs	8.947.840,0	8.947.840	0,00	0,00%
	ATM	133.700,0	133.700	0,00	0,00%
	INOA	27.736,0	27.736	0,00	0,00%
10	GTAA	0,5			
	DONOL	201.733,0	44.863	-156.869,62	-77,76%
	DOL	50.722,0	22.887	-27.835,28	-54,88%
	E	916,0	413	-502,68	-54,88%
	AF	2.786.382,0	1.257.268	-1.529.114,01	-54,88%
	WLUs	29.013.840,0	29.013.840	0,00	0,00%
	ATM	383.200,0	383.200	0,00	0,00%
	INOA	108.456,0	111.398	2.941,50	2,71%
11	OTTAWA IA	0,5			
	DONOL	16.301,0	8.741	-7.559,73	-46,38%
	DOL	5.972,0	3.259	-2.713,47	-45,44%
	E	150,0	82	-68,15	-45,44%
	AF	387.282,0	211.315	-175.967,29	-45,44%
	WLUs	3.217.000,0	4.786.729	1.569.729,36	48,79%
	ATM	68.500,0	68.500	0,00	0,00%
	INOA	9.976,0	15.024	5.048,32	50,60%
12	YVR AS	1,0			
	DONOL	33.862,0	33.862	0,00	0,00%
	DOL	20.856,0	20.856	0,00	0,00%
	E	310,0	310	0,00	0,00%
	AF	533.555,0	533.555	0,00	0,00%
	WLUs	17.227.390,0	17.227.390	0,00	0,00%
	ATM	296.600,0	296.600	0,00	0,00%
	INOA	76.406,0	76.406	0,00	0,00%
13	ASUR	1,0			
	DONOL	33.118,0	33.118	0,00	0,00%
	DOL	7.993,0	7.993	0,00	0,00%
	E	637,0	637	0,00	0,00%
	AF	802.138,0	802.138	0,00	0,00%
	WLUs	11.525.420,0	11.525.420	0,00	0,00%
	ATM	201.200,0	201.200	0,00	0,00%
	INOA	17.872,0	17.872	0,00	0,00%
14	INDIANAPOLIS A A	1,0			
	DONOL	10.055,0	10.055	0,00	0,00%
	DOL	13.990,0	13.990	0,00	0,00%
	E	400,0	400	0,00	0,00%
	AF	1.126.765,0	1.126.765	0,00	0,00%
	WLUs	15.898.170,0	15.898.170	0,00	0,00%
	ATM	205.900,0	205.900	0,00	0,00%
	INOA	77.499,0	77.499	0,00	0,00%
15	MWAA NATIONAL	0,9			
	DONOL	38.397,0	24.220	-14.176,74	-36,92%
	DOL	31.409,0	13.403	-18.006,19	-57,33%
	E	245,0	214	-30,75	-12,55%
	AF	753.124,0	658.590	-94.533,61	-12,55%
	WLUs	12.908.060,0	14.432.164	1.524.104,42	11,81%
	ATM	215.700,0	215.700	0,00	0,00%
	INOA	50.238,0	58.833	8.595,50	17,11%
16	MWAA DULLES	0,9			
	DONOL	61.158,0	41.410	-19.748,45	-32,29%
	DOL	42.821,0	21.288	-21.533,17	-50,29%
	E	380,0	358	-21,74	-5,72%
	AF	1.509.868,0	1.423.489	-86.379,37	-5,72%
	WLUs	20.253.480,0	26.941.252	6.687.772,46	33,02%
	ATM	372.600,0	372.600	0,00	0,00%
	INOA	76.070,0	105.081	29.011,24	38,14%

17	AD ROMA SpA	0,5			
	DONOL	151.610,0	75.660	-75.949,86	-50,10%
	DOL	152.175,0	75.942	-76.232,90	-50,10%
	E	2.327,0	651	-1.676,08	-72,03%
	AF	2.322.802,0	1.159.182	-1.163.620,32	-50,10%
	WLUs	26.647.933,0	33.086.989	6.439.056,06	24,16%
	ATM	282.800,0	539.260	256.459,98	90,69%
	INOA	169.340,0	169.340	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	19.492,0	19.492	0,00	0,00%
	DOL	18.817,0	18.817	0,00	0,00%
	E	414,0	414	0,00	0,00%
	AF	27.646,0	27.646	0,00	0,00%
	WLUs	2.937.561,0	2.937.561	0,00	0,00%
	ATM	59.900,0	59.900	0,00	0,00%
	INOA	12.057,0	12.057	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	DONOL	7.814,0	7.814	0,00	0,00%
	DOL	8.569,0	8.569	0,00	0,00%
	E	118,0	118	0,00	0,00%
	AF	22.963,0	22.963	0,00	0,00%
	WLUs	1.390.494,0	1.390.494	0,00	0,00%
	ATM	26.900,0	26.900	0,00	0,00%
	INOA	4.112,0	4.112	0,00	0,00%
20	AER RIANTA	1,0			
	DONOL	208.794,0	208.794	0,00	0,00%
	DOL	142.636,0	142.636	0,00	0,00%
	E	2.416,0	2.416	0,00	0,00%
	AF	706.277,0	706.277	0,00	0,00%
	WLUs	21.089.494,0	21.089.494	0,00	0,00%
	ATM	263.700,0	263.700	0,00	0,00%
	INOA	271.010,0	271.010	0,00	0,00%
21	BRUSSELS AIC	0,6			
	DONOL	108.288,0	49.000	-59.287,87	-54,75%
	DOL	53.463,0	32.011	-21.451,89	-40,12%
	E	768,0	460	-308,16	-40,12%
	AF	1.133.053,0	678.418	-454.634,57	-40,12%
	WLUs	19.815.130,0	21.797.737	1.982.607,13	10,01%
	ATM	256.900,0	371.240	114.340,42	44,51%
	INOA	103.461,0	103.461	0,00	0,00%
22	COPENH. AIRPORTS A/S	0,9			
	DONOL	33.399,0	30.033	-3.365,77	-10,08%
	DOL	70.809,0	21.332	-49.477,41	-69,87%
	E	1.347,0	381	-966,06	-71,72%
	AF	1.037.292,0	932.759	-104.532,69	-10,08%
	WLUs	22.009.113,0	22.009.113	0,00	0,00%
	ATM	266.900,0	294.606	27.706,38	10,38%
	INOA	97.144,0	97.144	0,00	0,00%
23	OSLO F A/S	0,7			
	DONOL	59.000,0	41.383	-17.616,93	-29,86%
	DOL	45.166,0	31.680	-13.486,21	-29,86%
	E	581,0	408	-173,48	-29,86%
	AF	1.283.355,0	900.155	-383.199,61	-29,86%
	WLUs	14.034.821,0	24.166.465	10.131.644,32	72,19%
	ATM	177.500,0	346.886	169.386,14	95,43%
	INOA	108.984,0	108.984	0,00	0,00%
24	CZECH A A	0,5			
	DONOL	33.658,0	15.313	-18.345,33	-54,51%
	DOL	21.078,0	9.589	-11.488,59	-54,51%
	E	1.624,0	155	-1.468,95	-90,45%
	AF	786.798,0	357.953	-428.845,11	-54,51%
	WLUs	6.834.739,0	9.732.844	2.898.104,99	42,40%
	ATM	115.400,0	137.041	21.641,35	18,75%
	INOA	41.795,0	41.795	0,00	0,00%

25	BAA STANSTED	0,6			
	DONOL	84.842,0	39.857	-44.985,45	-53,02%
	DOL	37.151,0	23.626	-13.524,66	-36,40%
	E	705,0	382	-323,46	-45,88%
	AF	1.570.303,0	998.641	-571.662,17	-36,40%
	WLU _s	15.880.670,0	27.040.919	11.160.249,11	70,28%
	ATM	166.800,0	345.451	178.651,14	107,10%
	INOA	112.396,0	112.396	0,00	0,00%
26	MANCHESTER AG Plc.	0,5			
	DONOL	206.203,0	99.620	-106.582,86	-51,69%
	DOL	119.245,0	64.851	-54.394,49	-45,62%
	E	1.924,0	1.038	-886,44	-46,07%
	AF	1.704.044,0	926.732	-777.312,34	-45,62%
	WLU _s	25.691.430,0	29.495.529	3.804.098,85	14,81%
	ATM	211.100,0	483.083	271.983,02	128,84%
	INOA	174.983,0	174.983	0,00	0,00%
27	F MÜNCHEN GmbH	0,4			
	DONOL	221.266,0	94.567	-126.698,62	-57,26%
	DOL	193.712,0	82.791	-110.920,98	-57,26%
	E	4.568,0	1.022	-3.545,74	-77,62%
	AF	2.091.034,0	893.692	-1.197.342,19	-57,26%
	WLU _s	25.412.805,0	31.484.364	6.071.559,13	23,89%
	ATM	330.900,0	562.640	231.740,22	70,03%
	INOA	173.100,0	173.100	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	32.192,0	32.192	0,00	0,00%
	DOL	75.966,0	75.966	0,00	0,00%
	E	808,0	808	0,00	0,00%
	AF	235.711,0	235.711	0,00	0,00%
	WLU _s	9.744.955,0	9.744.955	0,00	0,00%
	ATM	150.200,0	150.200	0,00	0,00%
	INOA	54.798,0	54.798	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	43.251,0	43.251	0,00	0,00%
	DOL	42.548,0	42.548	0,00	0,00%
	E	575,0	575	0,00	0,00%
	AF	163.505,0	163.505	0,00	0,00%
	WLU _s	8.095.767,0	8.095.767	0,00	0,00%
	ATM	163.800,0	163.800	0,00	0,00%
	INOA	62.306,0	62.306	0,00	0,00%
30	UNIQUE ZURICH A	0,7			
	DONOL	68.832,0	46.573	-22.258,63	-32,34%
	DOL	89.236,0	60.379	-28.856,80	-32,34%
	E	1.273,0	583	-690,02	-54,20%
	AF	1.831.201,0	1.239.034	-592.166,93	-32,34%
	WLU _s	22.166.168,0	25.523.027	3.356.859,04	15,14%
	ATM	282.200,0	367.984	85.783,97	30,40%
	INOA	139.249,0	139.249	0,00	0,00%
31	F WIEN GROUP	1,0			
	DONOL	68.298,0	68.298	0,00	0,00%
	DOL	120.259,0	120.259	0,00	0,00%
	E	336,0	336	0,00	0,00%
	AF	510.902,0	510.902	0,00	0,00%
	WLU _s	13.574.260,0	13.574.260	0,00	0,00%
	ATM	186.800,0	186.800	0,00	0,00%
	INOA	118.963,0	118.963	0,00	0,00%
32	ATHENS IA	0,3			
	DONOL	68500	20.003	-48.497,25	-0,708
	DOL	27900	8.728	-19.171,57	-0,6872
	E	712	194	-517,76	-0,7272
	AF	1853899	579.987	-1.273.912,39	-0,6872
	WLU _s	12817278	14.203.214	1.385.935,53	0,1081
	ATM	159500	159.500	0,00	0
	INOA	49844	49.844	0,00	0

**Model Name = CCR(CCR-I)
2002**

No.	DMU	Score	Excess DONOL S-(1)	Excess DOL S-(2)	Excess E S-(3)	Excess AF S-(4)	Shortage WLU's S+(1)	Shortage ATM S+(2)	Shortage INOA S+(3)
1	HKIA	0,61	31.418,79	3.473,00	0,00	0,00	0,00	329.864,39	12.602,89
2	NARITA A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
3	APACld. MELB.	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
4	AUCKLAND IALtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
5	BRISBANE ACLtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
6	WACLtd PERTH	0,83	0,00	0,00	16,51	0,00	2.870.052,68	16.902,66	0,00
7	SYDNEY ACLtd.	0,96	0,00	6.968,97	0,00	98.569,83	10.379.390,78	48.078,27	0,00
8	ADMTL	0,97	2.537,91	0,00	205,66	0,00	1.655.512,83	0,00	11.174,68
9	CALGARY A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
10	GTA A	0,45	46.162,35	0,00	0,00	0,00	0,00	0,00	2.941,50
11	OTTAWA IA	0,55	153,13	0,00	0,00	0,00	1.569.729,36	0,00	5.048,32
12	YVR AS	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
13	ASUR	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
14	INDIANAPOLIS A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
15	MWAA NATIONAL	0,87	9.357,07	14.063,67	0,00	0,00	1.524.104,42	0,00	8.595,50
16	MWAA DULLES	0,94	16.249,61	19.083,38	0,00	0,00	6.687.772,46	0,00	29.011,24
17	AD ROMA Spa	0,50	0,00	0,00	510,36	0,00	6.439.056,06	256.459,98	0,00
18	SAGA TORINO Spa	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
19	AD FIRENZE Spa	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
20	AER RIANIA	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
21	BRUSSELS AIC	0,60	15.837,60	0,00	0,00	0,00	1.982.607,13	114.340,42	0,00
22	COPENH. AIRPORTS A/S	0,90	0,00	42.341,66	830,32	0,00	0,00	27.706,38	0,00
23	OSLO F A/S	0,70	0,00	0,00	0,00	0,00	10.131.644,32	169.386,14	0,00
24	CZECHA A	0,45	0,00	0,00	583,79	0,00	2.898.104,99	21.641,35	0,00
25	BAA STANSTED	0,64	14.099,07	0,00	66,80	0,00	11.160.249,11	178.651,14	0,00
26	MANCHESTER AG Plc.	0,54	12.521,82	0,00	8,79	0,00	3.804.098,85	271.983,02	0,00
27	F MUNCHEN GmbH	0,43	0,00	0,00	930,06	0,00	6.071.559,13	231.740,22	0,00
28	F HAMBURG GmbH	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
29	AI GENEVE	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
30	UNIQUE ZURICH A	0,68	0,00	0,00	278,36	0,00	3.356.859,04	85.783,97	0,00
31	F WIEN GROUP	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
32	ATHENS IA	0,31	1.427,26	0,00	28,51	0,00	1.385.935,53	0,00	0,00

DEA model = CCR(CCR-I)

Problem = Indústries Aeroportuàries 2002

No. of DMUs = 32

Returns to Scale = Constant ($0 \leq \sum \text{of Lambda} < \text{Infinity}$)

No. of Input items = 4

Frequency in Reference Set

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLUs

Output(2) = ATM

Output(3) = INOA

Reference	Frequency to other DMUs
NARITA A A	1
APACLtd. MELB.	9
AUCKLAND IALtd	6
BRISBANE ACLtd	5
CALGARY A A	3
YVR AS	15
ASUR	1
INDIANAPOLIS A A	0
SAGA TORINO SpA	1
AD FIRENZE SpA	0
AER RIANTA	2
F HAMBURG GmbH	0
AI GENÈVE	1
F WIEN GROUP	5

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	810.855,00	193.712,00	4.568,00	6.821.590,00	58.927.840,00	383.200,00	375.425,00
Min	7.814,00	5.126,00	118,00	22.963,00	1.390.494,00	26.900,00	4.112,00
Average	91.626,69	50.430,78	851,44	1.330.643,97	17.610.032,13	197.562,50	97.710,00
SD	144.195,23	47.899,59	901,64	1.390.138,33	12.015.867,53	85.936,27	79.271,48

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1,00	0,44	0,35	0,83	0,67	0,20	0,85
DOL	0,44	1,00	0,85	0,30	0,41	0,50	0,65
E	0,35	0,85	1,00	0,25	0,33	0,45	0,50
AF	0,83	0,30	0,25	1,00	0,90	0,29	0,79
WLUs	0,67	0,41	0,33	0,90	1,00	0,49	0,82
ATM	0,20	0,50	0,45	0,29	0,49	1,00	0,40
INOA	0,85	0,65	0,50	0,79	0,82	0,40	1,00

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32

No. of DMUs: 32

Average 0,810323914

SD 0,224441247

Maximum 1

Minimum 0,31284693

Average of scores = 0,810323914
 No. of efficient DMUs = 14
 No. of inefficient DMUs = 18
 No. of over iteration DMUs = 0

Model Name = CCR(CCR-I)

No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)
1	HKIA	0,61	24	APACLtd. MELB.	BRISBANE ACLtd	1,38	
2	NARITA A A	1,00	1	NARITA A A			
3	APACLtd. MELB.	1,00	1	APACLtd. MELB.			
4	AUCKLAND IALtd	1,00	1	AUCKLAND IALtd			
5	BRISBANE ACLtd	1,00	1	BRISBANE ACLtd			
6	WACLtd PERTH	0,83	20	APACLtd. MELB.	AUCKLAND IALtd	0,01	YVR AS
7	SYDNEY ACLtd.	0,96	16	NARITA A A	APACLtd. MELB.	1,90	
8	ADMIL	0,97	15	YVR AS	SAGA TORINO SpA	0,39	
9	CALGARY A A	1,00	1	CALGARY A A			
10	GTA A	0,45	30	APACLtd. MELB.	BRISBANE ACLtd	0,42	CALGARY A A
11	OTTAWA IA	0,55	26	BRISBANE ACLtd	CALGARY A A	0,43	ASUR
12	YVR AS	1,00	1	YVR AS			
13	ASUR	1,00	1	ASUR			
14	INDIANAPOLIS A A	1,00	1	INDIANAPOLIS A A			
15	MWAA NATIONAL	0,87	19	BRISBANE ACLtd	YVR AS	0,53	
16	MWAA DUILLES	0,94	17	BRISBANE ACLtd	YVR AS	0,70	
17	AD ROMA SpA	0,50	28	AUCKLAND IALtd	YVR AS	1,44	F WIEN GROUP
18	SAGA TORINO SpA	1,00	1	SAGA TORINO SpA			0,35
19	AD FIRENZE SpA	1,00	1	AD FIRENZE SpA			
20	AER RIANTA	1,00	1	AER RIANTA			
21	BRUSSELS AIC	0,60	25	YVR AS	AER RIANTA	0,03	F WIEN GROUP
22	COPENH. AIRPORTS A/S	0,90	18	APACLtd. MELB.	AUCKLAND IALtd	0,55	YVR AS
23	OSLO F A/S	0,70	21	APACLtd. MELB.	AUCKLAND IALtd	0,23	YVR AS
24	CZECH A A	0,45	29	APACLtd. MELB.	AUCKLAND IALtd	0,06	YVR AS
25	BAA STANSTED	0,64	23	APACLtd. MELB.	YVR AS	0,82	
26	MANCHESTER AG Plc.	0,54	27	YVR AS	AER RIANTA	0,25	
27	F MÜNCHEN GmbH	0,43	31	YVR AS	AI GENÈVE	1,04	F WIEN GROUP
28	F HAMBURG GmbH	1,00	1	F HAMBURG GmbH			
29	AI GENÈVE	1,00	1	AI GENÈVE			
30	UNIQUE ZÜRICH A	0,68	22	AUCKLAND IALtd	YVR AS	0,39	F WIEN GROUP
31	F WIEN GROUP	1,00	1	F WIEN GROUP			0,30
32	ATHENS IA	0,31	32	APACLtd. MELB.	CALGARY A A	0,73	YVR AS
							0,00

AEROPORTS 2002. VRS

Model Name = BCC(BCC-I)		2002			
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	DONOL	149.720,0	149.720	0,00	0,00%
	DOL	52.813,0	52.813	0,00	0,00%
	E	941,0	941	0,00	0,00%
	AF	5.024.828,0	5.024.828	0,00	0,00%
	WLUUs	58.927.840,0	58.927.840	0,00	0,00%
	ATM	197.700,0	197.700	0,00	0,00%
	INOA	207.175,0	207.175	0,00	0,00%
2	NARITA A A	1,0			
	DONOL	810.855,0	810.855	0,00	0,00%
	DOL	77.517,0	77.517	0,00	0,00%
	E	896,0	896	0,00	0,00%
	AF	6.821.590,0	6.821.590	0,00	0,00%
	WLUUs	48.902.220,0	48.902.220	0,00	0,00%
	ATM	165.800,0	165.800	0,00	0,00%
	INOA	375.425,0	375.425	0,00	0,00%
3	APACLtd. MELB.	1,0			
	DONOL	18.630,0	18.630	0,00	0,00%
	DOL	10.067,0	10.067	0,00	0,00%
	E	196,0	196	0,00	0,00%
	AF	859.452,0	859.452	0,00	0,00%
	WLUUs	19.805.450,0	19.805.450	0,00	0,00%
	ATM	157.600,0	157.600	0,00	0,00%
	INOA	76.336,0	76.336	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	9.393,0	9.393	0,00	0,00%
	DOL	11.752,0	11.752	0,00	0,00%
	E	262,0	262	0,00	0,00%
	AF	635.996,0	635.996	0,00	0,00%
	WLUUs	10.693.110,0	10.693.110	0,00	0,00%
	ATM	142.600,0	142.600	0,00	0,00%
	INOA	53.525,0	53.525	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	16.180,0	16.180	0,00	0,00%
	DOL	6.095,0	6.095	0,00	0,00%
	E	129,0	129	0,00	0,00%
	AF	962.627,0	962.627	0,00	0,00%
	WLUUs	13.623.190,0	13.623.190	0,00	0,00%
	ATM	150.800,0	150.800	0,00	0,00%
	INOA	47.197,0	47.197	0,00	0,00%
6	WACLtd PERTH	1,0			
	DONOL	9.194,0	9.194	0,00	0,00%
	DOL	5.126,0	5.126	0,00	0,00%
	E	118,0	118	0,00	0,00%
	AF	403.701,0	403.701	0,00	0,00%
	WLUUs	4.892.810,0	4.892.810	0,00	0,00%
	ATM	48.600,0	48.600	0,00	0,00%
	INOA	30.262,0	30.262	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	DONOL	56.208,0	56.208	0,00	0,00%
	DOL	29.024,0	29.024	0,00	0,00%
	E	409,0	409	0,00	0,00%
	AF	1.965.287,0	1.965.287	0,00	0,00%
	WLUUs	28.313.530,0	28.313.530	0,00	0,00%
	ATM	254.700,0	254.700	0,00	0,00%
	INOA	153.417,0	153.417	0,00	0,00%
8	ADMTL	1,0			
	DONOL	34.431,0	30.669	-3.761,87	-10,93%
	DOL	22.363,0	21.714	-649,19	-2,90%
	E	600,0	355	-245,46	-40,91%
	AF	387.282,0	376.039	-11.242,71	-2,90%
	WLUUs	11.229.060,0	12.863.261	1.634.201,26	14,55%
	ATM	225.500,0	225.500	0,00	0,00%
	INOA	45.588,0	58.493	12.905,48	28,31%

Indústries Aeroportuàries 2004	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	141726	52480	958	5143532	55046760	190300	168753
NARITA A A	780588	89326	891	6700760	54749286	186633	390215
APACld MELB	23994	11349	188	844200	22665310	165300	91963
AUCKLAND IALtd	6589	11343	281	676113	12673430	154800	39329
BRISBANEACLtd	19077	8136	143	964305	15302238	144700	58823
WACLtd PERTH	19099	6955	132	510896	8532000	53000	33739
SYDNEY ACLtd.	46659	21517	286	3614655	31176000	266700	170658
ADMTL	40156	26646	600	692091	12874828	235200	50401
CALGARY A A	26303	7568	162	409188	10414039	136000	26376
GTAA	255521	62462	1041	3681940	28292360	370100	128563
OTTAWA IA	18329	7364	163	225905	3609885	69600	12565
YVR AS	38494	22692	284	565180	16763000	270400	81346
ASUR	47234	7935	619	882557	13974360	250802	24572
INDIANAPOLIS A A	19010	15300	415	1161599	17114800	212558	49425
MWAA NATIONAL	39856	34011	300	883912	15970870	268600	63653
MWAA DULLES	64778	44637	460	1772074	25783080	469600	102980
AD ROMA SpA	155269	155839	2314	2389895	32213038	353900	188044
SAGA TORINO SpA	18604	17944	447	72537	3289648	57800	14968
AD FIRENZE SpA	9432	9676	133	29633	1518747	24096	6031
AER RIANITA	215694	159941	2382	760341	23640850	271137	289750
BRUSSELS AIC	114914	52305	768	1023085	20970237	252069	106100
COPENH. AIRPORTS A/S	45731	82170	1485	976124	22391075	272500	109754
OSLO F A/S	100321	32315	552	1173815	15534160	186800	132325
CZECH A A	40173	27134	1709	979689	10165263	144962	47699
BAA STANSTED	69938	52430	988	1699984	23179610	177400	139977
MANCHESTER AG Plc.	200761	107852	2573	2041956	29653000	261700	206025
F MÜNCHEN GmbH	320442	220874	4946	2061913	29912785	370534	355200
F HAMBURG GmbH	31968	74140	716	332963	10619193	151430	69950
AI GENÈVE	51898	49939	556	200872	9094330	166600	73700
UNIQUE ZÜRICH A	104000	85494	1260	1913791	20882296	266700	155625
F WIEN GROUP	97373	169953	357	712171	16881779	224800	138121
ATHENS IA	80000	34600	698	2061262	14755252	191000	67740

FULLA AEROPORTS 2004. Fulla 4 inputs

Model Name = CCR(CCR-I)

2004

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,5			
	DONOL	141.726,0	58.274	-83.452,28	-58,88%
	DOL	52.480,0	27.563	-24.916,92	-47,48%
	E	958,0	457	-501,41	-52,34%
	AF	5.143.532,0	2.050.291	-3.093.241,28	-60,14%
	WLU _s	55.046.760,0	55.046.760	0,00	0,00%
	ATM	190.300,0	401.461	211.160,62	110,96%
	INOA	168.753,0	223.349	54.595,60	32,35%
2	NARITA A.A	0,8			
	DONOL	780.588,0	103.856	-676.732,34	-86,70%
	DOL	89.326,0	48.593	-40.732,63	-45,60%
	E	891,0	737	-153,57	-17,24%
	AF	6.700.760,0	5.545.829	-1.154.930,91	-17,24%
	WLU _s	54.749.286,0	85.736.355	30.987.069,45	56,60%
	ATM	186.633,0	662.994	476.361,13	255,24%
	INOA	390.215,0	390.215	0,00	0,00%
3	APACLtd. MELB.	1,0			
	DONOL	23.994,0	23.994	0,00	0,00%
	DOL	11.349,0	11.349	0,00	0,00%
	E	188,0	188	0,00	0,00%
	AF	844.200,0	844.200	0,00	0,00%
	WLU _s	22.665.310,0	22.665.310	0,00	0,00%
	ATM	165.300,0	165.300	0,00	0,00%
	INOA	91.963,0	91.963	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	6.589,0	6.589	0,00	0,00%
	DOL	11.343,0	11.343	0,00	0,00%
	E	281,0	281	0,00	0,00%
	AF	676.113,0	676.113	0,00	0,00%
	WLU _s	12.673.430,0	12.673.430	0,00	0,00%
	ATM	154.800,0	154.800	0,00	0,00%
	INOA	39.329,0	39.329	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	19.077,0	19.077	0,00	0,00%
	DOL	8.136,0	8.136	0,00	0,00%
	E	143,0	143	0,00	0,00%
	AF	964.305,0	964.305	0,00	0,00%
	WLU _s	15.302.238,0	15.302.238	0,00	0,00%
	ATM	144.700,0	144.700	0,00	0,00%
	INOA	58.823,0	58.823	0,00	0,00%
6	WACLtd PERTH	0,6			
	DONOL	19.099,0	9.106	-9.992,69	-52,32%
	DOL	6.955,0	4.323	-2.631,75	-37,84%
	E	132,0	71	-60,71	-45,99%
	AF	510.896,0	317.574	-193.321,64	-37,84%
	WLU _s	8.532.000,0	8.532.000	0,00	0,00%
	ATM	53.000,0	62.754	9.753,98	18,40%
	INOA	33.739,0	34.666	926,67	2,75%
7	SYDNEY ACLtd.	1,0			
	DONOL	46.659,0	46.659	0,00	0,00%
	DOL	21.517,0	21.517	0,00	0,00%
	E	286,0	286	0,00	0,00%
	AF	3.614.655,0	3.614.655	0,00	0,00%
	WLU _s	31.176.000,0	31.176.000	0,00	0,00%
	ATM	266.700,0	266.700	0,00	0,00%
	INOA	170.658,0	170.658	0,00	0,00%
8	ADMTL	0,8			
	DONOL	40.156,0	31.349	-8.806,88	-21,93%
	DOL	26.646,0	19.510	-7.135,60	-26,78%
	E	600,0	263	-336,61	-56,10%
	AF	692.091,0	540.304	-151.787,09	-21,93%
	WLU _s	12.874.828,0	15.005.833	2.131.005,22	16,55%
	ATM	235.200,0	235.200	0,00	0,00%
	INOA	50.401,0	69.756	19.355,48	38,40%

9	CALGARY A A	1,0			
	DONOL	26.303,0	26.303	0,00	0,00%
	DOL	7.568,0	7.568	0,00	0,00%
	E	162,0	162	0,00	0,00%
	AF	409.188,0	409.188	0,00	0,00%
	WLU _s	10.414.039,0	10.414.039	0,00	0,00%
	ATM	136.000,0	136.000	0,00	0,00%
	INOA	26.376,0	26.376	0,00	0,00%
10	GTA A	0,4			
	DONOL	255.521,0	58.313	-197.208,11	-77,18%
	DOL	62.462,0	24.560	-37.902,47	-60,68%
	E	1.041,0	409	-631,69	-60,68%
	AF	3.681.940,0	1.447.708	-2.234.232,33	-60,68%
	WLU _s	28.292.360,0	34.266.900	5.974.539,67	21,12%
	ATM	370.100,0	370.100	0,00	0,00%
	INOA	128.563,0	128.563	0,00	0,00%
11	OTTAWA IA	0,7			
	DONOL	18.329,0	10.419	-7.909,85	-43,15%
	DOL	7.364,0	5.260	-2.104,21	-28,57%
	E	163,0	89	-74,14	-45,49%
	AF	225.905,0	161.354	-64.550,59	-28,57%
	WLU _s	3.609.885,0	4.245.002	635.116,71	17,59%
	ATM	69.600,0	69.600	0,00	0,00%
	INOA	12.565,0	18.684	6.118,61	48,70%
12	YVR AS	1,0			
	DONOL	38.494,0	38.494	0,00	0,00%
	DOL	22.692,0	22.692	0,00	0,00%
	E	284,0	284	0,00	0,00%
	AF	565.180,0	565.180	0,00	0,00%
	WLU _s	16.763.000,0	16.763.000	0,00	0,00%
	ATM	270.400,0	270.400	0,00	0,00%
	INOA	81.346,0	81.346	0,00	0,00%
13	ASUR	1,0			
	DONOL	47.234,0	47.234	0,00	0,00%
	DOL	7.935,0	7.935	0,00	0,00%
	E	619,0	619	0,00	0,00%
	AF	882.557,0	882.557	0,00	0,00%
	WLU _s	13.974.360,0	13.974.360	0,00	0,00%
	ATM	250.802,0	250.802	0,00	0,00%
	INOA	24.572,0	24.572	0,00	0,00%
14	INDIANAPOLIS A A	0,9			
	DONOL	19.010,0	16.974	-2.036,28	-10,71%
	DOL	15.300,0	13.661	-1.638,88	-10,71%
	E	415,0	371	-44,45	-10,71%
	AF	1.161.599,0	998.840	-162.758,52	-14,01%
	WLU _s	17.114.800,0	17.632.053	517.252,92	3,02%
	ATM	212.558,0	212.558	0,00	0,00%
	INOA	49.425,0	55.786	6.361,24	12,87%
15	MWAA NATIONAL	0,9			
	DONOL	39.856,0	36.905	-2.950,89	-7,40%
	DOL	34.011,0	23.881	-10.129,82	-29,78%
	E	300,0	278	-22,21	-7,40%
	AF	883.912,0	818.468	-65.443,81	-7,40%
	WLU _s	15.970.870,0	15.970.870	0,00	0,00%
	ATM	268.600,0	268.600	0,00	0,00%
	INOA	63.653,0	69.808	6.155,25	9,67%
16	MWAA DULLES	1,0			
	DONOL	64.778,0	64.778	0,00	0,00%
	DOL	44.637,0	44.637	0,00	0,00%
	E	460,0	460	0,00	0,00%
	AF	1.772.074,0	1.772.074	0,00	0,00%
	WLU _s	25.783.080,0	25.783.080	0,00	0,00%
	ATM	469.600,0	469.600	0,00	0,00%
	INOA	102.980,0	102.980	0,00	0,00%

17	AD ROMA SpA	0,5			
	DONOL	155.269,0	80.093	-75.176,44	-48,42%
	DOL	155.839,0	80.387	-75.452,41	-48,42%
	E	2.314,0	923	-1.391,43	-60,13%
	AF	2.389.895,0	1.232.782	-1.157.113,06	-48,42%
	WLU _s	32.213.038,0	36.661.401	4.448.362,63	13,81%
	ATM	353.900,0	374.739	20.839,07	5,89%
	INOA	188.044,0	188.044	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	18.604,0	18.604	0,00	0,00%
	DOL	17.944,0	17.944	0,00	0,00%
	E	447,0	447	0,00	0,00%
	AF	72.537,0	72.537	0,00	0,00%
	WLU _s	3.289.648,0	3.289.648	0,00	0,00%
	ATM	57.800,0	57.800	0,00	0,00%
	INOA	14.968,0	14.968	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	DONOL	9.432,0	9.432	0,00	0,00%
	DOL	9.676,0	9.676	0,00	0,00%
	E	133,0	133	0,00	0,00%
	AF	29.633,0	29.633	0,00	0,00%
	WLU _s	1.518.747,0	1.518.747	0,00	0,00%
	ATM	24.096,0	24.096	0,00	0,00%
	INOA	6.031,0	6.031	0,00	0,00%
20	AER RIANTA	1,0			
	DONOL	215.694,0	215.694	0,00	0,00%
	DOL	159.941,0	159.941	0,00	0,00%
	E	2.382,0	2.382	0,00	0,00%
	AF	760.341,0	760.341	0,00	0,00%
	WLU _s	23.640.850,0	23.640.850	0,00	0,00%
	ATM	271.137,0	271.137	0,00	0,00%
	INOA	289.750,0	289.750	0,00	0,00%
21	BRUSSELS AIC	0,7			
	DONOL	114.914,0	53.740	-61.173,97	-53,23%
	DOL	52.305,0	35.170	-17.134,81	-32,76%
	E	768,0	449	-319,12	-41,55%
	AF	1.023.085,0	687.928	-335.156,53	-32,76%
	WLU _s	20.970.237,0	20.970.237	0,00	0,00%
	ATM	252.069,0	341.648	89.579,04	35,54%
	INOA	106.100,0	106.100	0,00	0,00%
22	COPENH. AIRPORTS A/S	0,9			
	DONOL	45.731,0	40.407	-5.324,45	-11,64%
	DOL	82.170,0	29.329	-52.840,66	-64,31%
	E	1.485,0	367	-1.118,49	-75,32%
	AF	976.124,0	862.474	-113.649,83	-11,64%
	WLU _s	22.391.075,0	24.292.809	1.901.734,31	8,49%
	ATM	272.500,0	272.500	0,00	0,00%
	INOA	109.754,0	109.754	0,00	0,00%
23	OSLO F A/S	0,9			
	DONOL	100.321,0	48.108	-52.212,69	-52,05%
	DOL	32.315,0	28.371	-3.944,32	-12,21%
	E	552,0	444	-107,96	-19,56%
	AF	1.173.815,0	1.030.541	-143.273,98	-12,21%
	WLU _s	15.534.160,0	27.981.131	12.446.970,98	80,13%
	ATM	186.800,0	213.641	26.840,72	14,37%
	INOA	132.325,0	132.325	0,00	0,00%
24	CZECH A A	0,4			
	DONOL	40.173,0	17.787	-22.385,83	-55,72%
	DOL	27.134,0	11.529	-15.604,82	-57,51%
	E	1.709,0	176	-1.532,59	-89,68%
	AF	979.689,0	433.771	-545.917,77	-55,72%
	WLU _s	10.165.263,0	11.169.313	1.004.049,99	9,88%
	ATM	144.962,0	144.962	0,00	0,00%
	INOA	47.699,0	47.699	0,00	0,00%

25	BAA STANSTED	0,7			
	DONOL	69.938,0	46.442	-23.495,65	-33,59%
	DOL	52.430,0	34.816	-17.613,85	-33,59%
	E	988,0	452	-535,95	-54,25%
	AF	1.699.984,0	1.128.875	-571.109,22	-33,59%
	WLUs	23.179.610,0	31.445.694	8.266.084,33	35,66%
	ATM	177.400,0	263.175	85.775,07	48,35%
	INOA	139.977,0	139.977	0,00	0,00%
26	MANCHESTER AG Plc.	0,6			
	DONOL	200.761,0	100.222	-100.539,23	-50,08%
	DOL	107.852,0	66.615	-41.236,71	-38,23%
	E	2.573,0	1.015	-1.558,21	-60,56%
	AF	2.041.956,0	1.261.224	-780.732,37	-38,23%
	WLUs	29.653.000,0	34.932.032	5.279.031,61	17,80%
	ATM	261.700,0	287.507	25.807,18	9,86%
	INOA	206.025,0	206.025	0,00	0,00%
27	F MÜNCHEN GmbH	0,7			
	DONOL	320.442,0	223.274	-97.167,54	-30,32%
	DOL	220.874,0	159.601	-61.273,41	-27,74%
	E	4.946,0	2.394	-2.551,51	-51,59%
	AF	2.061.913,0	1.489.911	-572.002,31	-27,74%
	WLUs	29.912.785,0	43.009.799	13.097.014,08	43,78%
	ATM	370.534,0	405.705	35.170,70	9,49%
	INOA	355.200,0	355.200	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	31.968,0	31.968	0,00	0,00%
	DOL	74.140,0	74.140	0,00	0,00%
	E	716,0	716	0,00	0,00%
	AF	332.963,0	332.963	0,00	0,00%
	WLUs	10.619.193,0	10.619.193	0,00	0,00%
	ATM	151.430,0	151.430	0,00	0,00%
	INOA	69.950,0	69.950	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	51.898,0	51.898	0,00	0,00%
	DOL	49.939,0	49.939	0,00	0,00%
	E	556,0	556	0,00	0,00%
	AF	200.872,0	200.872	0,00	0,00%
	WLUs	9.094.330,0	9.094.330	0,00	0,00%
	ATM	166.600,0	166.600	0,00	0,00%
	INOA	73.700,0	73.700	0,00	0,00%
30	UNIQUE ZURICH A	0,6			
	DONOL	104.000,0	60.900	-43.099,91	-41,44%
	DOL	85.494,0	50.063	-35.430,62	-41,44%
	E	1.260,0	616	-644,36	-51,14%
	AF	1.913.791,0	1.120.673	-793.117,57	-41,44%
	WLUs	20.882.296,0	32.401.847	11.519.551,35	55,16%
	ATM	266.700,0	302.221	35.520,93	13,32%
	INOA	155.625,0	155.625	0,00	0,00%
31	F WIEN GROUP	1,0			
	DONOL	97.373,0	97.373	0,00	0,00%
	DOL	169.953,0	169.953	0,00	0,00%
	E	357,0	357	0,00	0,00%
	AF	712.171,0	712.171	0,00	0,00%
	WLUs	16.881.779,0	16.881.779	0,00	0,00%
	ATM	224.800,0	224.800	0,00	0,00%
	INOA	138.121,0	138.121	0,00	0,00%
32	ATHENS IA	0,4			
	DONOL	80.000,0	28.768	-51.232,33	-64,04%
	DOL	34.600,0	12.442	-22.157,98	-64,04%
	E	698,0	251	-447,00	-64,04%
	AF	2.061.262,0	741.221	-1.320.040,63	-64,04%
	WLUs	14.755.252,0	18.596.487	3.841.235,36	26,03%
	ATM	191.000,0	191.000	0,00	0,00%
	INOA	67.740,0	67.740	0,00	0,00%

DEA model = CCR(CCR-I)
Problem = Indústries Aeroportuàries 2004

No. of DMUs = 32
No. of Input items = 4
Input(1) = DONOL
Input(2) = DOL
Input(3) = E
Input(4) = AF
No. of Output items = 3
Output(1) = WLUs
Output(2) = ATM
Output(3) = INOA

Frequency in Reference Set

Reference	Frequency to other DMUs
APAC Ltd. MELB.	13
AUCKLAND IALtd	5
BRISBANE ACLtd	3
SYDNEY ACLtd.	1
CALGARY A A	2
YVR AS	9
ASUR	3
MWAA DULLES	1
SAGA TORINO SpA	1
AD FIRENZE SpA	0
AER RIANTA	3
F HAMBURG GmbH	4
AI GENÈVE	4
F WIEN GROUP	0

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	780.588,00	220.874,00	4.946,00	6.700.760,00	55.046.760,00	469.600,00	390.215,00
Min	6.589,00	6.955,00	132,00	29.633,00	1.518.747,00	24.096,00	6.031,00
Average	101.372,84	55.072,72	900,22	1.473.716,81	19.676.359,66	213.053,78	112.324,06
SD	143.418,84	53.994,92	981,02	1.462.241,17	12.131.544,06	96.280,79	92.544,15

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1,00	0,51	0,43	0,76	0,72	0,28	0,84
DOL	0,51	1,00	0,80	0,25	0,43	0,52	0,77
E	0,43	0,80	1,00	0,22	0,37	0,48	0,69
AF	0,76	0,25	0,22	1,00	0,91	0,34	0,67
WLUs	0,72	0,43	0,37	0,91	1,00	0,50	0,78
ATM	0,28	0,52	0,48	0,34	0,50	1,00	0,48
INOA	0,84	0,77	0,69	0,67	0,78	0,48	1,00

No. of DMUs in Data = 32
No. of DMUs with inappropriate Data = 0
No. of evaluated DMUs = 32
Average of scores = 0,813231605
No. of efficient DMUs = 14
No. of inefficient DMUs = 18
No. of over iteration DMUs = 0

Model Name = CCR(CCR-I)									
No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)
1	HKIA	0.53	28	APACLtd. MELB.	2.43				
2	NARITA A A	0.83	19	APACLtd. MELB.	2.46	SYDNEY ACLtd.	0.96		
3	APACLtd. MELB.	1.00	1	APACLtd. MELB.	1.00				
4	AUCKLAND IALtd.	1.00	1	AUCKLAND IALtd.	1.00				
5	BRISBANE ACLtd.	1.00	1	BRISBANE ACLtd.	1.00				
6	WACLtd PERTH	0.62	25	APACLtd. MELB.	0.37	YVR AS	0.00		
7	SYDNEY ACLtd.	1.00	1	SYDNEY ACLtd.	1.00				
8	ADMTL	0.78	20	AUCKLAND IALtd.	0.14	YVR AS	0.79		
9	CALGARY A A	1.00	1	CALGARY A A	1.00				
10	GTA A	0.39	31	APACLtd. MELB.	0.55	BRISBANE ACLtd.	0.44	CALGARY A A	0.36
11	OTTAWA IA	0.71	22	YVR AS	0.22	ASUR	0.04		
12	YVR AS	1.00	1	YVR AS	1.00				
13	ASUR	1.00	1	ASUR	1.00				
14	INDIANAPOLIS A A	0.89	16	AUCKLAND IALtd.	0.92	BRISBANE ACLtd.	0.29	ASUR	0.12
15	MWAA DULLES	0.93	15	AUCKLAND IALtd.	0.05	BRISBANE ACLtd.	0.02	YVR AS	0.46
16	MWAA DULLES	1.00	1	MWAA DULLES	1.00				
17	AD ROMA SpA	0.52	29	APACLtd. MELB.	1.12	F HAMBURG GmbH	0.38	AI GENEVE	0.79
18	SAGA TORINO SpA	1.00	1	SAGA TORINO SpA	1.00				
19	AD FIRENZE SpA	1.00	1	AD FIRENZE SpA	1.00				
20	AER RIANTA	1.00	1	AER RIANTA	1.00				
21	BRUSSELS AIC	0.67	23	YVR AS	1.15	SAGA TORINO SpA	0.09	AI GENEVE	0.15
22	COPENH. AIRPORTS A/S	0.88	17	APACLtd. MELB.	0.58	YVR AS	0.58	F HAMBURG GmbH	0.13
23	OSLO F A/S	0.88	18	APACLtd. MELB.	1.13	AER RIANTA	0.10		
24	CZECH A A	0.44	30	APACLtd. MELB.	0.13	AUCKLAND IALtd.	0.19	YVR AS	0.35
25	BAA STANSTED	0.66	24	APACLtd. MELB.	1.23	F HAMBURG GmbH	0.11	AI GENEVE	0.26
26	MANCHESTER A G Plc.	0.62	26	APACLtd. MELB.	1.20	AER RIANTA	0.33		
27	F MÜNCHEN GmbH	0.72	21	APACLtd. MELB.	0.93	AER RIANTA	0.93		
28	F HAMBURG GmbH	1.00	1	F HAMBURG GmbH	1.00				
29	AI GENEVE	1.00	1	AI GENEVE	1.00				
30	UNIQUE ZURICH A	0.59	27	APACLtd. MELB.	1.15	F HAMBURG GmbH	0.11	AI GENEVE	0.57
31	F WIEN GROUP	1.00	1	F WIEN GROUP	1.00				
32	ATHENS IA	0.36	32	APACLtd. MELB.	0.46	AUCKLAND IALtd.	0.12	CALGARY A A	0.36
								YVR AS	0.11
								ASUR	0.06

FULLA AEROPORTS 2004. Fulla BCC

Model Name = BCC(BCC-I)

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	DONOL	141.726,0	141.726	0,00	0,00%
	DOL	52.480,0	52.480	0,00	0,00%
	E	958,0	958	0,00	0,00%
	AF	5.143.532,0	5.143.532	0,00	0,00%
	WLU's	55.046.760,0	55.046.760	0,00	0,00%
	ATM	190.300,0	190.300	0,00	0,00%
	INOA	168.753,0	168.753	0,00	0,00%
2	NARITA A A	1,0			
	DONOL	780.588,0	780.588	0,00	0,00%
	DOL	89.326,0	89.326	0,00	0,00%
	E	891,0	891	0,00	0,00%
	AF	6.700.760,0	6.700.760	0,00	0,00%
	WLU's	54.749.286,0	54.749.286	0,00	0,00%
	ATM	186.633,0	186.633	0,00	0,00%
	INOA	390.215,0	390.215	0,00	0,00%
3	APACld. MELB.	1,0			
	DONOL	23.994,0	23.994	0,00	0,00%
	DOL	11.349,0	11.349	0,00	0,00%
	E	188,0	188	0,00	0,00%
	AF	844.200,0	844.200	0,00	0,00%
	WLU's	22.665.310,0	22.665.310	0,00	0,00%
	ATM	165.300,0	165.300	0,00	0,00%
	INOA	91.963,0	91.963	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	6.589,0	6.589	0,00	0,00%
	DOL	11.343,0	11.343	0,00	0,00%
	E	281,0	281	0,00	0,00%
	AF	676.113,0	676.113	0,00	0,00%
	WLU's	12.673.430,0	12.673.430	0,00	0,00%
	ATM	154.800,0	154.800	0,00	0,00%
	INOA	39.329,0	39.329	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	19.077,0	19.077	0,00	0,00%
	DOL	8.136,0	8.136	0,00	0,00%
	E	143,0	143	0,00	0,00%
	AF	964.305,0	964.305	0,00	0,00%
	WLU's	15.302.238,0	15.302.238	0,00	0,00%
	ATM	144.700,0	144.700	0,00	0,00%
	INOA	58.823,0	58.823	0,00	0,00%
6	WACLtd PERTH	1,0			
	DONOL	19.099,0	19.099	0,00	0,00%
	DOL	6.955,0	6.955	0,00	0,00%
	E	132,0	132	0,00	0,00%
	AF	510.896,0	510.896	0,00	0,00%
	WLU's	8.532.000,0	8.532.000	0,00	0,00%
	ATM	53.000,0	53.000	0,00	0,00%
	INOA	33.739,0	33.739	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	DONOL	46.659,0	46.659	0,00	0,00%
	DOL	21.517,0	21.517	0,00	0,00%
	E	286,0	286	0,00	0,00%
	AF	3.614.655,0	3.614.655	0,00	0,00%
	WLU's	31.176.000,0	31.176.000	0,00	0,00%
	ATM	266.700,0	266.700	0,00	0,00%
	INOA	170.658,0	170.658	0,00	0,00%
8	ADMTL	0,8			
	DONOL	40.156,0	31.556	-8.599,80	-21,42%
	DOL	26.646,0	20.033	-6.612,99	-24,82%
	E	600,0	273	-327,23	-54,54%
	AF	692.091,0	543.873	-148.217,99	-21,42%
	WLU's	12.874.828,0	15.051.675	2.176.846,58	16,91%
	ATM	235.200,0	235.200	0,00	0,00%
	INOA	50.401,0	69.566	19.164,89	38,02%

9	CALGARY A A	1,0			
	DONOL	26.303,0	26.303	0,00	0,00%
	DOL	7.568,0	7.568	0,00	0,00%
	E	162,0	162	0,00	0,00%
	AF	409.188,0	409.188	0,00	0,00%
	WLU _s	10.414.039,0	10.414.039	0,00	0,00%
	ATM	136.000,0	136.000	0,00	0,00%
	INOA	26.376,0	26.376	0,00	0,00%
10	GTA A	0,6			
	DONOL	255.521,0	94.154	-161.366,76	-63,15%
	DOL	62.462,0	38.294	-24.168,31	-38,69%
	E	1.041,0	423	-618,05	-59,37%
	AF	3.681.940,0	2.257.293	-1.424.646,53	-38,69%
	WLU _s	28.292.360,0	28.292.360	0,00	0,00%
	ATM	370.100,0	370.100	0,00	0,00%
	INOA	128.563,0	128.563	0,00	0,00%
11	OTTAWA IA	1,0			
	DONOL	18.329,0	18.329	0,00	0,00%
	DOL	7.364,0	7.364	0,00	0,00%
	E	163,0	163	0,00	0,00%
	AF	225.905,0	225.905	0,00	0,00%
	WLU _s	3.609.885,0	3.609.885	0,00	0,00%
	ATM	69.600,0	69.600	0,00	0,00%
	INOA	12.565,0	12.565	0,00	0,00%
12	YVR AS	1,0			
	DONOL	38.494,0	38.494	0,00	0,00%
	DOL	22.692,0	22.692	0,00	0,00%
	E	284,0	284	0,00	0,00%
	AF	565.180,0	565.180	0,00	0,00%
	WLU _s	16.763.000,0	16.763.000	0,00	0,00%
	ATM	270.400,0	270.400	0,00	0,00%
	INOA	81.346,0	81.346	0,00	0,00%
13	ASUR	1,0			
	DONOL	47.234,0	47.234	0,00	0,00%
	DOL	7.935,0	7.935	0,00	0,00%
	E	619,0	619	0,00	0,00%
	AF	882.557,0	882.557	0,00	0,00%
	WLU _s	13.974.360,0	13.974.360	0,00	0,00%
	ATM	250.802,0	250.802	0,00	0,00%
	INOA	24.572,0	24.572	0,00	0,00%
14	INDIANAPOLIS A A	1,0			
	DONOL	19.010,0	19.010	0,00	0,00%
	DOL	15.300,0	15.300	0,00	0,00%
	E	415,0	415	0,00	0,00%
	AF	1.161.599,0	1.161.599	0,00	0,00%
	WLU _s	17.114.800,0	17.114.800	0,00	0,00%
	ATM	212.558,0	212.558	0,00	0,00%
	INOA	49.425,0	49.425	0,00	0,00%
15	MWAA NATIONAL	0,9			
	DONOL	39.856,0	37.120	-2.736,15	-6,87%
	DOL	34.011,0	22.391	-11.619,78	-34,16%
	E	300,0	279	-20,60	-6,87%
	AF	883.912,0	823.231	-60.681,31	-6,87%
	WLU _s	15.970.870,0	17.602.553	1.631.682,84	10,22%
	ATM	268.600,0	268.600	0,00	0,00%
	INOA	63.653,0	78.333	14.679,92	23,06%
16	MWAA DULLES	1,0			
	DONOL	64.778,0	64.778	0,00	0,00%
	DOL	44.637,0	44.637	0,00	0,00%
	E	460,0	460	0,00	0,00%
	AF	1.772.074,0	1.772.074	0,00	0,00%
	WLU _s	25.783.080,0	25.783.080	0,00	0,00%
	ATM	469.600,0	469.600	0,00	0,00%
	INOA	102.980,0	102.980	0,00	0,00%

17	AD ROMA SpA	1,0			
	DONOL	155.269,0	144.982	-10.286,97	-6,63%
	DOL	155.839,0	92.478	-63.360,90	-40,66%
	E	2.314,0	1.525	-789,10	-34,10%
	AF	2.389.895,0	2.325.740	-64.154,68	-2,68%
	WLU _s	32.213.038,0	32.213.038	0,00	0,00%
	ATM	353.900,0	353.900	0,00	0,00%
	INOA	188.044,0	188.044	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	18.604,0	18.604	0,00	0,00%
	DOL	17.944,0	17.944	0,00	0,00%
	E	447,0	447	0,00	0,00%
	AF	72.537,0	72.537	0,00	0,00%
	WLU _s	3.289.648,0	3.289.648	0,00	0,00%
	ATM	57.800,0	57.800	0,00	0,00%
	INOA	14.968,0	14.968	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	DONOL	9.432,0	9.432	0,00	0,00%
	DOL	9.676,0	9.676	0,00	0,00%
	E	133,0	133	0,00	0,00%
	AF	29.633,0	29.633	0,00	0,00%
	WLU _s	1.518.747,0	1.518.747	0,00	0,00%
	ATM	24.096,0	24.096	0,00	0,00%
	INOA	6.031,0	6.031	0,00	0,00%
20	AER RIANTA	1,0			
	DONOL	215.694,0	215.694	0,00	0,00%
	DOL	159.941,0	159.941	0,00	0,00%
	E	2.382,0	2.382	0,00	0,00%
	AF	760.341,0	760.341	0,00	0,00%
	WLU _s	23.640.850,0	23.640.850	0,00	0,00%
	ATM	271.137,0	271.137	0,00	0,00%
	INOA	289.750,0	289.750	0,00	0,00%
21	BRUSSELS AIC	0,8			
	DONOL	114.914,0	63.481	-51.433,16	-44,76%
	DOL	52.305,0	42.168	-10.136,61	-19,38%
	E	768,0	594	-174,03	-22,66%
	AF	1.023.085,0	824.813	-198.271,92	-19,38%
	WLU _s	20.970.237,0	20.970.237	0,00	0,00%
	ATM	252.069,0	252.069	0,00	0,00%
	INOA	106.100,0	120.071	13.970,81	13,17%
22	COPENH. AIRPORTS A/S	1,0			
	DONOL	45.731,0	45.731	0,00	0,00%
	DOL	82.170,0	82.170	0,00	0,00%
	E	1.485,0	1.485	0,00	0,00%
	AF	976.124,0	976.124	0,00	0,00%
	WLU _s	22.391.075,0	22.391.075	0,00	0,00%
	ATM	272.500,0	272.500	0,00	0,00%
	INOA	109.754,0	109.754	0,00	0,00%
23	OSLO F A/S	1,0			
	DONOL	100.321,0	100.321	0,00	0,00%
	DOL	32.315,0	32.315	0,00	0,00%
	E	552,0	552	0,00	0,00%
	AF	1.173.815,0	1.173.815	0,00	0,00%
	WLU _s	15.534.160,0	15.534.160	0,00	0,00%
	ATM	186.800,0	186.800	0,00	0,00%
	INOA	132.325,0	132.325	0,00	0,00%
24	CZECH A A	0,5			
	DONOL	40.173,0	19.486	-20.686,84	-51,49%
	DOL	27.134,0	13.162	-13.972,49	-51,49%
	E	1.709,0	214	-1.495,39	-87,50%
	AF	979.689,0	475.204	-504.484,92	-51,49%
	WLU _s	10.165.263,0	12.028.841	1.863.578,14	18,33%
	ATM	144.962,0	144.962	0,00	0,00%
	INOA	47.699,0	47.699	0,00	0,00%

25	BAA STANSTED	0,8			
	DONOL	69.938,0	58.906	-11.032,10	-15,77%
	DOL	52.430,0	36.805	-15.624,50	-29,80%
	E	988,0	553	-435,43	-44,07%
	AF	1.699.984,0	1.431.826	-268.157,52	-15,77%
	WLU _s	23.179.610,0	24.663.430	1.483.820,42	6,40%
	ATM	177.400,0	203.849	26.449,06	14,91%
	INOA	139.977,0	139.977	0,00	0,00%
26	MANCHESTER AG Plc.	0,9			
	DONOL	200.761,0	157.413	-43.347,70	-21,59%
	DOL	107.852,0	94.178	-13.674,17	-12,68%
	E	2.573,0	1.396	-1.176,97	-45,74%
	AF	2.041.956,0	1.783.064	-258.892,35	-12,68%
	WLU _s	29.653.000,0	29.653.000	0,00	0,00%
	ATM	261.700,0	261.700	0,00	0,00%
	INOA	206.025,0	206.025	0,00	0,00%
27	F MÜNCHEN GmbH	1,0			
	DONOL	320.442,0	320.442	0,00	0,00%
	DOL	220.874,0	220.874	0,00	0,00%
	E	4.946,0	4.946	0,00	0,00%
	AF	2.061.913,0	2.061.913	0,00	0,00%
	WLU _s	29.912.785,0	29.912.785	0,00	0,00%
	ATM	370.534,0	370.534	0,00	0,00%
	INOA	355.200,0	355.200	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	31.968,0	31.968	0,00	0,00%
	DOL	74.140,0	74.140	0,00	0,00%
	E	716,0	716	0,00	0,00%
	AF	332.963,0	332.963	0,00	0,00%
	WLU _s	10.619.193,0	10.619.193	0,00	0,00%
	ATM	151.430,0	151.430	0,00	0,00%
	INOA	69.950,0	69.950	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	51.898,0	51.898	0,00	0,00%
	DOL	49.939,0	49.939	0,00	0,00%
	E	556,0	556	0,00	0,00%
	AF	200.872,0	200.872	0,00	0,00%
	WLU _s	9.094.330,0	9.094.330	0,00	0,00%
	ATM	166.600,0	166.600	0,00	0,00%
	INOA	73.700,0	73.700	0,00	0,00%
30	UNIQUE ZURICH A	0,8			
	DONOL	104.000,0	80.276	-23.723,59	-22,81%
	DOL	85.494,0	63.551	-21.942,99	-25,67%
	E	1.260,0	973	-287,42	-22,81%
	AF	1.913.791,0	1.477.233	-436.557,56	-22,81%
	WLU _s	20.882.296,0	23.233.775	2.351.478,89	11,26%
	ATM	266.700,0	266.700	0,00	0,00%
	INOA	155.625,0	155.625	0,00	0,00%
31	F WIEN GROUP	1,0			
	DONOL	97.373,0	97.373	0,00	0,00%
	DOL	169.953,0	169.953	0,00	0,00%
	E	357,0	357	0,00	0,00%
	AF	712.171,0	712.171	0,00	0,00%
	WLU _s	16.881.779,0	16.881.779	0,00	0,00%
	ATM	224.800,0	224.800	0,00	0,00%
	INOA	138.121,0	138.121	0,00	0,00%
32	ATHENS IA	0,4			
	DONOL	80.000,0	28.890	-51.109,66	-63,89%
	DOL	34.600,0	12.495	-22.104,93	-63,89%
	E	698,0	252	-445,93	-63,89%
	AF	2.061.262,0	744.382	-1.316.880,05	-63,89%
	WLU _s	14.755.252,0	17.593.312	2.838.059,73	19,23%
	ATM	191.000,0	191.000	0,00	0,00%
	INOA	67.740,0	67.740	0,00	0,00%

DEA model = BCC(BCC-I)

Problem = Indústrias Aeroportuáries 2004

No. of DMUs = 32

No. of Input items = 4

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLUs

Output(2) = ATM

Output(3) = INOA

Frequency in Reference Set

Reference	Frequency to other DMUs
HKIA	3
NARITA A A	2
APACLtd. MELB.	7
AUCKLAND IALtd	4
BRISBANE ACLtd	2
WACLtd PERTH	0
SYDNEY ACLtd.	3
CALGARY A A	2
OTTAWA IA	0
YVR AS	6
ASUR	1
INDIANAPOLIS A A	0
MWAA DULLES	5
SAGA TORINO SpA	0
AD FIRENZE SpA	2
AER RIANTA	5
COPENH. AIRPORTS A/S	1
OSLO F A/S	0
F MÜNCHEN GmbH	1
F HAMBURG GmbH	0
AI GENÈVE	0
F WIEN GROUP	0

No. of DMUs

32

Average

0,92009891

SD

0,1581722

Maximum

1

Minimum

0,36112923

Statistics on Input/Output Data

Returns to Scale = Variable (Sum of Lambda = 1)

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	780.588,00	220.874,00	4.946,00	6.700.760,00	55.046.760,00	469.600,00	390.215,00
Min	6.589,00	6.955,00	132,00	29.633,00	1.518.747,00	24.096,00	6.031,00
Average	101.372,84	55.072,72	900,22	1.473.716,81	19.676.359,66	213.053,78	112.324,06
SD	143.418,84	53.994,92	981,02	1.462.241,17	12.131.544,06	96.280,79	92.544,15

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1,00	0,51	0,43	0,76	0,72	0,28	0,84
DOL	0,51	1,00	0,80	0,25	0,43	0,52	0,77
E	0,43	0,80	1,00	0,22	0,37	0,48	0,69
AF	0,76	0,25	0,22	1,00	0,91	0,34	0,67
WLUs	0,72	0,43	0,37	0,91	1,00	0,50	0,78
ATM	0,28	0,52	0,48	0,34	0,50	1,00	0,48
INOA	0,84	0,77	0,69	0,67	0,78	0,48	1,00

No. of efficient DMUs =

22

No. of inefficient DMUs =

10

No. of over iteration DMUs =

0

Name = BCC(BCC-I)		2004	
DMU	Score	Rank	Reference set (lambda)
HKIA	1,00	1	HKIA
NARITA A A	1,00	1	NARITA A A
APACltd.MELB.	1,00	1	APACltd.MELB.
AUCKLAND IALtd	1,00	1	AUCKLAND IALtd
BRISBANE ACLtd	1,00	1	BRISBANE ACLtd
WACLtdPERTH	1,00	1	WACLtdPERTH
SYDNEY ACLtd.	1,00	1	SYDNEY ACLtd.
ADMITL	0,79	28	AUCKLAND IALtd 0,15 YVR AS 0,78 AD FIRENZE SpA 0,07
CALGARY A A	1,00	1	CALGARY A A
GTA A	0,61	30	HKIA 0,05 NARITA A A 0,15 APACltd.MELB. 0,16 SYDNEY ACLtd. 0,61
OTTAWA IA	1,00	1	OTTAWA IA
YVR AS	1,00	1	YVR AS
ASUR	1,00	1	ASUR
INDIANAPOLIS A A	1,00	1	INDIANAPOLIS A A
MWAA NATIONAL	0,93	24	AUCKLAND IALtd 0,03 BRISBANE ACLtd 0,21 YVR AS 0,62 MWAA DULLES 0,14
MWAA DULLES	1,00	1	MWAA DULLES
AD ROMA SpA	0,97	23	HKIA 0,22 MWAA DULLES 0,45 AER RIANTA 0,22 F MUNCHEN Gm 0,12
SAGA TORINO SpA	1,00	1	SAGA TORINO SpA
AD FIRENZE SpA	1,00	1	AD FIRENZE SpA
AER RIANTA	1,00	1	AER RIANTA
BRUSSELS AIC	0,81	27	APACltd.MELB. 0,37 YVR AS 0,10 AER RIANTA 0,16
COPENH. AIRPORTS A/S	1,00	1	COPENH. AIRPORTS
OSLO F A/S	1,00	1	OSLO F A/S
CZECHA A	0,49	31	APACltd.MELB. 0,17 AUCKLAND IALtd 0,23 CALGARY A A 0,09 YVR AS 0,23 AD FIRENZE SpA 0,28
BAA STANSTED	0,84	26	APACltd.MELB. 0,63 SYDNEY ACLtd. 0,22 AER RIANTA 0,16
MANCHESTER AG Plc.	0,87	25	HKIA 0,16 NARITA A A 0,20 MWAA DULLES 0,13884 AER RIANTA 0,47
F MUNCHEN GmbH	1,00	1	F MUNCHEN GmbH
F HAMBURG GmbH	1,00	1	F HAMBURG GmbH
AI GENEVE	1,00	1	AI GENEVE
UNIQUE ZURICH A	0,77	29	APACltd.MELB. 0,03 SYDNEY ACLtd. 0,26 YVR AS 0,30
F WIEN GROUP	1,00	1	F WIEN GROUP
ATHENS IA	0,36	32	APACltd.MELB. 0,38 AUCKLAND IALtd 0,03 BRISBANE ACLtd 0,13 CALGARY A A 0,13 YVR AS 0,21 ASUR 0,12

Indústries Aeroportuàries 2004	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	141726	52480	958	5143532	55046760	190300	168753
NARITA A A	780588	89326	891	6700760	54749286	186633	390215
APACLtd. MELB.	23994	11349	188	844200	22665310	165300	91963
AUCKLAND IALtd	6589	11343	281	676113	12673430	154800	39329
BRISBANE ACLtd	19077	8136	143	964305	15302238	144700	58823
WACLtd PERTH	19099	6955	132	510896	8532000	53000	33739
SYDNEY ACLtd.	46659	21517	286	3614655	31176000	266700	170658
ADMTL	40156	26646	600	692091	12874828	235200	50401
CALGARY A A	26303	7568	162	409188	10414039	136000	26376
GTA A	25521	62462	1041	3681940	28292360	370100	128563
OTTAWA IA	18329	7364	163	225905	3609885	69600	12565
YVR AS	38494	22692	284	565180	16763000	270400	81346
ASUR	47234	7935	619	882557	13974360	250802	24572
INDIANAPOLIS A A	19010	15300	415	1161599	17114800	212558	49425
MWAA NATIONAL	39856	34011	300	883912	15970870	268600	63653
MWAA DULLES	64778	44637	460	1772074	25783080	469600	102980
AD ROMA SpA	155269	155839	2314	2389895	32213038	353900	188044
SAGA TORINO SpA	18604	17944	447	72537	3289648	57800	14968
AD FIRENZE SpA	9432	9676	133	29633	1518747	24096	6031
AER RIANTA	215694	159941	2382	760341	23640850	271137	289750
BRUSSELS AIC	114914	52305	768	1023085	20970237	252069	106100
COPENH. AIRPORTS A/S	45731	82170	1485	976124	22391075	272500	109754
OSLO F A/S	100321	32315	552	1173815	15534160	186800	132325
CZECH A A	40173	27134	1709	979689	10165263	144962	47699
BAA STANSTED	69938	52430	988	1699984	23179610	177400	139977
MANCHESTER AG Plc.	200761	107852	2573	2041956	29653000	261700	206025
F MUNCHEN GmbH	320442	220874	4946	2061913	29912785	370534	355200
F HAMBURG GmbH	31968	74140	716	332963	10619193	151430	69950
AI GENEVE	51898	49939	556	200872	9094330	166600	73700
UNIQUE ZURICH A	104000	85494	1260	1913791	20882296	266700	155625
F WIEN GROUP	97373	169953	357	712171	16881779	224800	138121
ATHENS IA	80000	34600	698	2061262	14755252	191000	67740

FULLA AEROPORTS 2004. Sense E. Fulla 3 inputs

Model Name = CCR(CCR-I)			2004 Sense E		
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,5			
	DONOL	141.726,0	58.274	-83.452,28	-58,88%
	DOL	52.480,0	27.563	-24.916,92	-47,48%
	AF	5.143.532,0	2.050.291	-3.093.241,28	-60,14%
	WLU _s	55.046.760,0	55.046.760	0,00	0,00%
	ATM	190.300,0	401.461	211.160,62	110,96%
	INOA	168.753,0	223.349	54.595,60	32,35%
2	NARITA A A	0,5			
	DONOL	780.588,0	101.811	-678.777,29	-86,96%
	DOL	89.326,0	48.156	-41.170,22	-46,09%
	AF	6.700.760,0	3.582.087	-3.118.672,61	-46,54%
	WLU _s	54.749.286,0	96.172.851	41.423.565,49	75,66%
	ATM	186.633,0	701.397	514.763,64	275,82%
	INOA	390.215,0	390.215	0,00	0,00%
3	APACLtd. MELB.	1,0			
	DONOL	23.994,0	23.994	0,00	0,00%
	DOL	11.349,0	11.349	0,00	0,00%
	AF	844.200,0	844.200	0,00	0,00%
	WLU _s	22.665.310,0	22.665.310	0,00	0,00%
	ATM	165.300,0	165.300	0,00	0,00%
	INOA	91.963,0	91.963	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	DONOL	6.589,0	6.589	0,00	0,00%
	DOL	11.343,0	11.343	0,00	0,00%
	AF	676.113,0	676.113	0,00	0,00%
	WLU _s	12.673.430,0	12.673.430	0,00	0,00%
	ATM	154.800,0	154.800	0,00	0,00%
	INOA	39.329,0	39.329	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	DONOL	19.077,0	19.077	0,00	0,00%
	DOL	8.136,0	8.136	0,00	0,00%
	AF	964.305,0	964.305	0,00	0,00%
	WLU _s	15.302.238,0	15.302.238	0,00	0,00%
	ATM	144.700,0	144.700	0,00	0,00%
	INOA	58.823,0	58.823	0,00	0,00%
6	WACLtd PERTH	0,6			
	DONOL	19.099,0	9.106	-9.992,69	-52,32%
	DOL	6.955,0	4.323	-2.631,75	-37,84%
	AF	510.896,0	317.574	-193.321,64	-37,84%
	WLU _s	8.532.000,0	8.532.000	0,00	0,00%
	ATM	53.000,0	62.754	9.753,98	18,40%
	INOA	33.739,0	34.666	926,67	2,75%
7	SYDNEY ACLtd.	1,0			
	DONOL	46.659,0	44.526	-2.132,74	-4,57%
	DOL	21.517,0	21.061	-456,38	-2,12%
	AF	3.614.655,0	1.566.603	-2.048.052,31	-56,66%
	WLU _s	31.176.000,0	42.060.573	10.884.572,99	34,91%
	ATM	266.700,0	306.751	40.051,27	15,02%
	INOA	170.658,0	170.658	0,00	0,00%
8	ADMTL	0,8			
	DONOL	40.156,0	31.349	-8.806,88	-21,93%
	DOL	26.646,0	19.510	-7.135,60	-26,78%
	AF	692.091,0	540.304	-151.787,09	-21,93%
	WLU _s	12.874.828,0	15.005.833	2.131.005,22	16,55%
	ATM	235.200,0	235.200	0,00	0,00%
	INOA	50.401,0	69.756	19.355,48	38,40%

9	CALGARY A A	1,0			
	DONOL	26.303,0	26.303	0,00	0,00%
	DOL	7.568,0	7.568	0,00	0,00%
	AF	409.188,0	409.188	0,00	0,00%
	WLUs	10.414.039,0	10.414.039	0,00	0,00%
	ATM	136.000,0	136.000	0,00	0,00%
	INOA	26.376,0	26.376	0,00	0,00%
10	GTAA	0,4			
	DONOL	255.521,0	57.892	-197.628,91	-77,34%
	DOL	62.462,0	23.326	-39.135,75	-62,66%
	AF	3.681.940,0	1.375.010	-2.306.930,25	-62,66%
	WLUs	28.292.360,0	33.563.381	5.271.020,76	18,63%
	ATM	370.100,0	370.100	0,00	0,00%
	INOA	128.563,0	128.563	0,00	0,00%
11	OTTAWA IA	0,7			
	DONOL	18.329,0	10.419	-7.909,85	-43,15%
	DOL	7.364,0	5.260	-2.104,21	-28,57%
	AF	225.905,0	161.354	-64.550,59	-28,57%
	WLUs	3.609.885,0	4.245.002	635.116,71	17,59%
	ATM	69.600,0	69.600	0,00	0,00%
	INOA	12.565,0	18.684	6.118,61	48,70%
12	YVR AS	1,0			
	DONOL	38.494,0	38.494	0,00	0,00%
	DOL	22.692,0	22.692	0,00	0,00%
	AF	565.180,0	565.180	0,00	0,00%
	WLUs	16.763.000,0	16.763.000	0,00	0,00%
	ATM	270.400,0	270.400	0,00	0,00%
	INOA	81.346,0	81.346	0,00	0,00%
13	ASUR	1,0			
	DONOL	47.234,0	47.234	0,00	0,00%
	DOL	7.935,0	7.935	0,00	0,00%
	AF	882.557,0	882.557	0,00	0,00%
	WLUs	13.974.360,0	13.974.360	0,00	0,00%
	ATM	250.802,0	250.802	0,00	0,00%
	INOA	24.572,0	24.572	0,00	0,00%
14	INDIANAPOLIS A A	0,9			
	DONOL	19.010,0	16.870	-2.140,39	-11,26%
	DOL	15.300,0	13.577	-1.722,67	-11,26%
	AF	1.161.599,0	961.616	-199.982,60	-17,22%
	WLUs	17.114.800,0	17.114.800	0,00	0,00%
	ATM	212.558,0	212.558	0,00	0,00%
	INOA	49.425,0	52.566	3.140,77	6,35%
15	MWAA NATIONAL	0,8			
	DONOL	39.856,0	31.869	-7.987,34	-20,04%
	DOL	34.011,0	21.862	-12.149,44	-35,72%
	AF	883.912,0	706.772	-177.140,43	-20,04%
	WLUs	15.970.870,0	17.919.959	1.949.088,78	12,20%
	ATM	268.600,0	268.600	0,00	0,00%
	INOA	63.653,0	77.819	14.166,39	22,26%
16	MWAA DULLES	0,8			
	DONOL	64.778,0	51.792	-12.985,95	-20,05%
	DOL	44.637,0	35.689	-8.948,31	-20,05%
	AF	1.772.074,0	1.416.829	-355.245,09	-20,05%
	WLUs	25.783.080,0	32.218.119	6.435.038,98	24,96%
	ATM	469.600,0	469.600	0,00	0,00%
	INOA	102.980,0	125.919	22.939,11	22,28%

17	AD ROMA SpA	0,5			
	DONOL	155.269,0	80.093	-75.176,44	-48,42%
	DOL	155.839,0	80.387	-75.452,41	-48,42%
	AF	2.389.895,0	1.232.782	-1.157.113,06	-48,42%
	WLUs	32.213.038,0	36.661.401	4.448.362,63	13,81%
	ATM	353.900,0	374.739	20.839,07	5,89%
	INOA	188.044,0	188.044	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	DONOL	18.604,0	18.604	0,00	0,00%
	DOL	17.944,0	17.944	0,00	0,00%
	AF	72.537,0	72.537	0,00	0,00%
	WLUs	3.289.648,0	3.289.648	0,00	0,00%
	ATM	57.800,0	57.800	0,00	0,00%
	INOA	14.968,0	14.968	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	DONOL	9.432,0	9.432	0,00	0,00%
	DOL	9.676,0	9.676	0,00	0,00%
	AF	29.633,0	29.633	0,00	0,00%
	WLUs	1.518.747,0	1.518.747	0,00	0,00%
	ATM	24.096,0	24.096	0,00	0,00%
	INOA	6.031,0	6.031	0,00	0,00%
20	AER RIANTA	1,0			
	DONOL	215.694,0	215.694	0,00	0,00%
	DOL	159.941,0	159.941	0,00	0,00%
	AF	760.341,0	760.341	0,00	0,00%
	WLUs	23.640.850,0	23.640.850	0,00	0,00%
	ATM	271.137,0	271.137	0,00	0,00%
	INOA	289.750,0	289.750	0,00	0,00%
21	BRUSSELS AIC	0,7			
	DONOL	114.914,0	53.740	-61.173,97	-53,23%
	DOL	52.305,0	35.170	-17.134,81	-32,76%
	AF	1.023.085,0	687.928	-335.156,53	-32,76%
	WLUs	20.970.237,0	20.970.237	0,00	0,00%
	ATM	252.069,0	341.648	89.579,04	35,54%
	INOA	106.100,0	106.100	0,00	0,00%
22	COPENH. AIRPORTS A	0,9			
	DONOL	45.731,0	40.407	-5.324,45	-11,64%
	DOL	82.170,0	29.329	-52.840,66	-64,31%
	AF	976.124,0	862.474	-113.649,83	-11,64%
	WLUs	22.391.075,0	24.292.809	1.901.734,31	8,49%
	ATM	272.500,0	272.500	0,00	0,00%
	INOA	109.754,0	109.754	0,00	0,00%
23	OSLO F A/S	0,9			
	DONOL	100.321,0	48.108	-52.212,69	-52,05%
	DOL	32.315,0	28.371	-3.944,32	-12,21%
	AF	1.173.815,0	1.030.541	-143.273,98	-12,21%
	WLUs	15.534.160,0	27.981.131	12.446.970,98	80,13%
	ATM	186.800,0	213.641	26.840,72	14,37%
	INOA	132.325,0	132.325	0,00	0,00%
24	CZECH A A	0,4			
	DONOL	40.173,0	17.787	-22.385,83	-55,72%
	DOL	27.134,0	11.529	-15.604,82	-57,51%
	AF	979.689,0	433.771	-545.917,77	-55,72%
	WLUs	10.165.263,0	11.169.313	1.004.049,99	9,88%
	ATM	144.962,0	144.962	0,00	0,00%
	INOA	47.699,0	47.699	0,00	0,00%

25	BAA STANSTED	0,7			
	DONOL	69.938,0	46.442	-23.495,65	-33,59%
	DOL	52.430,0	34.816	-17.613,85	-33,59%
	AF	1.699.984,0	1.128.875	-571.109,22	-33,59%
	WLUs	23.179.610,0	31.445.694	8.266.084,33	35,66%
	ATM	177.400,0	263.175	85.775,07	48,35%
	INOA	139.977,0	139.977	0,00	0,00%
26	MANCHESTER AG Plc.	0,6			
	DONOL	200.761,0	100.222	-100.539,23	-50,08%
	DOL	107.852,0	66.615	-41.236,71	-38,23%
	AF	2.041.956,0	1.261.224	-780.732,37	-38,23%
	WLUs	29.653.000,0	34.932.032	5.279.031,61	17,80%
	ATM	261.700,0	287.507	25.807,18	9,86%
	INOA	206.025,0	206.025	0,00	0,00%
27	F MÜNCHEN GmbH	0,7			
	DONOL	320.442,0	223.274	-97.167,54	-30,32%
	DOL	220.874,0	159.601	-61.273,41	-27,74%
	AF	2.061.913,0	1.489.911	-572.002,31	-27,74%
	WLUs	29.912.785,0	43.009.799	13.097.014,08	43,78%
	ATM	370.534,0	405.705	35.170,70	9,49%
	INOA	355.200,0	355.200	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	DONOL	31.968,0	31.968	0,00	0,00%
	DOL	74.140,0	74.140	0,00	0,00%
	AF	332.963,0	332.963	0,00	0,00%
	WLUs	10.619.193,0	10.619.193	0,00	0,00%
	ATM	151.430,0	151.430	0,00	0,00%
	INOA	69.950,0	69.950	0,00	0,00%
29	AI GENÈVE	1,0			
	DONOL	51.898,0	51.898	0,00	0,00%
	DOL	49.939,0	49.939	0,00	0,00%
	AF	200.872,0	200.872	0,00	0,00%
	WLUs	9.094.330,0	9.094.330	0,00	0,00%
	ATM	166.600,0	166.600	0,00	0,00%
	INOA	73.700,0	73.700	0,00	0,00%
30	UNIQUE ZURICH A	0,6			
	DONOL	104.000,0	60.900	-43.099,91	-41,44%
	DOL	85.494,0	50.063	-35.430,62	-41,44%
	AF	1.913.791,0	1.120.673	-793.117,57	-41,44%
	WLUs	20.882.296,0	32.401.847	11.519.551,35	55,16%
	ATM	266.700,0	302.221	35.520,93	13,32%
	INOA	155.625,0	155.625	0,00	0,00%
31	F WIEN GROUP	0,8			
	DONOL	97.373,0	75.718	-21.655,25	-22,24%
	DOL	169.953,0	126.914	-43.039,34	-25,32%
	AF	712.171,0	553.788	-158.383,10	-22,24%
	WLUs	16.881.779,0	19.520.404	2.638.625,12	15,63%
	ATM	224.800,0	303.884	79.084,47	35,18%
	INOA	138.121,0	138.121	0,00	0,00%
32	ATHENS IA	0,4			
	DONOL	80.000,0	28.373	-51.626,55	-64,53%
	DOL	34.600,0	12.272	-22.328,48	-64,53%
	AF	2.061.262,0	731.064	-1.330.198,07	-64,53%
	WLUs	14.755.252,0	17.731.778	2.976.525,57	20,17%
	ATM	191.000,0	191.000	0,00	0,00%
	INOA	67.740,0	67.740	0,00	0,00%

Model Name = CCR(CCR-I)		2004										Sense E		
No.	DMU	Score	Excess DONOL S-(1)	Excess DOL S-(2)	Excess AF S-(3)	Shortage WLUs S+(1)	Shortage ATM S+(2)	Shortage INOA S+(3)						
1	HKIA	0,53	16.162,34	0,00	651.149,20	0,00	211.160,62	54.595,60						
2	NARITA A A	0,54	319.005,45	0,00	30.302,36	41.423.565,49	514.763,64	0,00						
3	APACLtd. MELB.	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
4	AUCKLAND IALtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
5	BRISBANE ACLtd	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
6	WACLtd PERTH	0,62	2.765,68	0,00	0,00	0,00	9.753,98	926,67						
7	SYDNEY ACLtd.	0,98	1.143,09	0,00	1.971.384,45	10.884.572,99	40.051,27	0,00						
8	ADMTL	0,78	0,00	1.291,69	0,00	2.131.005,22	0,00	19.355,48						
9	CALGARY A A	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
10	GTA A	0,37	37.531,48	0,00	0,00	5.271.020,76	0,00	0,00						
11	OTTAWA IA	0,71	2.672,49	0,00	0,00	635.116,71	0,00	6.118,61						
12	YVR AS	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
13	ASUR	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
14	INDIANAPOLIS A A	0,89	0,00	0,00	69.195,00	0,00	0,00	3.140,77						
15	MWAA NATIONAL	0,80	0,00	5.333,46	0,00	1.949.088,78	0,00	14.166,39						
16	MWAA DULLES	0,80	0,00	0,00	0,00	6.435.038,98	0,00	22.939,11						
17	AD ROMA SpA	0,52	0,00	0,00	0,00	4.448.362,63	20.839,07	0,00						
18	SAGA TORINO SpA	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
19	AD FIRENZE SpA	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
20	AER RIANTA	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
21	BRUSSELS AIC	0,67	23.528,83	0,00	0,00	0,00	89.579,04	0,00						
22	COPENH. AIRPORTS A/S	0,88	0,00	43.273,63	0,00	1.901.734,31	0,00	0,00						
23	OSLO F A/S	0,88	39.967,67	0,00	0,00	12.446.970,98	26.840,72	0,00						
24	CZECH A A	0,44	0,00	484,79	0,00	1.004.049,99	0,00	0,00						
25	BAA STANSTED	0,66	0,00	0,00	0,00	8.266.084,33	85.775,07	0,00						
26	MANCHESTER AG Plc.	0,62	23.779,20	0,00	0,00	5.279.031,61	25.807,18	0,00						
27	F MÜNCHEN GmbH	0,72	8.272,63	0,00	0,00	13.097.014,08	35.170,70	0,00						
28	F HAMBURG GmbH	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
29	AI GENEVE	1,00	0,00	0,00	0,00	0,00	0,00	0,00						
30	UNIQUE ZURICH A	0,59	0,00	0,00	0,00	11.519.551,35	35.520,93	0,00						
31	F WIEN GROUP	0,78	0,00	5.242,68	0,00	2.638.625,12	79.084,47	0,00						
32	ATHENS IA	0,35	0,00	0,00	0,00	2.976.525,57	0,00	0,00						

DEA model = CCR(CCR-I)

Problem = Indústries Aeroportuàries 2004

Sense E

No. of DMUs = 32	No. of DMUs	32,00
No. of Input items = 3	Average	0,79
Input(1) = DONOL	SD	0,21
Input(2) = DOL	Maximum	1,00
Input(3) = AF	Minimum	0,35
No. of Output items = 3		
Output(1) = WLUs		
Output(2) = ATM		
Output(3) = INOA		

Frequency in Reference Set

Reference	Frequency to other DMUs
APACLtd. MELB.	14
AUCKLAND IALtd	6
BRISBANE ACLtd	1
CALGARY A A	0
YVR AS	10
ASUR	5
SAGA TORINO SpA	1
AD FIRENZE SpA	0
AER RIANTA	3
F HAMBURG GmbH	5
AI GENEVE	5

Statistics on Input/Output Data Returns to Scale = Constant ($0 \leq \text{Sum of Lambda} < \text{Infinity}$)

	DONOL	DOL	AF	WLUs	ATM	INOA
Max	780588	220874	6700760	55046760	469600	390215
Min	6589	6955	29633	1518747	24096	6031
Average	101372,844	55072,7188	1473716,81	19676359,66	213053,781	112324,063
SD	143418,842	53994,9241	1462241,17	12131544,06	96280,79	92544,1511

Correlation

	DONOL	DOL	AF	WLUs	ATM	INOA
DONOL	1	0,50761554	0,76285586	0,715095774	0,27567401	0,84077261
DOL	0,50761554	1	0,24817981	0,431172953	0,51917048	0,76907431
AF	0,76285586	0,24817981	1	0,911443122	0,34059527	0,67433699
WLUs	0,71509577	0,43117295	0,91144312	1	0,49591979	0,77973098
ATM	0,27567401	0,51917048	0,34059527	0,495919794	1	0,48189573
INOA	0,84077261	0,76907431	0,67433699	0,779730975	0,48189573	1

No. of DMUs in Data =	32	Average of scores =	0,78544633
No. of DMUs with inappropriate Data =	0	No. of efficient DMUs =	11
No. of evaluated DMUs =	32	No. of inefficient DMUs =	21
		No. of over iteration DMUs =	0

Model Name = CCR(ICCR-I) 2004 sense E

No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)
1	HKIA	0,53	28	APACltd. MELB.	2,43		
2	NARITA A A	0,54	27	APACltd. MELB.	4,24		
3	APACltd. MELB.	1,00	1	APACltd. MELB.	1,00		
4	AUCKLAND IALtd	1,00	1	AUCKLAND IALtd	1,00		
5	BRISBANE ACLtd	1,00	1	BRISBANE ACLtd	1,00		
6	WACLtd PERTH	0,62	24	APACltd. MELB.	0,37	YVR AS	0,00
7	SYDNEY ACLtd.	0,98	12	APACltd. MELB.	1,86		
8	ADMTL	0,78	18	AUCKLAND IALtd	0,14	YVR AS	0,79
9	CALGARY A A	1,00	1	CALGARY A A	1,00		
10	GTA A	0,37	31	APACltd. MELB.	0,91	YVR AS	0,43
11	OTTAWA IA	0,71	21	YVR AS	0,22	ASUR	0,04
12	YVR AS	1,00	1	YVR AS	1,00		
13	ASUR	1,00	1	ASUR	1,00		
14	INDIANAPOLIS A A	0,89	13	AUCKLAND IALtd	0,96	BRISBANE ACLtd	0,19
15	MWAA NATIONAL	0,80	16	AUCKLAND IALtd	0,41	YVR AS	0,76
16	MWAA DULLES	0,80	17	AUCKLAND IALtd	1,08	YVR AS	0,98
17	AD ROMA SpA	0,52	29	APACltd. MELB.	1,12	F HAMBURG GmbH	0,38
18	SAGA TORINO SpA	1,00	1	SAGA TORINO SpA	1,00		
19	AD FIRENZE SpA	1,00	1	AD FIRENZE SpA	1,00		
20	AER RIAN TA	1,00	1	AER RIAN TA	1,00		
21	BRUSSELS AIC	0,67	22	YVR AS	1,15	SAGA TORINO SpA	0,09
22	COPENH. AIRPORTS AVS	0,88	14	APACltd. MELB.	0,58	YVR AS	0,58
23	OSLO F A/S	0,88	15	APACltd. MELB.	1,13	AER RIAN TA	0,10
24	CZECH A A	0,44	30	APACltd. MELB.	0,13	AUCKLAND IALtd	0,19
25	BAA STANSTED	0,66	23	APACltd. MELB.	1,23	F HAMBURG GmbH	0,11
26	MANCHESTER AG Plc.	0,62	25	APACltd. MELB.	1,20	AER RIAN TA	0,33
27	F MUNCHEN GmbH	0,72	20	APACltd. MELB.	0,93	AER RIAN TA	0,93
28	F HAMBURG GmbH	1,00	1	F HAMBURG GmbH	1,00		
29	AI GENÈVE	1,00	1	AI GENÈVE	1,00		
30	UNIQUE ZURICH A	0,59	26	APACltd. MELB.	1,15	F HAMBURG GmbH	0,11
31	F WIEN GROUP	0,78	19	F HAMBURG GmbH	1,25	AI GENÈVE	0,69
32	ATHENS IA	0,35	32	APACltd. MELB.	0,48	AUCKLAND IALtd	0,08
						YVR AS	0,20
						ASUR	0,18

FULLA AEROPORTS 2004.Sense APAC Ltd. Melbourne

Model Name = CCR(CCR-I)		2004	Sense APAC Ltd. Melbourne		
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	0,6			
	DONOL	141.726,0	83.836	-57.890,25	-40,85%
	DOL	52.480,0	32.393	-20.087,25	-38,28%
	E	958,0	591	-366,68	-38,28%
	AF	5.143.532,0	3.174.793	-1.968.739,28	-38,28%
	WLUs	55.046.760,0	55.046.760	0,00	0,00%
	ATM	190.300,0	567.903	377.603,39	198,43%
	INOA	168.753,0	198.548	29.795,20	17,66%
2	NARITA A A	1,0			
	DONOL	780.588,0	135.797	-644.791,50	-82,60%
	DOL	89.326,0	86.294	-3.032,49	-3,39%
	E	891,0	861	-30,25	-3,39%
	AF	6.700.760,0	6.473.279	-227.480,88	-3,39%
	WLUs	54.749.286,0	72.567.658	17.818.372,38	32,55%
	ATM	186.633,0	794.818	608.184,87	325,87%
	INOA	390.215,0	390.215	0,00	0,00%
3	AUCKLAND IALtd	1,0			
	DONOL	6.589,0	6.589	0,00	0,00%
	DOL	11.343,0	11.343	0,00	0,00%
	E	281,0	281	0,00	0,00%
	AF	676.113,0	676.113	0,00	0,00%
	WLUs	12.673.430,0	12.673.430	0,00	0,00%
	ATM	154.800,0	154.800	0,00	0,00%
	INOA	39.329,0	39.329	0,00	0,00%
4	BRISBANE ACLtd	1,0			
	DONOL	19.077,0	19.077	0,00	0,00%
	DOL	8.136,0	8.136	0,00	0,00%
	E	143,0	143	0,00	0,00%
	AF	964.305,0	964.305	0,00	0,00%
	WLUs	15.302.238,0	15.302.238	0,00	0,00%
	ATM	144.700,0	144.700	0,00	0,00%
	INOA	58.823,0	58.823	0,00	0,00%
5	WACLtd PERTH	0,9			
	DONOL	19.099,0	13.680	-5.418,71	-28,37%
	DOL	6.955,0	6.290	-664,90	-9,56%
	E	132,0	99	-32,62	-24,71%
	AF	510.896,0	462.054	-48.841,84	-9,56%
	WLUs	8.532.000,0	8.532.000	0,00	0,00%
	ATM	53.000,0	96.497	43.496,66	82,07%
	INOA	33.739,0	33.739	0,00	0,00%
6	SYDNEY ACLtd.	1,0			
	DONOL	46.659,0	46.659	0,00	0,00%
	DOL	21.517,0	21.517	0,00	0,00%
	E	286,0	286	0,00	0,00%
	AF	3.614.655,0	3.614.655	0,00	0,00%
	WLUs	31.176.000,0	31.176.000	0,00	0,00%
	ATM	266.700,0	266.700	0,00	0,00%
	INOA	170.658,0	170.658	0,00	0,00%
7	ADMTL	0,8			
	DONOL	40.156,0	31.349	-8.806,88	-21,93%
	DOL	26.646,0	19.510	-7.135,60	-26,78%
	E	600,0	263	-336,61	-56,10%
	AF	692.091,0	540.304	-151.787,09	-21,93%
	WLUs	12.874.828,0	15.005.833	2.131.005,22	16,55%
	ATM	235.200,0	235.200	0,00	0,00%
	INOA	50.401,0	69.756	19.355,48	38,40%
8	CALGARY A A	1,0			
	DONOL	26.303,0	26.303	0,00	0,00%
	DOL	7.568,0	7.568	0,00	0,00%
	E	162,0	162	0,00	0,00%
	AF	409.188,0	409.188	0,00	0,00%
	WLUs	10.414.039,0	10.414.039	0,00	0,00%
	ATM	136.000,0	136.000	0,00	0,00%
	INOA	26.376,0	26.376	0,00	0,00%

9	GTAA	0,4			
	DONOL	255.521,0	51.044	-204.476,70	-80,02%
	DOL	62.462,0	26.252	-36.210,22	-57,97%
	E	1.041,0	382	-658,78	-63,28%
	AF	3.681.940,0	1.547.461	-2.134.479,42	-57,97%
	WLU _s	28.292.360,0	30.291.783	1.999.423,05	7,07%
	ATM	370.100,0	370.100	0,00	0,00%
	INOA	128.563,0	128.563	0,00	0,00%
10	OTTAWA IA	0,7			
	DONOL	18.329,0	10.419	-7.909,85	-43,15%
	DOL	7.364,0	5.260	-2.104,21	-28,57%
	E	163,0	89	-74,14	-45,49%
	AF	225.905,0	161.354	-64.550,59	-28,57%
	WLU _s	3.609.885,0	4.245.002	635.116,71	17,59%
	ATM	69.600,0	69.600	0,00	0,00%
	INOA	12.565,0	18.684	6.118,61	48,70%
11	YVR AS	1,0			
	DONOL	38.494,0	38.494	0,00	0,00%
	DOL	22.692,0	22.692	0,00	0,00%
	E	284,0	284	0,00	0,00%
	AF	565.180,0	565.180	0,00	0,00%
	WLU _s	16.763.000,0	16.763.000	0,00	0,00%
	ATM	270.400,0	270.400	0,00	0,00%
	INOA	81.346,0	81.346	0,00	0,00%
12	ASUR	1,0			
	DONOL	47.234,0	47.234	0,00	0,00%
	DOL	7.935,0	7.935	0,00	0,00%
	E	619,0	619	0,00	0,00%
	AF	882.557,0	882.557	0,00	0,00%
	WLU _s	13.974.360,0	13.974.360	0,00	0,00%
	ATM	250.802,0	250.802	0,00	0,00%
	INOA	24.572,0	24.572	0,00	0,00%
13	INDIANAPOLIS A A	0,9			
	DONOL	19.010,0	16.974	-2.036,28	-10,71%
	DOL	15.300,0	13.661	-1.638,88	-10,71%
	E	415,0	371	-44,45	-10,71%
	AF	1.161.599,0	998.840	-162.758,52	-14,01%
	WLU _s	17.114.800,0	17.632.053	517.252,92	3,02%
	ATM	212.558,0	212.558	0,00	0,00%
	INOA	49.425,0	55.786	6.361,24	12,87%
14	MWAA NATIONAL	0,9			
	DONOL	39.856,0	36.905	-2.950,89	-7,40%
	DOL	34.011,0	23.881	-10.129,82	-29,78%
	E	300,0	278	-22,21	-7,40%
	AF	883.912,0	818.468	-65.443,81	-7,40%
	WLU _s	15.970.870,0	15.970.870	0,00	0,00%
	ATM	268.600,0	268.600	0,00	0,00%
	INOA	63.653,0	69.808	6.155,25	9,67%
15	MWAA DULLES	1,0			
	DONOL	64.778,0	64.778	0,00	0,00%
	DOL	44.637,0	44.637	0,00	0,00%
	E	460,0	460	0,00	0,00%
	AF	1.772.074,0	1.772.074	0,00	0,00%
	WLU _s	25.783.080,0	25.783.080	0,00	0,00%
	ATM	469.600,0	469.600	0,00	0,00%
	INOA	102.980,0	102.980	0,00	0,00%
16	AD ROMA SpA	0,5			
	DONOL	155.269,0	85.327	-69.941,72	-45,05%
	DOL	155.839,0	85.641	-70.198,47	-45,05%
	E	2.314,0	978	-1.336,17	-57,74%
	AF	2.389.895,0	1.313.355	-1.076.540,43	-45,05%
	WLU _s	32.213.038,0	37.580.209	5.367.170,63	16,66%
	ATM	353.900,0	581.897	227.997,04	64,42%
	INOA	188.044,0	188.044	0,00	0,00%

17	SAGA TORINO SpA	1,0			
	DONOL	18.604,0	18.604	0,00	0,00%
	DOL	17.944,0	17.944	0,00	0,00%
	E	447,0	447	0,00	0,00%
	AF	72.537,0	72.537	0,00	0,00%
	WLU _s	3.289.648,0	3.289.648	0,00	0,00%
	ATM	57.800,0	57.800	0,00	0,00%
	INOA	14.968,0	14.968	0,00	0,00%
18	AD FIRENZE SpA	1,0			
	DONOL	9.432,0	9.432	0,00	0,00%
	DOL	9.676,0	9.676	0,00	0,00%
	E	133,0	133	0,00	0,00%
	AF	29.633,0	29.633	0,00	0,00%
	WLU _s	1.518.747,0	1.518.747	0,00	0,00%
	ATM	24.096,0	24.096	0,00	0,00%
	INOA	6.031,0	6.031	0,00	0,00%
19	DUBLIN A A	1,0			
	DONOL	215.694,0	215.694	0,00	0,00%
	DOL	159.941,0	159.941	0,00	0,00%
	E	2.382,0	2.382	0,00	0,00%
	AF	760.341,0	760.341	0,00	0,00%
	WLU _s	23.640.850,0	23.640.850	0,00	0,00%
	ATM	271.137,0	271.137	0,00	0,00%
	INOA	289.750,0	289.750	0,00	0,00%
20	BRUSSELS AIC	0,7			
	DONOL	114.914,0	53.740	-61.173,97	-53,23%
	DOL	52.305,0	35.170	-17.134,81	-32,76%
	E	768,0	449	-319,12	-41,55%
	AF	1.023.085,0	687.928	-335.156,53	-32,76%
	WLU _s	20.970.237,0	20.970.237	0,00	0,00%
	ATM	252.069,0	341.648	89.579,04	35,54%
	INOA	106.100,0	106.100	0,00	0,00%
21	COPENH. AIRPORTS A/S	0,9			
	DONOL	45.731,0	42.705	-3.025,53	-6,62%
	DOL	82.170,0	76.734	-5.436,30	-6,62%
	E	1.485,0	878	-606,77	-40,86%
	AF	976.124,0	911.544	-64.579,61	-6,62%
	WLU _s	22.391.075,0	22.577.499	186.424,12	0,83%
	ATM	272.500,0	313.330	40.830,34	14,98%
	INOA	109.754,0	109.754	0,00	0,00%
22	OSLO F A/S	1,0			
	DONOL	100.321,0	100.321	0,00	0,00%
	DOL	32.315,0	32.315	0,00	0,00%
	E	552,0	552	0,00	0,00%
	AF	1.173.815,0	1.173.815	0,00	0,00%
	WLU _s	15.534.160,0	15.534.160	0,00	0,00%
	ATM	186.800,0	186.800	0,00	0,00%
	INOA	132.325,0	132.325	0,00	0,00%
23	CZECH A A	0,5			
	DONOL	40.173,0	19.071	-21.102,08	-52,53%
	DOL	27.134,0	12.881	-14.252,95	-52,53%
	E	1.709,0	198	-1.511,05	-88,42%
	AF	979.689,0	465.078	-514.611,17	-52,53%
	WLU _s	10.165.263,0	11.150.589	985.326,45	9,69%
	ATM	144.962,0	161.297	16.335,00	11,27%
	INOA	47.699,0	47.699	0,00	0,00%
24	BAA STANSTED	0,8			
	DONOL	69.938,0	55.097	-14.841,39	-21,22%
	DOL	52.430,0	41.304	-11.126,06	-21,22%
	E	988,0	638	-350,08	-35,43%
	AF	1.699.984,0	1.339.234	-360.749,92	-21,22%
	WLU _s	23.179.610,0	32.931.702	9.752.092,34	42,07%
	ATM	177.400,0	484.681	307.281,15	173,21%
	INOA	139.977,0	139.977	0,00	0,00%

25	MANCHESTER AG Plc.	0,6			
	DONOL	200.761,0	107.302	-93.459,39	-46,55%
	DOL	107.852,0	67.346	-40.505,60	-37,56%
	E	2.573,0	890	-1.682,67	-65,40%
	AF	2.041.956,0	1.275.066	-766.890,35	-37,56%
	WLU _s	29.653.000,0	37.953.887	8.300.886,97	27,99%
	ATM	261.700,0	598.470	336.769,81	128,69%
	INOA	206.025,0	206.025	0,00	0,00%
26	F MÜNCHEN GmbH	0,7			
	DONOL	320.442,0	228.969	-91.472,54	-28,55%
	DOL	220.874,0	160.382	-60.491,64	-27,39%
	E	4.946,0	2.302	-2.644,11	-53,46%
	AF	2.061.913,0	1.497.209	-564.704,31	-27,39%
	WLU _s	29.912.785,0	45.250.688	15.337.903,30	51,28%
	ATM	370.534,0	644.539	274.005,07	73,95%
	INOA	355.200,0	355.200	0,00	0,00%
27	F HAMBURG GmbH	1,0			
	DONOL	31.968,0	31.968	0,00	0,00%
	DOL	74.140,0	74.140	0,00	0,00%
	E	716,0	716	0,00	0,00%
	AF	332.963,0	332.963	0,00	0,00%
	WLU _s	10.619.193,0	10.619.193	0,00	0,00%
	ATM	151.430,0	151.430	0,00	0,00%
	INOA	69.950,0	69.950	0,00	0,00%
28	AI GENÈVE	1,0			
	DONOL	51.898,0	51.898	0,00	0,00%
	DOL	49.939,0	49.939	0,00	0,00%
	E	556,0	556	0,00	0,00%
	AF	200.872,0	200.872	0,00	0,00%
	WLU _s	9.094.330,0	9.094.330	0,00	0,00%
	ATM	166.600,0	166.600	0,00	0,00%
	INOA	73.700,0	73.700	0,00	0,00%
29	UNIQUE ZURICH A	0,6			
	DONOL	104.000,0	67.562	-36.437,58	-35,04%
	DOL	85.494,0	55.540	-29.953,79	-35,04%
	E	1.260,0	716	-543,77	-43,16%
	AF	1.913.791,0	1.243.273	-670.518,34	-35,04%
	WLU _s	20.882.296,0	33.456.624	12.574.328,18	60,22%
	ATM	266.700,0	511.253	244.552,83	91,70%
	INOA	155.625,0	155.625	0,00	0,00%
30	F WIEN AG	1,0			
	DONOL	97.373,0	97.373	0,00	0,00%
	DOL	169.953,0	169.953	0,00	0,00%
	E	357,0	357	0,00	0,00%
	AF	712.171,0	712.171	0,00	0,00%
	WLU _s	16.881.779,0	16.881.779	0,00	0,00%
	ATM	224.800,0	224.800	0,00	0,00%
	INOA	138.121,0	138.121	0,00	0,00%
31	ATHENS IA	0,4			
	DONOL	80.000,0	27.030	-52.970,41	-66,21%
	DOL	34.600,0	13.723	-20.877,12	-60,34%
	E	698,0	199	-499,18	-71,52%
	AF	2.061.262,0	817.528	-1.243.734,32	-60,34%
	WLU _s	14.755.252,0	15.804.989	1.049.737,25	7,11%
	ATM	191.000,0	191.000	0,00	0,00%
	INOA	67.740,0	67.740	0,00	0,00%

DEA model = CCR(CCR-I)

Problem = Industries Aeroportuaires 2004
Sense APAC Ltd. Melbourne.

No. of DMUs = 31

No. of Input items = 4

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLU\$

Output(2) = ATM

Output(3) = INOA

No. of DMUs 31,00

Average 0,84

SD 0,20

Maximum 1,00

Minimum 0,40

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Frequency in Reference Set

Reference	Frequency to other DMUs
AUCKLAND IALtd	8
BRISBANE ACLtd	7
SYDNEY ACLtd.	1
CALGARY A A	2
YVR AS	16
ASUR	3
MWAA DULLES	1
SAGA TORINO SpA	1
AD FIRENZE SpA	0
DUBLIN A A	2
OSLO F A/S	1
F HAMBURG GmbH	4
AI GENÈVE	1
F WIEN AG	1

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU\$	ATM	INOA
Max	780588	220874	4946	6700760	55046760	469600	390215
Min	6589	6955	132	29633	1518747	24096	6031
Average	103868,935	56483,1613	923,193548	1494023,81	19579941,9	214594,2258	112980,871
SD	145027,942	54275,5886	988,211497	1481190,68	12313587,5	97432,47641	93951,513

Correlation

	DONOL	DOL	E	AF	WLU\$	ATM	INOA
DONOL	1	0,50118466	0,42158453	0,76121372	0,723494012	0,26937541	0,84155812
DOL	0,50118466	1	0,79937066	0,2401995	0,442745539	0,513697145	0,77213383
E	0,42158453	0,79937066	1	0,21402345	0,381318768	0,471079982	0,68973142
AF	0,76121372	0,2401995	0,21402345	1	0,918511677	0,336045329	0,67382359
WLU\$	0,72349401	0,44274554	0,38131877	0,91851168	1	0,502349011	0,78285728
ATM	0,26937541	0,51369714	0,47107998	0,33604533	0,502349011	1	0,48066047
INOA	0,84155812	0,77213383	0,68973142	0,67382359	0,782857285	0,480660473	1

No. of DMUs in Data = 31

No. of DMUs with inappropriate Data = 0

No. of evaluated DMUs = 31

Average of scores = 0,83989929

No. of efficient DMUs = 14

No. of inefficient DMUs = 17

No. of over iteration DMUs = 0

Model Name = CCR(CCR-I)		2004 Sense APAC Ltd, Melbourne					Reference set (lambda)		Reference set (lambda)	
No.	DMU	Score	Rank	Reference set (lambda)	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	
1	HKIA	0,62	27	BRISBANE ACLtd	2,81	CALGARY A A	1,05	YVR AS	0,07263	
2	NARITA A A	0,97	15	SYDNEY ACLtd.	1,56	YVR AS	1,28	F WIEN AG	0,13862	
3	AUCKLAND IALtd	1,00	1	AUCKLAND IALtd	1,00					
4	BRISBANE ACLtd	1,00	1	BRISBANE ACLtd	1,00					
5	WACLtd PERTH	0,90	18	BRISBANE ACLtd	0,38	CALGARY A A	0,07	YVR AS	0,11622	
6	SYDNEY ACLtd.	1,00	1	SYDNEY ACLtd.	1,00					
7	ADMTL	0,78	21	AUCKLAND IALtd	0,14	YVR AS	0,79			
8	CALGARY A A	1,00	1	CALGARY A A	1,00					
9	GTA A	0,42	30	BRISBANE ACLtd	1,16	YVR AS	0,74	ASUR	0,01	
10	OTTAWA IA	0,71	23	YVR AS	0,22	ASUR	0,04			
11	YVR AS	1,00	1	YVR AS	1,00					
12	ASUR	1,00	1	ASUR	1,00					
13	INDIANAPOLIS A A	0,89	19	AUCKLAND IALtd	0,92	BRISBANE ACLtd	0,29	ASUR	0,12	
14	MWAA NATIONAL	0,93	17	AUCKLAND IALtd	0,05	BRISBANE ACLtd	0,02	YVR AS	0,46	
15	MWAA DULLES	1,00	1	MWAA DULLES	1,00					
16	AD ROMA SpA	0,55	28	AUCKLAND IALtd	0,25	YVR AS	1,67	F HAMBURG GmbH	0,61	
17	SAGA TORINO SpA	1,00	1	SAGA TORINO SpA	1,00					
18	AD FIRENZE SpA	1,00	1	AD FIRENZE SpA	1,00					
19	DUBLIN A A	1,00	1	DUBLIN A A	1,00					
20	BRUSSELS AIC	0,67	24	YVR AS	1,15	SAGA TORINO SpA	0,09	AI GENEVE	0,15	
21	COPENH. AIRPORTS A/S	0,93	16	AUCKLAND IALtd	0,69	YVR AS	0,29	F HAMBURG GmbH	0,84	
22	OSLO F A/S	1,00	1	OSLO F A/S	1,00					
23	CZECH A A	0,47	29	AUCKLAND IALtd	0,25	BRISBANE ACLtd	0,06	YVR AS	0,42	
24	BAA STANSTED	0,79	20	AUCKLAND IALtd	0,92	YVR AS	1,24	F HAMBURG GmbH	0,04	
25	MANCHESTER AG Pic.	0,62	26	YVR AS	2,09	DUBLIN A A	0,12			
26	F MUNICHEN GmbH	0,73	22	YVR AS	1,61	DUBLIN A A	0,77			
27	F HAMBURG GmbH	1,00	1	F HAMBURG GmbH	1,00					
28	AI GENEVE	1,00	1	AI GENEVE	1,00					
29	UNIQUE ZURICH A	0,65	25	AUCKLAND IALtd	0,49	YVR AS	1,49	F HAMBURG GmbH	0,22	
30	F WIEN AG	1,00	1	F WIEN AG	1,00					
31	ATHENS IA	0,40	31	BRISBANE ACLtd	0,62	YVR AS	0,37	OSLO F A/S	0,01	

Indústries Aeroportuàries 2001	(IN)SCC	(IN)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	439000	21	156961	50398	932	5195792	53548760	186400	217570
NARITA A A	259000	20	756884	74475	915	6637260	42188370	124600	338937
APACld. MELB.	80000	14	16525	11260	211	863773	20837250	187400	73440
AUCKLAND IAltd	60500	47	9676	11774	282	508257	10293540	147900	49952
BRISBANE ACLtd	23150	31	15186	5774	127	958876	14492100	175800	51827
WACLtd PERTH	11060	7	9712	4466	112	409632	5546490	57600	27056
SYDNEY ACLtd.	109020	46	50940	27257	482	1999183	28742200	317300	151889
ADMTL	64000	20	41506	23869	595	314358	11786210	232400	45139
CALGARY A A	54813	53	18726	5833	145	233142	8659900	138400	23104
GTA A	69677	52	194700	46783	705	2160404	31082880	406300	111617
OTTAWA IA	0	0	14934	5483	148	53365	3391000	72600	10182
YVR AS	96156	48	34380	19490	294	491155	17763740	312100	87936
ASUR	33000	18	30358	7864	658	807457	11719790	194900	13867
INDIANAPOLIS A A	67500	30	7473	10295	300	960350	18391720	244800	79344
MWAA NATIONAL	0	0	35909	28648	510	694797	13418880	244000	44811
MWAA DULLES	48000	24	55658	39440	703	1392935	20863510	396900	71053
AD ROMA SpA	70000	87	156573	174207	2318	2449154	26906697	283700	165400
SAGA TORINO SpA	6000	7	19750	19096	425	29551	2970632	64900	11329
AD FIRENZE SpA	0	0	8984	8404	200	24059	1535929	31000	4253
AER RIANITA	90000	55	228981	135993	2511	654679	20534530	284500	290914
BRUSSELS AIC	77000	44	134556	57458	767	1014618	25522157	305500	106132
COPENH. AIRPORTS A/S	88000	78	30220	68515	1347	991109	21926644	288800	86026
OSLO F A/S	40000	42	64090	35286	588	1320376	14614756	194800	108730
CZECH A A	3500	30	36687	18488	1589	792245	6937774	115500	39043
BAA STANSTED	40007	25	66282	35639	676	1335978	14107480	148900	82243
MANCHESTER AG Plc.	51097	95	143876	102079	1639	1710993	20211770	181000	141319
F MÜNCHEN GmbH	53000	107	214646	184488	4472	2063566	25747259	321800	180500
F HAMBURG GmbH	19000	12	39182	79840	809	220285	10271352	158600	65494
AI GENEVE	24000	26	41793	38823	539	140740	8030944	163200	61335
UNIQUE ZÜRICH A	55400	102	70784	83156	1215	1582881	25941591	309200	151454
F WIEN GROUP	56250	55	68298	139733	342	475719	13448250	185400	116984
ATHENS IA	42100	20	52500	15800	520	1930202	10884204	138000	37236

RESULTATS DEA 2001.2 INOC

Model Name = Non-controllable(NCN-I-C)

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	(IN)SCC	439.000,0	439.000	0,00	0,00%
	(IN)NSCC	21,0	21	0,00	0,00%
	(I)DONOL	156.961,0	156.961	0,00	0,00%
	(I)DOL	50.398,0	50.398	0,00	0,00%
	(I)E	932,0	932	0,00	0,00%
	(I)AF	5.195.792,0	5.195.792	0,00	0,00%
	(O)WLU _s	53.548.760,0	53.548.760	0,00	0,00%
	(O)ATM	186.400,0	186.400	0,00	0
(O)INOA	217.570,0	217.570	0,00	0,00%	
2	NARITA A A	1,0			
	(IN)SCC	259.000,0	259.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0,00%
	(I)DONOL	756.884,0	756.884	0,00	0,00%
	(I)DOL	74.475,0	74.475	0,00	0,00%
	(I)E	915,0	915	0,00	0,00%
	(I)AF	6.637.260,0	6.637.260	0,00	0
	(O)WLU _s	42.188.370,0	42.188.370	0,00	0,00%
	(O)ATM	124.600,0	124.600	0,00	0,00%
(O)INOA	338.937,0	338.937	0,00	0,00%	
3	APACLtd. MELB.	1,0			
	(IN)SCC	80.000,0	80.000	0,00	0,00%
	(IN)NSCC	14,0	14	0,00	0,00%
	(I)DONOL	16.525,0	16.525	0,00	0,00%
	(I)DOL	11.260,0	11.260	0,00	0
	(I)E	211,0	211	0,00	0,00%
	(I)AF	863.773,0	863.773	0,00	0,00%
	(O)WLU _s	20.837.250,0	20.837.250	0,00	0,00%
	(O)ATM	187.400,0	187.400	0,00	0,00%
(O)INOA	73.440,0	73.440	0,00	0,00%	
4	AUCKLAND IALtd	1,0			
	(IN)SCC	60.500,0	60.500	0,00	0,00%
	(IN)NSCC	47,0	47	0,00	0
	(I)DONOL	9.676,0	9.676	0,00	0,00%
	(I)DOL	11.774,0	11.774	0,00	0,00%
	(I)E	282,0	282	0,00	0,00%
	(I)AF	508.257,0	508.257	0,00	0,00%
	(O)WLU _s	10.293.540,0	10.293.540	0,00	0,00%
	(O)ATM	147.900,0	147.900	0,00	0,00%
(O)INOA	49.952,0	49.952	0,00	0,00%	
5	BRISBANE ACLtd	1,0			
	(IN)SCC	23.150,0	23.150	0,00	0,00%
	(IN)NSCC	31,0	31	0,00	0,00%
	(I)DONOL	15.186,0	15.186	0,00	0,00%
	(I)DOL	5.774,0	5.774	0,00	0,00%
	(I)E	127,0	127	0,00	0,00%
	(I)AF	958.876,0	958.876	0,00	0,00%
	(O)WLU _s	14.492.100,0	14.492.100	0,00	0,00%
	(O)ATM	175.800,0	175.800	0,00	0
(O)INOA	51.827,0	51.827	0,00	0,00%	

6	WACLtd PERTH	1,0			
	(IN)SCC	11.060,0	11.060	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	9.712,0	9.712	0,00	0,00%
	(I)DOL	4.466,0	4.466	0,00	0,00%
	(I)E	112,0	112	0,00	0,00%
	(I)AF	409.632,0	409.632	0,00	0
	(O)WLU	5.546.490,0	5.546.490	0,00	0,00%
	(O)ATM	57.600,0	57.600	0,00	0,00%
	(O)INOA	27.056,0	27.056	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	(IN)SCC	109.020,0	109.020	0,00	0,00%
	(IN)NSCC	46,0	46	0,00	0,00%
	(I)DONOL	50.940,0	50.940	0,00	0,00%
	(I)DOL	27.257,0	27.257	0,00	0
	(I)E	482,0	482	0,00	0,00%
	(I)AF	1.999.183,0	1.999.183	0,00	0,00%
	(O)WLU	28.742.200,0	28.742.200	0,00	0,00%
	(O)ATM	317.300,0	317.300	0,00	0,00%
	(O)INOA	151.889,0	151.889	0,00	0,00%
8	ADMTL	1,0			
	(IN)SCC	64.000,0	64.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	41.506,0	41.506	0,00	0,00%
	(I)DOL	23.869,0	23.869	0,00	0,00%
	(I)E	595,0	595	0,00	0,00%
	(I)AF	314.358,0	314.358	0,00	0,00%
	(O)WLU	11.786.210,0	11.786.210	0,00	0,00%
	(O)ATM	232.400,0	232.400	0,00	0,00%
	(O)INOA	45.139,0	45.139	0,00	0,00%
9	CALGARY A A	1,0			
	(IN)SCC	54.813,0	54.813	0,00	0,00%
	(IN)NSCC	53,0	53	0,00	0,00%
	(I)DONOL	18.726,0	18.726	0,00	0,00%
	(I)DOL	5.833,0	5.833	0,00	0,00%
	(I)E	145,0	145	0,00	0,00%
	(I)AF	233.142,0	233.142	0,00	0,00%
	(O)WLU	8.659.900,0	8.659.900	0,00	0,00%
	(O)ATM	138.400,0	138.400	0,00	0
	(O)INOA	23.104,0	23.104	0,00	0,00%
10	GTAA	0,7			
	(IN)SCC	69.677,0	69.677	0,00	0,00%
	(IN)NSCC	52,0	52	0,00	0,00%
	(I)DONOL	194.700,0	52.164	-142.536,08	-73,21%
	(I)DOL	46.783,0	21.916	-24.866,67	-53,15%
	(I)E	705,0	491	-213,82	-30,33%
	(I)AF	2.160.404,0	1.505.186	-655.218,21	-0,3033
	(O)WLU	31.082.880,0	31.082.880	0,00	0,00%
	(O)ATM	406.300,0	427.731	21.430,75	5,27%
	(O)INOA	111.617,0	111.617	0,00	0,00%

11	OTTAWA IA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	14.934,0	14.934	0,00	0,00%
	(I)DOL	5.483,0	5.483	0,00	0
	(I)E	148,0	148	0,00	0,00%
	(I)AF	53.365,0	53.365	0,00	0,00%
	(O)WLUUs	3.391.000,0	3.391.000	0,00	0,00%
	(O)ATM	72.600,0	72.600	0,00	0,00%
(O)INOA	10.182,0	10.182	0,00	0,00%	
12	YVR AS	1,0			
	(IN)SCC	96.156,0	96.156	0,00	0,00%
	(IN)NSCC	48,0	48	0,00	0
	(I)DONOL	34.380,0	34.380	0,00	0,00%
	(I)DOL	19.490,0	19.490	0,00	0,00%
	(I)E	294,0	294	0,00	0,00%
	(I)AF	491.155,0	491.155	0,00	0,00%
	(O)WLUUs	17.763.740,0	17.763.740	0,00	0,00%
	(O)ATM	312.100,0	312.100	0,00	0,00%
(O)INOA	87.936,0	87.936	0,00	0,00%	
13	ASUR	1,0			
	(IN)SCC	33.000,0	33.000	0,00	0,00%
	(IN)NSCC	18,0	18	0,00	0,00%
	(I)DONOL	30.358,0	30.358	0,00	0,00%
	(I)DOL	7.864,0	7.864	0,00	0,00%
	(I)E	658,0	658	0,00	0,00%
	(I)AF	807.457,0	807.457	0,00	0,00%
	(O)WLUUs	11.719.790,0	11.719.790	0,00	0,00%
	(O)ATM	194.900,0	194.900	0,00	0
(O)INOA	13.867,0	13.867	0,00	0,00%	
14	INDIANAPOLIS A A	1,0			
	(IN)SCC	67.500,0	67.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0,00%
	(I)DONOL	7.473,0	7.473	0,00	0,00%
	(I)DOL	10.295,0	10.295	0,00	0,00%
	(I)E	300,0	300	0,00	0,00%
	(I)AF	960.350,0	960.350	0,00	0
	(O)WLUUs	18.391.720,0	18.391.720	0,00	0,00%
	(O)ATM	244.800,0	244.800	0,00	0,00%
(O)INOA	79.344,0	79.344	0,00	0,00%	
15	MWAA NATIONAL	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	35.909,0	35.909	0,00	0,00%
	(I)DOL	28.648,0	28.648	0,00	0
	(I)E	510,0	510	0,00	0,00%
	(I)AF	694.797,0	694.797	0,00	0,00%
	(O)WLUUs	13.418.880,0	13.418.880	0,00	0,00%
	(O)ATM	244.000,0	244.000	0,00	0,00%
(O)INOA	44.811,0	44.811	0,00	0,00%	
16	MWAA DULLES	0,9			
	(IN)SCC	48.000,0	48.000	0,00	0,00%
	(IN)NSCC	24,0	24	0,00	0
	(I)DONOL	55.658,0	49.576	-6.082,43	-10,93%
	(I)DOL	39.440,0	28.509	-10.931,05	-27,72%
	(I)E	703,0	626	-76,83	-10,93%
	(I)AF	1.392.935,0	1.240.712	-152.223,11	-10,93%
	(O)WLUUs	20.863.510,0	26.825.017	5.961.506,51	28,57%
	(O)ATM	396.900,0	396.900	0,00	0,00%
(O)INOA	71.053,0	95.321	24.267,69	34,15%	

17	AD ROMA SpA	0,5			
	(IN)SCC	70.000,0	70.000	0,00	0,00%
	(IN)NSCC	87,0	87	0,00	0,00%
	(I)DONOL	156.573,0	83.306	-73.266,53	-46,79%
	(I)DOL	174.207,0	92.689	-81.518,16	-46,79%
	(I)E	2.318,0	1.233	-1.084,68	-46,79%
	(I)AF	2.449.154,0	1.303.101	-1.146.053,36	-46,79%
	(O)WLU s	26.906.697,0	26.917.565	10.867,57	0,04%
	(O)ATM	283.700,0	382.519	98.819,15	0,3483
	(O)INOA	165.400,0	165.400	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	(IN)SCC	6.000,0	6.000	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	19.750,0	19.750	0,00	0,00%
	(I)DOL	19.096,0	19.096	0,00	0,00%
	(I)E	425,0	425	0,00	0,00%
	(I)AF	29.551,0	29.551	0,00	0
	(O)WLU s	2.970.632,0	2.970.632	0,00	0,00%
	(O)ATM	64.900,0	64.900	0,00	0,00%
	(O)INOA	11.329,0	11.329	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	8.984,0	8.984	0,00	0,00%
	(I)DOL	8.404,0	8.404	0,00	0
	(I)E	200,0	200	0,00	0,00%
	(I)AF	24.059,0	24.059	0,00	0,00%
	(O)WLU s	1.535.929,0	1.535.929	0,00	0,00%
	(O)ATM	31.000,0	31.000	0,00	0,00%
	(O)INOA	4.253,0	4.253	0,00	0,00%
20	AER RIANTA	1,0			
	(IN)SCC	90.000,0	90.000	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0
	(I)DONOL	228.981,0	228.981	0,00	0,00%
	(I)DOL	135.993,0	135.993	0,00	0,00%
	(I)E	2.511,0	2.511	0,00	0,00%
	(I)AF	654.679,0	654.679	0,00	0,00%
	(O)WLU s	20.534.530,0	20.534.530	0,00	0,00%
	(O)ATM	284.500,0	284.500	0,00	0,00%
	(O)INOA	290.914,0	290.914	0,00	0,00%
21	BRUSSELS AIC	0,8			
	(IN)SCC	77.000,0	77.000	0,00	0,00%
	(IN)NSCC	44,0	44	0,00	0,00%
	(I)DONOL	134.556,0	65.827	-68.728,71	-51,08%
	(I)DOL	57.458,0	34.654	-22.804,18	-39,69%
	(I)E	767,0	601	-166,04	-21,65%
	(I)AF	1.014.618,0	794.975	-219.643,32	-21,65%
	(O)WLU s	25.522.157,0	25.522.157	0,00	0,00%
	(O)ATM	305.500,0	443.471	137.971,02	0,4516
	(O)INOA	106.132,0	106.132	0,00	0,00%
22	COPENH. AIRPORTS A/	1,0			
	(IN)SCC	88.000,0	88.000	0,00	0,00%
	(IN)NSCC	78,0	78	0,00	0,00%
	(I)DONOL	30.220,0	30.220	0,00	0,00%
	(I)DOL	68.515,0	68.515	0,00	0,00%
	(I)E	1.347,0	1.347	0,00	0,00%
	(I)AF	991.109,0	991.109	0,00	0
	(O)WLU s	21.926.644,0	21.926.644	0,00	0,00%
	(O)ATM	288.800,0	288.800	0,00	0,00%
	(O)INOA	86.026,0	86.026	0,00	0,00%

23	OSLO F A/S	1,0			
	(IN)SCC	40.000,0	40.000	0,00	0,00%
	(IN)NSCC	42,0	42	0,00	0,00%
	(I)DONOL	64.090,0	55.743	-8.346,52	-13,02%
	(I)DOL	35.286,0	34.644	-641,96	-0,0182
	(I)E	588,0	577	-10,70	-1,82%
	(I)AF	1.320.376,0	1.296.354	-24.021,80	-1,82%
	(O)WLUs	14.614.756,0	21.468.280	6.853.524,29	46,89%
	(O)ATM	194.800,0	276.315	81.515,28	41,85%
	(O)INOA	108.730,0	108.730	0,00	0,00%
24	CZECH A A	1,0			
	(IN)SCC	3.500,0	3.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0
	(I)DONOL	36.687,0	36.687	0,00	0,00%
	(I)DOL	18.488,0	18.488	0,00	0,00%
	(I)E	1.589,0	1.589	0,00	0,00%
	(I)AF	792.245,0	792.245	0,00	0,00%
	(O)WLUs	6.937.774,0	6.937.774	0,00	0,00%
	(O)ATM	115.500,0	115.500	0,00	0,00%
	(O)INOA	39.043,0	39.043	0,00	0,00%
25	BAA STANSTED	0,6			
	(IN)SCC	40.007,0	40.007	0,00	0,00%
	(IN)NSCC	25,0	25	0,00	0,00%
	(I)DONOL	66.282,0	39.797	-26.485,11	-39,96%
	(I)DOL	35.639,0	22.360	-13.279,15	-37,26%
	(I)E	676,0	424	-251,88	-37,26%
	(I)AF	1.335.978,0	838.190	-497.787,53	-37,26%
	(O)WLUs	14.107.480,0	14.107.480	0,00	0,00%
	(O)ATM	148.900,0	173.916	25.016,41	0,168
	(O)INOA	82.243,0	82.243	0,00	0,00%
26	MANCHESTER AG Plc.	0,9			
	(IN)SCC	51.097,0	51.097	0,00	0,00%
	(IN)NSCC	95,0	95	0,00	0,00%
	(I)DONOL	143.876,0	74.029	-69.847,28	-48,55%
	(I)DOL	102.079,0	82.148	-19.930,69	-19,52%
	(I)E	1.639,0	1.416	-222,96	-13,60%
	(I)AF	1.710.993,0	1.478.242	-232.751,20	-0,136
	(O)WLUs	20.211.770,0	24.555.346	4.343.576,37	21,49%
	(O)ATM	181.000,0	309.422	128.422,42	70,95%
	(O)INOA	141.319,0	141.319	0,00	0,00%
27	F MUNCHEN GmbH	0,9			
	(IN)SCC	53.000,0	53.000	0,00	0,00%
	(IN)NSCC	107,0	107	0,00	0,00%
	(I)DONOL	214.646,0	143.481	-71.165,36	-33,15%
	(I)DOL	184.488,0	113.180	-71.308,44	-0,3865
	(I)E	4.472,0	3.806	-666,27	-14,90%
	(I)AF	2.063.566,0	1.756.123	-307.442,60	-14,90%
	(O)WLUs	25.747.259,0	29.077.208	3.329.948,69	12,93%
	(O)ATM	321.800,0	512.185	190.385,20	59,16%
	(O)INOA	180.500,0	180.500	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	(IN)SCC	19.000,0	19.000	0,00	0,00%
	(IN)NSCC	12,0	12	0,00	0
	(I)DONOL	39.182,0	39.182	0,00	0,00%
	(I)DOL	79.840,0	79.840	0,00	0,00%
	(I)E	809,0	809	0,00	0,00%
	(I)AF	220.285,0	220.285	0,00	0,00%
	(O)WLUs	10.271.352,0	10.271.352	0,00	0,00%
	(O)ATM	158.600,0	158.600	0,00	0,00%
	(O)INOA	65.494,0	65.494	0,00	0,00%

29	AI GENÈVE	1,0			
	(IN)SCC	24.000,0	24.000	0,00	0,00%
	(IN)NSCC	26,0	26	0,00	0,00%
	(I)DONOL	41.793,0	41.793	0,00	0,00%
	(I)DOL	38.823,0	38.823	0,00	0,00%
	(I)E	539,0	539	0,00	0,00%
	(I)AF	140.740,0	140.740	0,00	0,00%
	(O)WLUs	8.030.944,0	8.030.944	0,00	0,00%
	(O)ATM	163.200,0	163.200	0,00	0
	(O)INOA	61.335,0	61.335	0,00	0,00%
30	UNIQUE ZURICH A	1,0			
	(IN)SCC	55.400,0	55.400	0,00	0,00%
	(IN)NSCC	102,0	102	0,00	0,00%
	(I)DONOL	70.784,0	70.784	0,00	0,00%
	(I)DOL	83.156,0	83.156	0,00	0,00%
	(I)E	1.215,0	1.215	0,00	0,00%
	(I)AF	1.582.881,0	1.582.881	0,00	0
	(O)WLUs	25.941.591,0	25.941.591	0,00	0,00%
	(O)ATM	309.200,0	309.200	0,00	0,00%
	(O)INOA	151.454,0	151.454	0,00	0,00%
31	F WIEN GROUP	1,0			
	(IN)SCC	56.250,0	56.250	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0,00%
	(I)DONOL	68.298,0	68.298	0,00	0,00%
	(I)DOL	139.733,0	139.733	0,00	0
	(I)E	342,0	342	0,00	0,00%
	(I)AF	475.719,0	475.719	0,00	0,00%
	(O)WLUs	13.448.250,0	13.448.250	0,00	0,00%
	(O)ATM	185.400,0	185.400	0,00	0,00%
	(O)INOA	116.984,0	116.984	0,00	0,00%
32	ATHENS IA	0,4			
	(IN)SCC	42.100,0	42.100	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	52.500,0	7.013	-45.486,91	-86,64%
	(I)DOL	15.800,0	6.108	-9.692,10	-61,34%
	(I)E	520,0	163	-357,14	-68,68%
	(I)AF	1.930.202,0	527.152	-1.403.049,99	-72,69%
	(O)WLUs	10.884.204,0	10.884.204	0,00	0,00%
	(O)ATM	138.000,0	138.000	0,00	0,00%
	(O)INOA	37.236,0	43.601	6.364,87	17,09%

Model Name = Non-controllable(NCN-I-C)

Rank	DMU	Score
1	F WIEN GROUP	1,00
1	HKIA	1,00
1	NARITA A A	1,00
1	APACLtd. MELB.	1,00
1	AUCKLAND IALtd	1,00
1	BRISBANE ACLtd	1,00
1	WACLtd PERTH	1,00
1	SYDNEY ACLtd.	1,00
1	ADMTL	1,00
1	CALGARY A A	1,00
1	UNIQUE ZURICH A	1,00
1	OTTAWA IA	1,00
1	YVR AS	1,00
1	ASUR	1,00
1	INDIANAPOLIS A A	1,00
1	MWAA NATIONAL	1,00
1	AI GENÈVE	1,00
1	F HAMBURG GmbH	1,00
1	SAGA TORINO SpA	1,00
1	AD FIRENZE SpA	1,00
1	AER RIANTA	1,00
1	CZECH A A	1,00
1	COPENH. AIRPORTS A/S	1,00
24	OSLO F A/S	0,98
25	MWAA DULLES	0,89
26	MANCHESTER AG Plc.	0,86
27	F MÜNCHEN GmbH	0,85
28	BRUSSELS AIC	0,78
29	GTAA	0,70
30	BAA STANSTED	0,63
31	AD ROMA SpA	0,53
32	ATHENS IA	0,39

Frequency in Reference Set

Reference	Frequency to other DMUs
HKIA	0
NARITA A A	0
APAC Ltd. MELB.	4
AUCKLAND IALtd	0
BRISBANE ACLtd	6
WAACLtd PERTH	3
SYDNEY ACLtd.	0
ADMTL	0
CALGARY A A	2
OTTAWA IA	4
YVRAS	3
ASUR	0
INDIANAPOLIS A A	3
MWAA NATIONAL	2
SAGA TORINO SpA	2
AD FIRENZE SpA	0
AER RIANTA	2
COPENH. AIRPORTS A/S	0
CZECH A A	2
F HAMBURG GmbH	1
AI GENEVE	3
UNIQUE ZURICH A	3

DEA model = Non-controllable(NCN-I-C)

Problem = Industries Aéroportuaires 2001

No. of DMUs = 32
No. of Input items = 6
Input(1) = (IN)SCC (Non-controllable variable)
Input(2) = (IN)NSCC (Non-controllable variable)
Input(3) = (I)DONOL
Input(4) = (I)DOL
Input(5) = (I)E
Input(6) = (I)AF
No. of Output items = 3
Output(1) = (O)WLU
Output(2) = (O)ATM
Output(3) = (O)INOA
No. of DMUs = 32
Average = 0,925430561
SD = 0,152885595
Maximum = 1
Minimum = 0,386576184
Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	(IN)SCC	(IN)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)INOA
Max	439.000,00	107,00	756.884,00	184.488,00	4.472,00	6.637.260,00	53.548.760,00	406.300,00	338.937,00
Min	0,00	0,00	7.473,00	4.466,00	112,00	24.059,00	1.535.929,00	31.000,00	4.253,00
Average	66.569,69	38,00	88.335,31	49.066,06	846,13	1.263.027,84	17.572.447,16	206.693,75	95.191,13
SD	81.783,26	29,18	135.394,99	49.057,65	876,10	1.385.863,54	11.088.529,88	94.351,64	77.572,85
Correlation									
(IN)SCC	1,00	0,06	0,54	0,16	0,09	0,81	0,85	0,14	0,66
(IN)NSCC	0,06	1,00	0,16	0,70	0,66	0,15	0,36	0,54	0,44
(I)DONOL	0,54	0,16	1,00	0,43	0,36	0,81	0,63	0,10	0,82
(I)DOL	0,16	0,70	0,43	1,00	0,81	0,28	0,40	0,39	0,65
(I)E	0,09	0,66	0,36	0,81	1,00	0,26	0,33	0,38	0,53
(I)AF	0,81	0,15	0,81	0,28	0,26	1,00	0,86	0,16	0,75
(O)WLU	0,85	0,36	0,63	0,40	0,33	0,86	1,00	0,53	0,80
(O)ATM	0,14	0,54	0,10	0,39	0,38	0,16	0,53	1,00	0,36
(O)INOA	0,66	0,44	0,82	0,65	0,53	0,75	0,80	0,36	1,00

Model Name = Non-controllable(NCN+LC)

No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)						
1	HKIA	1.00	1	HKIA											
2	NARITA A A	1.00	1	NARITA A A											
3	APACld MELB.	1.00	1	APACld MELB.											
4	AUCKLAND IALld	1.00	1	AUCKLAND IALld											
5	BRISBANE ACld	1.00	1	BRISBANE ACld											
6	WACLtd PERTH	1.00	1	WACLtd PERTH											
7	SYDNEY ACld.	1.00	1	SYDNEY ACld.											
8	ADMTL	1.00	1	ADMTL											
9	CALGARY A A	1.00	1	CALGARY A A											
10	GTAA	0.70	29	APACld MELB.	1.13	CALGARY A A	0.09	OTTAWA IA	1.52	YVR AS	0.18				
11	OTTAWA IA	1.00	1	OTTAWA IA											
12	YVR AS	1.00	1	YVR AS											
13	ASUR	1.00	1	ASUR											
14	INDIANAPOLIS A A	1.00	1	INDIANAPOLIS A A											
15	MWAA NATIONAL	1.00	1	MWAA NATIONAL											
16	MWAA DULLES	0.89	25	APACld MELB.	0.39	OTTAWA IA	1.46	INDIANAPOLIS A A	0.29	MWAA NATIONAL	0.44				
17	AD ROMA SpA	0.53	31	WACLtd PERTH	0.37	INDIANAPOLIS A A	0.04	AI GENEVE	0.84	UNIQUE ZURICH A	0.51	F WIEN GROUP	0.07		
18	SAGA TORINO SpA	1.00	1	SAGA TORINO SpA											
19	AD FIRENZE SpA	1.00	1	AD FIRENZE SpA											
20	AER RIANTA	1.00	1	AER RIANTA											
21	BRUSSELS AIC	0.78	28	APACld MELB.	0.29	OTTAWA IA	2.32	YVR AS	0.66	F WIEN GROUP	0.05				
22	COPENH. AIRPORTS A/S	1.00	1	COPENH. AIRPORTS A/S											
23	OSLO F A/S	0.98	24	BRISBANE ACld	0.32	MWAA NATIONAL	0.17	AER RIANTA	0.13	F WIEN GROUP	0.04				
24	CZECH A A	1.00	1	CZECH A A											
25	BAA STANSTED	0.63	30	BRISBANE ACld	0.08	WACLtd PERTH	1.54	OTTAWA IA	0.04	YVR AS	0.14	AER RIANTA	0.08	F WIEN GROUP	0.01
26	MANCHESTER AG Plc.	0.86	26	SAGA TORINO SpA	0.37	CZECH A A	0.12	AI GENEVE	0.03	UNIQUE ZURICH A	0.86309				
27	F MUNCHEN GmbH	0.85	27	SAGA TORINO SpA	0.93	CZECH A A	1.56	AI GENEVE	1.29	UNIQUE ZURICH A	0.19658				
28	F HAMBURG GmbH	1.00	1	F HAMBURG GmbH											
29	AI GENEVE	1.00	1	AI GENEVE											
30	UNIQUE ZURICH A	1.00	1	UNIQUE ZURICH A											
31	F WIEN GROUP	1.00	1	F WIEN GROUP											
32	ATHENIA	0.39	32	APACld MELB.	0.10	BRISBANE ACld	0.02	CALGARY A A	0.11	INDIANAPOLIS A A	0.41				

Indústries Aeroportuàries 2002	(IN)SCC	(IN)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLUS	(O)ATM	(O)INOA
HKIA	439000	21	149720	52813	941	5024828	58927840	197700	207175
NARITA A A	259000	20	810855	77517	896	6821590	48902220	165800	375425
APACLtd. MELB.	80000	14	18630	10067	196	859452	19805450	157600	76336
AUCKLAND IALtd	60500	47	9393	11752	262	635996	10693110	142600	53525
BRISBANE ACLtd	23150	31	16180	6095	129	962627	13623190	150800	47197
WACLtd PERTH	11060	7	9194	5126	118	403701	4892810	48600	30262
SYDNEY ACLtd.	109020	46	56208	29024	409	1965287	28313530	254700	153417
ADMTL	64000	20	34431	22363	600	387282	11229060	225500	45588
CALGARY A A	54813	53	17380	6535	161	339945	8947840	133700	27736
GTAA	69677	52	201733	50722	916	2786382	29013840	383200	108456
OTTAWA IA	0	0	16301	5972	150	387282	3217000	68500	9976
YVR AS	96156	48	33862	20856	310	533555	17227390	296600	76406
ASUR	33000	18	33118	7993	637	802138	11525420	201200	17872
INDIANAPOLIS A A	67500	30	10055	13990	400	1126765	15898170	205900	77499
MWAA NATIONAL	0	0	38397	31409	245	753124	12908060	215700	50238
MWAA DULLES	48000	24	61158	42821	380	1509868	20253480	372600	76070
AD ROMA SpA	70000	87	151610	152175	2327	2322802	26647933	282800	169340
SAGA TORINO SpA	6000	7	19492	18817	414	27646	2937561	59900	12057
AD FIRENZE SpA	0	0	7814	8569	118	22963	1390494	26900	4112
AER RIANTA	90000	55	208794	142636	2416	706277	21089494	263700	271010
BRUSSELS AIC	77000	44	108288	53463	768	1133053	19815130	256900	103461
COPENH. AIRPORTS A/S	88000	78	33399	70809	1347	1037292	22009113	266900	97144
OSLO F A/S	40000	42	59000	45166	581	1283355	14034821	177500	108984
CZECH A A	3500	30	33658	21078	1624	786798	6834739	115400	41795
BAA STANSTED	40007	25	84842	37151	705	1570303	15880670	166800	112396
MANCHESTER AG Plc.	84310	131	206203	119245	1924	1704044	25691430	211100	174983
F MUNCHEN GmbH	53000	107	221266	193712	4568	2091034	25412805	330900	173100
F HAMBURG GmbH	19000	12	32192	75966	808	235711	9744955	150200	54798
AI GENÈVE	24000	26	43251	42548	575	163505	8095767	163800	62306
UNIQUE ZURICH A	55400	102	68832	89236	1273	1831201	22166168	282200	139249
F WIEN GROUP	56250	55	68298	120259	336	510902	13574260	186800	118963

RESULTATS DEA 2002.2 INOC

Model Name = Non-controllable(NCN-I-C)			2002		
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	(IN)SCC	439.000,0	439.000	0,00	0,00%
	(IN)NSCC	21,0	21	0,00	0,00%
	(I)DONOL	149.720,0	149.720	0,00	0,00%
	(I)DOL	52.813,0	52.813	0,00	0,00%
	(I)E	941,0	941	0,00	0,00%
	(I)AF	5.024.828,0	5.024.828	0,00	0,00%
	(O)WLU s	58.927.840,0	58.927.840	0,00	0,00%
	(O)ATM	197.700,0	197.700	0,00	0
	(O)NOA	207.175,0	207.175	0,00	0,00%
2	NARITA A A	1,0			
	(IN)SCC	259.000,0	259.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0,00%
	(I)DONOL	810.855,0	810.855	0,00	0,00%
	(I)DOL	77.517,0	77.517	0,00	0,00%
	(I)E	896,0	896	0,00	0,00%
	(I)AF	6.821.590,0	6.821.590	0,00	0
	(O)WLU s	48.902.220,0	48.902.220	0,00	0,00%
	(O)ATM	165.800,0	165.800	0,00	0,00%
	(O)NOA	375.425,0	375.425	0,00	0,00%
3	APACLtd. MELB.	1,0			
	(IN)SCC	80.000,0	80.000	0,00	0,00%
	(IN)NSCC	14,0	14	0,00	0,00%
	(I)DONOL	18.630,0	18.630	0,00	0,00%
	(I)DOL	10.067,0	10.067	0,00	0
	(I)E	196,0	196	0,00	0,00%
	(I)AF	859.452,0	859.452	0,00	0,00%
	(O)WLU s	19.805.450,0	19.805.450	0,00	0,00%
	(O)ATM	157.600,0	157.600	0,00	0,00%
	(O)NOA	76.336,0	76.336	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	(IN)SCC	60.500,0	60.500	0,00	0,00%
	(IN)NSCC	47,0	47	0,00	0
	(I)DONOL	9.393,0	9.393	0,00	0,00%
	(I)DOL	11.752,0	11.752	0,00	0,00%
	(I)E	262,0	262	0,00	0,00%
	(I)AF	635.996,0	635.996	0,00	0,00%
	(O)WLU s	10.693.110,0	10.693.110	0,00	0,00%
	(O)ATM	142.600,0	142.600	0,00	0,00%
	(O)NOA	53.525,0	53.525	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	(IN)SCC	23.150,0	23.150	0,00	0,00%
	(IN)NSCC	31,0	31	0,00	0,00%
	(I)DONOL	16.180,0	16.180	0,00	0,00%
	(I)DOL	6.095,0	6.095	0,00	0,00%
	(I)E	129,0	129	0,00	0,00%
	(I)AF	962.627,0	962.627	0,00	0,00%
	(O)WLU s	13.623.190,0	13.623.190	0,00	0,00%
	(O)ATM	150.800,0	150.800	0,00	0
	(O)NOA	47.197,0	47.197	0,00	0,00%
6	WACLtd PERTH	1,0			
	(IN)SCC	11.060,0	11.060	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	9.194,0	9.194	0,00	0,00%
	(I)DOL	5.126,0	5.126	0,00	0,00%
	(I)E	118,0	118	0,00	0,00%
	(I)AF	403.701,0	403.701	0,00	0
	(O)WLU s	4.892.810,0	4.892.810	0,00	0,00%
	(O)ATM	48.600,0	48.600	0,00	0,00%
	(O)NOA	30.262,0	30.262	0,00	0,00%
7	SYDNEY ACLtd.	1,0			
	(IN)SCC	109.020,0	109.020	0,00	0,00%
	(IN)NSCC	46,0	46	0,00	0,00%
	(I)DONOL	56.208,0	56.208	0,00	0,00%
	(I)DOL	29.024,0	29.024	0,00	0
	(I)E	409,0	409	0,00	0,00%
	(I)AF	1.965.287,0	1.965.287	0,00	0,00%
	(O)WLU s	28.313.530,0	28.313.530	0,00	0,00%
	(O)ATM	254.700,0	254.700	0,00	0,00%
	(O)NOA	153.417,0	153.417	0,00	0,00%
8	ADMTL	1,0			
	(IN)SCC	64.000,0	64.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	34.431,0	34.431	0,00	0,00%
	(I)DOL	22.363,0	22.363	0,00	0,00%
	(I)E	600,0	600	0,00	0,00%
	(I)AF	387.282,0	387.282	0,00	0,00%
(O)WLU s	11.229.060,0	11.229.060	0,00	0,00%	

	(O)ATM	225.500,0	225.500	0,00	0,00%
	(O)INOA	45.588,0	45.588	0,00	0,00%
9	CALGARY A.A	1,0			
	(IN)SCC	54.813,0	54.813	0,00	0,00%
	(IN)NSCC	53,0	53	0,00	0,00%
	(I)DONOL	17.380,0	17.380	0,00	0,00%
	(I)DOL	6.535,0	6.535	0,00	0,00%
	(I)E	161,0	161	0,00	0,00%
	(I)AF	339.945,0	339.945	0,00	0,00%
	(O)WLU _s	8.947.840,0	8.947.840	0,00	0,00%
	(O)ATM	133.700,0	133.700	0,00	0
	(O)INOA	27.736,0	27.736	0,00	0,00%
10	GTA	0,6			
	(IN)SCC	69.677,0	69.677	0,00	0,00%
	(IN)NSCC	52,0	52	0,00	0,00%
	(I)DONOL	201.733,0	49.740	-151.993,27	-75,34%
	(I)DOL	50.722,0	30.070	-20.651,68	-40,72%
	(I)E	916,0	388	-527,85	-57,63%
	(I)AF	2.786.382,0	1.651.895	-1.134.487,31	-40,72%
	(O)WLU _s	29.013.840,0	29.013.840	0,00	0,00%
	(O)ATM	383.200,0	383.200	0,00	0,00%
	(O)INOA	108.456,0	109.424	968,32	0,89%
11	OTTAWA IA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	16.301,0	16.301	0,00	0,00%
	(I)DOL	5.972,0	5.972	0,00	0
	(I)E	150,0	150	0,00	0,00%
	(I)AF	387.282,0	387.282	0,00	0,00%
	(O)WLU _s	3.217.000,0	3.217.000	0,00	0,00%
	(O)ATM	68.500,0	68.500	0,00	0,00%
	(O)INOA	9.976,0	9.976	0,00	0,00%
12	YVR AS	1,0			
	(IN)SCC	96.156,0	96.156	0,00	0,00%
	(IN)NSCC	48,0	48	0,00	0
	(I)DONOL	33.862,0	33.862	0,00	0,00%
	(I)DOL	20.856,0	20.856	0,00	0,00%
	(I)E	310,0	310	0,00	0,00%
	(I)AF	533.555,0	533.555	0,00	0,00%
	(O)WLU _s	17.227.390,0	17.227.390	0,00	0,00%
	(O)ATM	296.600,0	296.600	0,00	0,00%
	(O)INOA	76.406,0	76.406	0,00	0,00%
13	ASUR	1,0			
	(IN)SCC	33.000,0	33.000	0,00	0,00%
	(IN)NSCC	18,0	18	0,00	0,00%
	(I)DONOL	33.118,0	33.118	0,00	0,00%
	(I)DOL	7.993,0	7.993	0,00	0,00%
	(I)E	637,0	637	0,00	0,00%
	(I)AF	802.138,0	802.138	0,00	0,00%
	(O)WLU _s	11.525.420,0	11.525.420	0,00	0,00%
	(O)ATM	201.200,0	201.200	0,00	0
	(O)INOA	17.872,0	17.872	0,00	0,00%
14	INDIANAPOLIS A.A	1,0			
	(IN)SCC	67.500,0	67.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0,00%
	(I)DONOL	10.055,0	10.055	0,00	0,00%
	(I)DOL	13.990,0	13.990	0,00	0,00%
	(I)E	400,0	400	0,00	0,00%
	(I)AF	1.126.765,0	1.126.765	0,00	0
	(O)WLU _s	15.898.170,0	15.898.170	0,00	0,00%
	(O)ATM	205.900,0	205.900	0,00	0,00%
	(O)INOA	77.499,0	77.499	0,00	0,00%
15	MWAA NATIONAL	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	38.397,0	38.397	0,00	0,00%
	(I)DOL	31.409,0	31.409	0,00	0
	(I)E	245,0	245	0,00	0,00%
	(I)AF	753.124,0	753.124	0,00	0,00%
	(O)WLU _s	12.908.060,0	12.908.060	0,00	0,00%
	(O)ATM	215.700,0	215.700	0,00	0,00%
	(O)INOA	50.238,0	50.238	0,00	0,00%
16	MWAA DULLES	1,0			
	(IN)SCC	48.000,0	48.000	0,00	0,00%
	(IN)NSCC	24,0	24	0,00	0
	(I)DONOL	61.158,0	61.158	0,00	0,00%
	(I)DOL	42.821,0	42.821	0,00	0,00%
	(I)E	380,0	380	0,00	0,00%
	(I)AF	1.509.868,0	1.509.868	0,00	0,00%
	(O)WLU _s	20.253.480,0	20.253.480	0,00	0,00%
	(O)ATM	372.600,0	372.600	0,00	0,00%

	(O)INOA	76.070,0	76.070	0,00	0,00%
17	AD ROMA SpA	0,6			
	(IN)SCC	70.000,0	70.000	0,00	0,00%
	(IN)NSCC	87,0	87	0,00	0,00%
	(I)DONOL	151.610,0	93.639	-57.970,76	-38,24%
	(I)DOL	152.175,0	93.988	-58.186,79	-38,24%
	(I)E	2.327,0	1.347	-979,82	-42,11%
	(I)AF	2.322.802,0	1.434.638	-888.164,28	-38,24%
	(O)WLU _s	26.647.933,0	26.647.933	0,00	0,00%
	(O)ATM	282.800,0	407.000	124.200,30	0,4392
	(O)INOA	169.340,0	169.340	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	(IN)SCC	6.000,0	6.000	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	19.492,0	19.492	0,00	0,00%
	(I)DOL	18.817,0	18.817	0,00	0,00%
	(I)E	414,0	414	0,00	0,00%
	(I)AF	27.646,0	27.646	0,00	0
	(O)WLU _s	2.937.561,0	2.937.561	0,00	0,00%
	(O)ATM	59.900,0	59.900	0,00	0,00%
	(O)INOA	12.057,0	12.057	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	7.814,0	7.814	0,00	0,00%
	(I)DOL	8.569,0	8.569	0,00	0
	(I)E	118,0	118	0,00	0,00%
	(I)AF	22.963,0	22.963	0,00	0,00%
	(O)WLU _s	1.390.494,0	1.390.494	0,00	0,00%
	(O)ATM	26.900,0	26.900	0,00	0,00%
	(O)INOA	4.112,0	4.112	0,00	0,00%
20	AER RIANTA	1,0			
	(IN)SCC	90.000,0	90.000	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0
	(I)DONOL	208.794,0	208.794	0,00	0,00%
	(I)DOL	142.636,0	142.636	0,00	0,00%
	(I)E	2.416,0	2.416	0,00	0,00%
	(I)AF	706.277,0	706.277	0,00	0,00%
	(O)WLU _s	21.089.494,0	21.089.494	0,00	0,00%
	(O)ATM	263.700,0	263.700	0,00	0,00%
	(O)INOA	271.010,0	271.010	0,00	0,00%
21	BRUSSELS AIC	0,7			
	(IN)SCC	77.000,0	77.000	0,00	0,00%
	(IN)NSCC	44,0	44	0,00	0,00%
	(I)DONOL	108.288,0	48.463	-59.825,12	-55,25%
	(I)DOL	53.463,0	38.737	-14.726,00	-27,54%
	(I)E	768,0	556	-211,54	-27,54%
	(I)AF	1.133.053,0	820.962	-312.091,40	-27,54%
	(O)WLU _s	19.815.130,0	19.815.130	0,00	0,00%
	(O)ATM	256.900,0	284.249	27.348,88	0,1065
	(O)INOA	103.461,0	103.461	0,00	0,00%
22	COPENH. AIRPORTS A/S	1,0			
	(IN)SCC	88.000,0	88.000	0,00	0,00%
	(IN)NSCC	78,0	78	0,00	0,00%
	(I)DONOL	33.399,0	33.399	0,00	0,00%
	(I)DOL	70.809,0	70.809	0,00	0,00%
	(I)E	1.347,0	1.347	0,00	0,00%
	(I)AF	1.037.292,0	1.037.292	0,00	0
	(O)WLU _s	22.009.113,0	22.009.113	0,00	0,00%
	(O)ATM	266.900,0	266.900	0,00	0,00%
	(O)INOA	97.144,0	97.144	0,00	0,00%
23	OSLO F A/S	1,0			
	(IN)SCC	40.000,0	40.000	0,00	0,00%
	(IN)NSCC	42,0	42	0,00	0,00%
	(I)DONOL	59.000,0	54.622	-4.378,47	-7,42%
	(I)DOL	45.166,0	44.786	-379,66	-0,0084
	(I)E	581,0	576	-4,88	-0,84%
	(I)AF	1.283.355,0	1.272.567	-10.787,65	-0,84%
	(O)WLU _s	14.034.821,0	21.195.693	7.160.872,05	51,02%
	(O)ATM	177.500,0	289.367	111.866,76	63,02%
	(O)INOA	108.984,0	108.984	0,00	0,00%
24	CZECH A A	1,0			
	(IN)SCC	3.500,0	3.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0
	(I)DONOL	33.658,0	33.658	0,00	0,00%
	(I)DOL	21.078,0	21.078	0,00	0,00%
	(I)E	1.624,0	1.624	0,00	0,00%
	(I)AF	786.798,0	786.798	0,00	0,00%
	(O)WLU _s	6.834.739,0	6.834.739	0,00	0,00%
	(O)ATM	115.400,0	115.400	0,00	0,00%
	(O)INOA	41.795,0	41.795	0,00	0,00%

25	BAA STANSTED	0,8			
	(IN)SCC	40.007,0	40.007	0,00	0,00%
	(IN)NSCC	25,0	25	0,00	0,00%
	(I)DONOL	84.842,0	46.436	-38.405,52	-45,27%
	(I)DOL	37.151,0	29.333	-7.818,17	-21,04%
	(I)E	705,0	557	-148,36	-21,04%
	(I)AF	1.570.303,0	1.239.844	-330.459,39	-21,04%
	(O)WLU _s	15.880.670,0	16.434.193	553.522,52	3,49%
	(O)ATM	166.800,0	172.088	5.288,20	0,0317
	(O)INOA	112.396,0	112.396	0,00	0,00%
26	MANCHESTER AG Plc.	1,0			
	(IN)SCC	84.310,0	84.310	0,00	0,00%
	(IN)NSCC	131,0	131	0,00	0,00%
	(I)DONOL	206.203,0	206.203	0,00	0,00%
	(I)DOL	119.245,0	119.245	0,00	0,00%
	(I)E	1.924,0	1.924	0,00	0,00%
	(I)AF	1.704.044,0	1.704.044	0,00	0
	(O)WLU _s	25.691.430,0	25.691.430	0,00	0,00%
	(O)ATM	211.100,0	211.100	0,00	0,00%
	(O)INOA	174.983,0	174.983	0,00	0,00%
27	F MÜNCHEN GmbH	0,8			
	(IN)SCC	53.000,0	53.000	0,00	0,00%
	(IN)NSCC	107,0	107	0,00	0,00%
	(I)DONOL	221.266,0	158.880	-62.385,88	-28,19%
	(I)DOL	193.712,0	117.985	-75.726,87	-39,09%
	(I)E	4.568,0	3.865	-702,74	-15,38%
	(I)AF	2.091.034,0	1.769.350	-321.684,35	-15,38%
	(O)WLU _s	25.412.805,0	26.759.121	1.346.316,25	5,30%
	(O)ATM	330.900,0	434.471	103.571,00	31,30%
	(O)INOA	173.100,0	173.100	0,00	0,00%
28	F HAMBURG GmbH	1,0			
	(IN)SCC	19.000,0	19.000	0,00	0,00%
	(IN)NSCC	12,0	12	0,00	0
	(I)DONOL	32.192,0	32.192	0,00	0,00%
	(I)DOL	75.966,0	75.966	0,00	0,00%
	(I)E	808,0	808	0,00	0,00%
	(I)AF	235.711,0	235.711	0,00	0,00%
	(O)WLU _s	9.744.955,0	9.744.955	0,00	0,00%
	(O)ATM	150.200,0	150.200	0,00	0,00%
	(O)INOA	54.798,0	54.798	0,00	0,00%
29	AI GENÈVE	1,0			
	(IN)SCC	24.000,0	24.000	0,00	0,00%
	(IN)NSCC	26,0	26	0,00	0,00%
	(I)DONOL	43.251,0	43.251	0,00	0,00%
	(I)DOL	42.548,0	42.548	0,00	0,00%
	(I)E	575,0	575	0,00	0,00%
	(I)AF	163.505,0	163.505	0,00	0,00%
	(O)WLU _s	8.095.767,0	8.095.767	0,00	0,00%
	(O)ATM	163.800,0	163.800	0,00	0
	(O)INOA	62.306,0	62.306	0,00	0,00%
30	UNIQUE ZÜRICH A	1,0			
	(IN)SCC	55.400,0	55.400	0,00	0,00%
	(IN)NSCC	102,0	102	0,00	0,00%
	(I)DONOL	68.832,0	68.832	0,00	0,00%
	(I)DOL	89.236,0	89.236	0,00	0,00%
	(I)E	1.273,0	1.273	0,00	0,00%
	(I)AF	1.831.201,0	1.831.201	0,00	0
	(O)WLU _s	22.166.168,0	22.166.168	0,00	0,00%
	(O)ATM	282.200,0	282.200	0,00	0,00%
	(O)INOA	139.249,0	139.249	0,00	0,00%
31	F WIEN GROUP	1,0			
	(IN)SCC	56.250,0	56.250	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0,00%
	(I)DONOL	68.298,0	68.298	0,00	0,00%
	(I)DOL	120.259,0	120.259	0,00	0
	(I)E	336,0	336	0,00	0,00%
	(I)AF	510.902,0	510.902	0,00	0,00%
	(O)WLU _s	13.574.260,0	13.574.260	0,00	0,00%
	(O)ATM	186.800,0	186.800	0,00	0,00%
	(O)INOA	118.963,0	118.963	0,00	0,00%
32	ATHENS IA	0,4			
	(IN)SCC	42.100,0	42.100	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	68.500,0	21.157	-47.342,54	-69,11%
	(I)DOL	27.900,0	10.778	-17.122,21	-61,37%
	(I)E	712,0	190	-521,96	-73,31%
	(I)AF	1.853.899,0	716.162	-1.137.736,73	-61,37%
	(O)WLU _s	12.817.278,0	13.067.742	250.464,02	1,95%
	(O)ATM	159.500,0	159.500	0,00	0,00%
	(O)INOA	49.844,0	49.844	0,00	0,00%

DEA model = Non-controllable(NCN-I-C)

Problem = Indústries Aeroportuàries 2002

No. of DMUs = 32

No. of Input items = 6

Input(1) = (I)NSCC (Non-controllable variable)

Input(2) = (I)NSCC (Non-controllable variable)

Input(3) = (I)DONOL

Input(4) = (I)DOL

Input(5) = (I)E

Input(6) = (I)AF

No. of Output items = 3

Output(1) = (O)WLU

Output(2) = (O)ATM

Output(3) = (O)INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

No. of DMUs in Data = 32

No. of DMUs with inappropriate Data = 0

No. of evaluated DMUs = 32

Average of scores = 0,93589522

No. of efficient DMUs = 25

No. of inefficient DMUs = 7

No. of over iteration DMUs = 0

Frequency in Reference Set

Reference	Frequency to other DMUs
HKIA	0
NARITA A A	0
APACld. MELB.	4
AUCKLAND IALtd	1
BRISBANE ACLtd	5
WACLtd PERTH	4
SYDNEY ACLtd.	0
ADMIL	0
CALGARY A A	1
OTTAWA IA	1
YVRAS	3
ASUR	0
INDIANAPOLIS A A	0
MWAA NATIONAL	4
MWAA DULLES	0
SAGA TORINO SpA	1
AD FIRENZE SpA	0
AER RIANTA	1
COPENH. AIRPORTS AVS	1
CZECH A A	1
MANCHESTER AG Plc.	1
F HAMBURG GmbH	0
AI GENEVE	4
UNIQUE ZURICH A	1
F WIEN GROUP	3

No. of DMUs
Average
SD
Maximum
Minimum

32,00

0,94

1,00

0,39

	(I)NSCC	(I)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)INOA
Max	439000	131	810855	193712	4568	6821590	58927840	383200	375425
Min	0	0	7814	5126	118	22963	1390494	26900	4112
Average	67607,5938	39,125	91626,6875	50430,7813	851,4375	1330643,969	17610032,1	197562,5	97710
SD	81791,0591	31,9254503	144195,232	47899,5911	901,638541	1390138,335	12015867,5	85936,2691	79271,4833
Correlation									
(I)NSCC	1	0,08372413	0,52813106	0,18037361	0,11065828	0,796752215	0,90065471	0,20923949	0,66469335
(I)NSCC	0,08372413	1	0,18141185	0,71496468	0,67512222	0,152362746	0,31497982	0,5508907	0,41936764
(I)DONOL	0,52813106	0,18141185	1	0,43928693	0,34684792	0,82758459	0,67072839	0,20411369	0,84608247
(I)DOL	0,18037361	0,71496468	0,43928693	1	0,8473245	0,29827916	0,41489129	0,50480461	0,65413232
(I)E	0,11065828	0,67512222	0,34684792	0,8473245	1	0,252825344	0,33115196	0,45225315	0,50093004
(I)AF	0,79675222	0,15236275	0,82758459	0,29827916	0,25282534	1	0,90338461	0,29373456	0,78618765
(O)WLU	0,90065471	0,31497982	0,67072839	0,41489129	0,33115196	0,90338461	1	0,49446702	0,81816287
(O)ATM	0,20923949	0,5508907	0,20411369	0,50480461	0,45225315	0,29373456	0,49446702	1	0,40444942
(O)INOA	0,66469335	0,41936764	0,84608247	0,65413232	0,50093004	0,78618764	0,81816287	0,40444942	1

Model Name = Non-controllable(NC+L-C)

2002

No	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)			
1	HKIA	1.00	1	HKIA										
2	NARITA A.A	1.00	1	NARITA A.A										
3	APACld MELB	1.00	1	APACld MELB										
4	AUCKLAND JALtd	1.00	1	AUCKLAND JALtd										
5	BRISBANE ACldd	1.00	1	BRISBANE ACldd										
6	WACLtd PERTH	1.00	1	WACLtd PERTH										
7	SYDNEY ACldd	1.00	1	SYDNEY ACldd										
8	ADMTL	1.00	1	ADMTL										
9	CALGARY A A	1.00	1	CALGARY A A										
10	GTAA	0.59	31	APACld MELB	BRISBANE ACldd	0.99	CALGARY A A	0.08	YVR AS	0.31	MWAA NATIONAL	0.49		
11	OTTAWA JA	1.00	1	OTTAWA JA										
12	YVR AS	1.00	1	YVR AS										
13	ASUR	1.00	1	ASUR										
14	INDIANAPOLIS A A	1.00	1	INDIANAPOLIS A A										
15	MWAA NATIONAL	1.00	1	MWAA NATIONAL										
16	MWAA DULLES	1.00	1	MWAA DULLES										
17	AD ROMA Spa	0.82	30	AUCKLAND JALtd	BRISBANE ACldd	0.32	WACLtd PERTH	0.63	COPENH AIRPORTS A/S	0.01	AI GENEVE	1.37	UNIQUE ZURICH A	0.33
18	SAGA TORINO Spa	1.00	1	SAGA TORINO Spa										
19	AD FIRENZE Spa	1.00	1	AD FIRENZE Spa										
20	AER RIANTA	1.00	1	AER RIANTA										
21	BRUSSELS AIC	0.72	29	APACld MELB	BRISBANE ACldd	0.22	WACLtd PERTH	0.62	YVR AS	0.38	AI GENEVE	0.54	F WIEN GROUP	0.02
22	COPENH AIRPORTS A/S	1.00	1	COPENH AIRPORTS A/S										
23	OSLO F A/S	0.99	26	BRISBANE ACldd	WACLtd PERTH	0.61	MWAA NATIONAL	0.25	AI GENEVE	0.54	F WIEN GROUP	0.04		
24	CZECH A A	1.00	1	CZECH A A										
25	BAA STANSTED	0.79	28	APACld MELB	WACLtd PERTH	0.01	MWAA NATIONAL	0.05	AER RIANTA	0.09	F WIEN GROUP	0.01		
26	MANCHESTER AG Plc	1.00	1	MANCHESTER AG Plc										
27	F MUNCHEN GmbH	0.85	27	SAGA TORINO Spa	CZECH A A	1.05	MANCHESTER AG Plc	0.24	AI GENEVE	0.89623				
28	F HAMBURG GmbH	1.00	1	F HAMBURG GmbH										
29	AI GENEVE	1.00	1	AI GENEVE										
30	UNIQUE ZURICH A	1.00	1	UNIQUE ZURICH A										
31	F WIEN GROUP	1.00	1	F WIEN GROUP										
32	ATHENS JA	0.39	32	APACld MELB	BRISBANE ACldd	0.25	OTTAWA JA	0.29	YVR AS	0.16	MWAA NATIONAL	0.05		

Indústries Aeroportuàries 2003	(IN)SCC	(IN)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLUs	(O)ATM	(O)INOA
HKIA	439000	21	145796	53109	963	4913927	53780800	211700	198532
NARITA A A	259000	20	775859	77180	912	6961160	48083910	171000	371514
APACld. MELB.	80000	14	22775	10644	179	856922	20404320	157900	79485
AUCKLAND IALtd	60500	47	7787	11875	276	649975	11317110	144500	33742
BRISBANE ACLtd	23150	31	17089	7888	139	959872	13434020	136900	49525
WACLtd PERTH	11060	7	16034	5763	127	407255	5356840	51600	30798
SYDNEY ACLtd	109020	46	51365	24587	399	3646954	29854000	252000	159724
ADMTL	64000	20	41566	25424	600	518465	11385930	230100	48003
CALGARY A A	54813	53	26164	6848	161	374970	9727350	132900	24170
GTA A	69677	52	243818	55890	1006	3376895	27468880	370100	114553
OTTAWA IA	0	0	15836	6580	155	227854	3263000	69800	10788
YVR AS	108156	48	39268	19927	298	516220	16479390	290100	78773
ASUR	33000	18	38383	9551	665	875719	12796830	225948	37120
INDIANAPOLIS A A	67500	30	13050	14907	400	952114	16251630	204000	45126
MWAA NATIONAL	0	0	39133	32794	270	816968	14253480	250800	58117
MWAA DULLES	48000	24	67046	46477	420	1637864	19606210	335400	81662
AD ROMA SpA	70000	87	153955	150389	2256	2418763	27561599	300800	171945
SAGA TORINO SpA	6000	7	17817	18344	442	63393	2990578	54700	12690
AD FIRENZE SpA	0	0	8753	8893	117	23338	1394199	26100	4981
AER RIANTA	90000	55	219140	145103	2352	717430	22389558	269700	283877
BRUSSELS AIC	77000	44	121531	54827	779	1104631	21267336	252200	99962
COPENH. AIRPORTS A/S	88000	78	43444	71830	1352	1978023	21071317	259000	102095
OSLO F A/S	40000	42	62756	37056	579	1225016	14294890	175900	117109
CZECH A A	3500	30	32246	24471	1658	798947	8100842	130400	46656
BAA STANSTED	40007	25	35639	39465	855	1664838	20173450	171300	112396
MANCHESTER AG Plc.	84310	131	195761	113468	2411	1675911	26813000	247165	170729
F MÜNCHEN GmbH	53000	107	296670	220551	4891	2152218	26479308	343000	265600
F HAMBURG GmbH	19000	12	35872	77417	782	277748	10317594	149400	68607
AI GENÈVE	24000	26	46894	47514	540	192686	8578760	163800	68490
UNIQUE ZÜRICH A	55400	102	97922	88800	1289	1916303	20923367	269400	152449
FWIEN GROUP	56250	55	74583	147151	355	578064	14512155	197100	122208
ATHENS IA	42100	20	64400	29300	696	2039735	13264484	170100	53589

RESULTATS DEA 2003.2 INOC

Model Name = Non-controllable(NCN-I-C)		2003			
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	(IN)SCC	439.000,0	439.000	0,00	0,00%
	(IN)NSCC	21,0	21	0,00	0,00%
	(I)DONOL	145.796,0	145.796	0,00	0,00%
	(I)DOL	53.109,0	53.109	0,00	0,00%
	(I)E	963,0	963	0,00	0,00%
	(I)AF	4.913.927,0	4.913.927	0,00	0,00%
	(O)WLUUs	53.780.800,0	53.780.800	0,00	0,00%
	(O)ATM	211.700,0	211.700	0,00	0
	(O)INOA	198.532,0	198.532	0,00	0,00%
2	NARITA A A	1,0			
	(IN)SCC	259.000,0	259.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0,00%
	(I)DONOL	775.859,0	775.859	0,00	0,00%
	(I)DOL	77.180,0	77.180	0,00	0,00%
	(I)E	912,0	912	0,00	0,00%
	(I)AF	6.961.160,0	6.961.160	0,00	0
	(O)WLUUs	48.083.910,0	48.083.910	0,00	0,00%
	(O)ATM	171.000,0	171.000	0,00	0,00%
	(O)INOA	371.514,0	371.514	0,00	0,00%
3	APACLtd. MELB.	1,0			
	(IN)SCC	80.000,0	80.000	0,00	0,00%
	(IN)NSCC	14,0	14	0,00	0,00%
	(I)DONOL	22.775,0	22.775	0,00	0,00%
	(I)DOL	10.644,0	10.644	0,00	0
	(I)E	179,0	179	0,00	0,00%
	(I)AF	856.922,0	856.922	0,00	0,00%
	(O)WLUUs	20.404.320,0	20.404.320	0,00	0,00%
	(O)ATM	157.900,0	157.900	0,00	0,00%
	(O)INOA	79.485,0	79.485	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	(IN)SCC	60.500,0	60.500	0,00	0,00%
	(IN)NSCC	47,0	47	0,00	0
	(I)DONOL	7.787,0	7.787	0,00	0,00%
	(I)DOL	11.875,0	11.875	0,00	0,00%
	(I)E	276,0	276	0,00	0,00%
	(I)AF	649.975,0	649.975	0,00	0,00%
	(O)WLUUs	11.317.110,0	11.317.110	0,00	0,00%
	(O)ATM	144.500,0	144.500	0,00	0,00%
	(O)INOA	33.742,0	33.742	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	(IN)SCC	23.150,0	23.150	0,00	0,00%
	(IN)NSCC	31,0	31	0,00	0,00%
	(I)DONOL	17.089,0	17.089	0,00	0,00%
	(I)DOL	7.888,0	7.888	0,00	0,00%
	(I)E	139,0	139	0,00	0,00%
	(I)AF	959.872,0	959.872	0,00	0,00%
	(O)WLUUs	13.434.020,0	13.434.020	0,00	0,00%
	(O)ATM	136.900,0	136.900	0,00	0
	(O)INOA	49.525,0	49.525	0,00	0,00%
6	WACLtd PERTH	1,0			
	(IN)SCC	11.060,0	11.060	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	16.034,0	16.034	0,00	0,00%
	(I)DOL	5.763,0	5.763	0,00	0,00%
	(I)E	127,0	127	0,00	0,00%
	(I)AF	407.255,0	407.255	0,00	0
	(O)WLUUs	5.356.840,0	5.356.840	0,00	0,00%
	(O)ATM	51.600,0	51.600	0,00	0,00%
	(O)INOA	30.798,0	30.798	0,00	0,00%

7	SYDNEY ACLtd.	1,0			
	(IN)SCC	109.020,0	109.020	0,00	0,00%
	(IN)NSCC	46,0	46	0,00	0,00%
	(I)DONOL	51.365,0	51.365	0,00	0,00%
	(I)DOL	24.587,0	24.587	0,00	0
	(I)E	399,0	399	0,00	0,00%
	(I)AF	3.646.954,0	3.646.954	0,00	0,00%
	(O)WLUs	29.854.000,0	29.854.000	0,00	0,00%
	(O)ATM	252.000,0	252.000	0,00	0,00%
	(O)INOA	159.724,0	159.724	0,00	0,00%
8	ADMTL	1,0			
	(IN)SCC	64.000,0	64.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	41.566,0	41.566	0,00	0,00%
	(I)DOL	25.424,0	25.424	0,00	0,00%
	(I)E	600,0	600	0,00	0,00%
	(I)AF	518.465,0	518.465	0,00	0,00%
	(O)WLUs	11.385.930,0	11.385.930	0,00	0,00%
	(O)ATM	230.100,0	230.100	0,00	0,00%
	(O)INOA	48.003,0	48.003	0,00	0,00%
9	CALGARY A A	1,0			
	(IN)SCC	54.813,0	54.813	0,00	0,00%
	(IN)NSCC	53,0	53	0,00	0,00%
	(I)DONOL	26.164,0	26.164	0,00	0,00%
	(I)DOL	6.848,0	6.848	0,00	0,00%
	(I)E	161,0	161	0,00	0,00%
	(I)AF	374.970,0	374.970	0,00	0,00%
	(O)WLUs	9.727.350,0	9.727.350	0,00	0,00%
	(O)ATM	132.900,0	132.900	0,00	0
	(O)INOA	24.170,0	24.170	0,00	0,00%
10	GTAA	0,5			
	(IN)SCC	69.677,0	69.677	0,00	0,00%
	(IN)NSCC	52,0	52	0,00	0,00%
	(I)DONOL	243.818,0	61.500	-182.317,95	-74,78%
	(I)DOL	55.890,0	28.575	-27.314,58	-48,87%
	(I)E	1.006,0	514	-491,65	-48,87%
	(I)AF	3.376.895,0	1.726.538	-1.650.357,03	-0,4887
	(O)WLUs	27.468.880,0	27.772.253	303.372,77	1,10%
	(O)ATM	370.100,0	370.100	0,00	0,00%
	(O)INOA	114.553,0	114.553	0,00	0,00%
11	OTTAWA IA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	15.836,0	15.836	0,00	0,00%
	(I)DOL	6.580,0	6.580	0,00	0
	(I)E	155,0	155	0,00	0,00%
	(I)AF	227.854,0	227.854	0,00	0,00%
	(O)WLUs	3.263.000,0	3.263.000	0,00	0,00%
	(O)ATM	69.800,0	69.800	0,00	0,00%
	(O)INOA	10.788,0	10.788	0,00	0,00%
12	YVR AS	1,0			
	(IN)SCC	108.156,0	108.156	0,00	0,00%
	(IN)NSCC	48,0	48	0,00	0
	(I)DONOL	39.268,0	39.268	0,00	0,00%
	(I)DOL	19.927,0	19.927	0,00	0,00%
	(I)E	298,0	298	0,00	0,00%
	(I)AF	516.220,0	516.220	0,00	0,00%
	(O)WLUs	16.479.390,0	16.479.390	0,00	0,00%
	(O)ATM	290.100,0	290.100	0,00	0,00%
	(O)INOA	78.773,0	78.773	0,00	0,00%
13	ASUR	1,0			
	(IN)SCC	33.000,0	33.000	0,00	0,00%
	(IN)NSCC	18,0	18	0,00	0,00%
	(I)DONOL	38.383,0	38.383	0,00	0,00%
	(I)DOL	9.551,0	9.551	0,00	0,00%
	(I)E	665,0	665	0,00	0,00%
	(I)AF	875.719,0	875.719	0,00	0,00%
	(O)WLUs	12.796.830,0	12.796.830	0,00	0,00%
	(O)ATM	225.948,0	225.948	0,00	0
	(O)INOA	37.120,0	37.120	0,00	0,00%

14	INDIANAPOLIS A A	1,0			
	(IN)SCC	67.500,0	67.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0,00%
	(I)DONOL	13.050,0	13.050	0,00	0,00%
	(I)DOL	14.907,0	14.907	0,00	0,00%
	(I)E	400,0	400	0,00	0,00%
	(I)AF	952.114,0	952.114	0,00	0
	(O)WLUs	16.251.630,0	16.251.630	0,00	0,00%
	(O)ATM	204.000,0	204.000	0,00	0,00%
	(O)INOA	45.126,0	45.126	0,00	0,00%
15	MWAA NATIONAL	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	39.133,0	39.133	0,00	0,00%
	(I)DOL	32.794,0	32.794	0,00	0
	(I)E	270,0	270	0,00	0,00%
	(I)AF	816.968,0	816.968	0,00	0,00%
	(O)WLUs	14.253.480,0	14.253.480	0,00	0,00%
	(O)ATM	250.800,0	250.800	0,00	0,00%
	(O)INOA	58.117,0	58.117	0,00	0,00%
16	MWAA DULLES	0,8			
	(IN)SCC	48.000,0	48.000	0,00	0,00%
	(IN)NSCC	24,0	24	0,00	0
	(I)DONOL	67.046,0	49.283	-17.763,07	-26,49%
	(I)DOL	46.477,0	35.064	-11.413,47	-24,56%
	(I)E	420,0	354	-65,97	-15,71%
	(I)AF	1.637.864,0	981.091	-656.772,84	-40,10%
	(O)WLUs	19.606.210,0	19.794.133	187.923,19	0,96%
	(O)ATM	335.400,0	335.400	0,00	0,00%
	(O)INOA	81.662,0	84.842	3.179,73	3,89%
17	AD ROMA SpA	0,6			
	(IN)SCC	70.000,0	70.000	0,00	0,00%
	(IN)NSCC	87,0	87	0,00	0,00%
	(I)DONOL	153.955,0	99.216	-54.739,18	-35,56%
	(I)DOL	150.389,0	96.918	-53.471,28	-35,56%
	(I)E	2.256,0	1.079	-1.176,54	-52,15%
	(I)AF	2.418.763,0	1.558.764	-859.998,73	-35,56%
	(O)WLUs	27.561.599,0	28.916.469	1.354.870,46	4,92%
	(O)ATM	300.800,0	406.596	105.796,22	0,3517
	(O)INOA	171.945,0	171.945	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	(IN)SCC	6.000,0	6.000	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	17.817,0	17.817	0,00	0,00%
	(I)DOL	18.344,0	18.344	0,00	0,00%
	(I)E	442,0	442	0,00	0,00%
	(I)AF	63.393,0	63.393	0,00	0
	(O)WLUs	2.990.578,0	2.990.578	0,00	0,00%
	(O)ATM	54.700,0	54.700	0,00	0,00%
	(O)INOA	12.690,0	12.690	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	8.753,0	8.753	0,00	0,00%
	(I)DOL	8.893,0	8.893	0,00	0
	(I)E	117,0	117	0,00	0,00%
	(I)AF	23.338,0	23.338	0,00	0,00%
	(O)WLUs	1.394.199,0	1.394.199	0,00	0,00%
	(O)ATM	26.100,0	26.100	0,00	0,00%
	(O)INOA	4.981,0	4.981	0,00	0,00%
20	AER RIANTA	1,0			
	(IN)SCC	90.000,0	90.000	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0
	(I)DONOL	219.140,0	219.140	0,00	0,00%
	(I)DOL	145.103,0	145.103	0,00	0,00%
	(I)E	2.352,0	2.352	0,00	0,00%
	(I)AF	717.430,0	717.430	0,00	0,00%
	(O)WLUs	22.389.558,0	22.389.558	0,00	0,00%
	(O)ATM	269.700,0	269.700	0,00	0,00%
	(O)INOA	283.877,0	283.877	0,00	0,00%

21	BRUSSELS AIC	0,7			
	(IN)SCC	77.000,0	77.000	0,00	0,00%
	(IN)NSCC	44,0	44	0,00	0,00%
	(I)DONOL	121.531,0	54.356	-67.174,53	-55,27%
	(I)DOL	54.827,0	40.629	-14.197,80	-25,90%
	(I)E	779,0	516	-263,02	-33,76%
	(I)AF	1.104.631,0	818.580	-286.051,27	-25,90%
	(O)WLU	21.267.336,0	21.267.336	0,00	0,00%
	(O)ATM	252.200,0	258.660	6.459,61	0,0256
	(O)INOA	99.962,0	99.962	0,00	0,00%
22	COPENH. AIRPORTS A	0,8			
	(IN)SCC	88.000,0	88.000	0,00	0,00%
	(IN)NSCC	78,0	78	0,00	0,00%
	(I)DONOL	43.444,0	35.272	-8.171,80	-18,81%
	(I)DOL	71.830,0	45.709	-26.120,53	-36,36%
	(I)E	1.352,0	686	-666,49	-49,30%
	(I)AF	1.978.023,0	1.605.958	-372.065,47	-0,1881
	(O)WLU	21.071.317,0	26.731.073	5.659.756,25	26,86%
	(O)ATM	259.000,0	315.208	56.207,56	21,70%
	(O)INOA	102.095,0	102.095	0,00	0,00%
23	OSLO F A/S	1,0			
	(IN)SCC	40.000,0	40.000	0,00	0,00%
	(IN)NSCC	42,0	42	0,00	0,00%
	(I)DONOL	62.756,0	62.756	0,00	0,00%
	(I)DOL	37.056,0	37.056	0,00	0
	(I)E	579,0	579	0,00	0,00%
	(I)AF	1.225.016,0	1.225.016	0,00	0,00%
	(O)WLU	14.294.890,0	14.294.890	0,00	0,00%
	(O)ATM	175.900,0	175.900	0,00	0,00%
	(O)INOA	117.109,0	117.109	0,00	0,00%
24	CZECH A A	1,0			
	(IN)SCC	3.500,0	3.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0
	(I)DONOL	32.246,0	32.246	0,00	0,00%
	(I)DOL	24.471,0	24.471	0,00	0,00%
	(I)E	1.658,0	1.658	0,00	0,00%
	(I)AF	798.947,0	798.947	0,00	0,00%
	(O)WLU	8.100.842,0	8.100.842	0,00	0,00%
	(O)ATM	130.400,0	130.400	0,00	0,00%
	(O)INOA	46.656,0	46.656	0,00	0,00%
25	BAA STANSTED	1,0			
	(IN)SCC	40.007,0	40.007	0,00	0,00%
	(IN)NSCC	25,0	25	0,00	0,00%
	(I)DONOL	35.639,0	35.639	0,00	0,00%
	(I)DOL	39.465,0	39.465	0,00	0,00%
	(I)E	855,0	855	0,00	0,00%
	(I)AF	1.664.838,0	1.664.838	0,00	0,00%
	(O)WLU	20.173.450,0	20.173.450	0,00	0,00%
	(O)ATM	171.300,0	171.300	0,00	0
	(O)INOA	112.396,0	112.396	0,00	0,00%
26	MANCHESTER AG Plc.	1,0			
	(IN)SCC	84.310,0	84.310	0,00	0,00%
	(IN)NSCC	131,0	131	0,00	0,00%
	(I)DONOL	195.761,0	195.761	0,00	0,00%
	(I)DOL	113.468,0	113.468	0,00	0,00%
	(I)E	2.411,0	2.411	0,00	0,00%
	(I)AF	1.675.911,0	1.675.911	0,00	0
	(O)WLU	26.813.000,0	26.813.000	0,00	0,00%
	(O)ATM	247.165,0	247.165	0,00	0,00%
	(O)INOA	170.729,0	170.729	0,00	0,00%
27	F MÜNCHEN GmbH	1,0			
	(IN)SCC	53.000,0	53.000	0,00	0,00%
	(IN)NSCC	107,0	107	0,00	0,00%
	(I)DONOL	296.670,0	296.670	0,00	0,00%
	(I)DOL	220.551,0	220.551	0,00	0
	(I)E	4.891,0	4.891	0,00	0,00%
	(I)AF	2.152.218,0	2.152.218	0,00	0,00%
	(O)WLU	26.479.308,0	26.479.308	0,00	0,00%
	(O)ATM	343.000,0	343.000	0,00	0,00%
	(O)INOA	265.600,0	265.600	0,00	0,00%

28	F HAMBURG GmbH	1,0			
	(IN)SCC	19.000,0	19.000	0,00	0,00%
	(IN)NSCC	12,0	12	0,00	0
	(I)DONOL	35.872,0	35.872	0,00	0,00%
	(I)DOL	77.417,0	77.417	0,00	0,00%
	(I)E	782,0	782	0,00	0,00%
	(I)AF	277.748,0	277.748	0,00	0,00%
	(O)WLU's	10.317.594,0	10.317.594	0,00	0,00%
	(O)ATM	149.400,0	149.400	0,00	0,00%
	(O)INOA	68.607,0	68.607	0,00	0,00%
29	AI GENEVE	1,0			
	(IN)SCC	24.000,0	24.000	0,00	0,00%
	(IN)NSCC	26,0	26	0,00	0,00%
	(I)DONOL	46.894,0	46.894	0,00	0,00%
	(I)DOL	47.514,0	47.514	0,00	0,00%
	(I)E	540,0	540	0,00	0,00%
	(I)AF	192.686,0	192.686	0,00	0,00%
	(O)WLU's	8.578.760,0	8.578.760	0,00	0,00%
	(O)ATM	163.800,0	163.800	0,00	0
	(O)INOA	68.490,0	68.490	0,00	0,00%
30	UNIQUE ZURICH A	1,0			
	(IN)SCC	55.400,0	55.400	0,00	0,00%
	(IN)NSCC	102,0	102	0,00	0,00%
	(I)DONOL	97.922,0	97.922	0,00	0,00%
	(I)DOL	88.800,0	88.800	0,00	0,00%
	(I)E	1.289,0	1.289	0,00	0,00%
	(I)AF	1.916.303,0	1.916.303	0,00	0
	(O)WLU's	20.923.367,0	20.923.367	0,00	0,00%
	(O)ATM	269.400,0	269.400	0,00	0,00%
	(O)INOA	152.449,0	152.449	0,00	0,00%
31	F WIEN GROUP	1,0			
	(IN)SCC	56.250,0	56.250	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0,00%
	(I)DONOL	74.583,0	74.583	0,00	0,00%
	(I)DOL	147.151,0	147.151	0,00	0
	(I)E	355,0	355	0,00	0,00%
	(I)AF	578.064,0	578.064	0,00	0,00%
	(O)WLU's	14.512.155,0	14.512.155	0,00	0,00%
	(O)ATM	197.100,0	197.100	0,00	0,00%
	(O)INOA	122.208,0	122.208	0,00	0,00%
32	ATHENS IA	0,4			
	(IN)SCC	42.100,0	42.100	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	64.400,0	24.981	-39.419,22	-61,21%
	(I)DOL	29.300,0	11.365	-17.934,52	-61,21%
	(I)E	696,0	266	-429,99	-61,78%
	(I)AF	2.039.735,0	791.214	-1.248.521,12	-61,21%
	(O)WLU's	13.264.484,0	14.279.693	1.015.208,84	7,65%
	(O)ATM	170.100,0	170.100	0,00	0,00%
	(O)INOA	53.589,0	53.589	0,00	0,00%

DEA model = Non-controllable(NCN-I-C)
 Problem = Indústries Aeroportuàries 2003

No. of DMUs = 32
 No. of Input items = 6
 Input(1) = (I)SCC (Non-controllable variable) SD
 Input(2) = (I)NSCC (Non-controllable variable) Maximum
 Input(3) = (I)DONOL
 Input(4) = (I)DOL
 Input(5) = (I)E
 Input(6) = (I)AF
 No. of Output items = 3
 Output(1) = (O)WLU
 Output(2) = (O)ATM
 Output(3) = (O)JNOA
 No. of DMUs in Data = 32
 No. of evaluated DMUs = 32
 Average of scores = 0.93561
 No. of efficient DMUs = 26
 No. of inefficient DMUs = 6
 No. of over iteration DMUs = 0
 Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Frequency in Reference Set

Reference	Frequency to other DMUs
HKIA	0
NARITA A A	0
APACLtd.MELB.	3
AUCKLANDIALtd	2
BRISBANE ACLtd	6
WAGLd PERTH	2
SYDNEY ACLtd	0
ADMTL	0
CALGARY A A	1
OTTAWAIA	1
YVR AS	3
ASUR	1
INDIANAPOLIS A A	0
MWAA NATIONAL	4
SAGA TORINO SpA	0
AD FIRENZE SpA	0
AER RIANTA	0
OSLO F AVS	0
CZECH A A	0
BAA STANSTED	1
MANCHESTER AG Plc.	0
F MUNCHEN GmbH	0
F HAMBURG GmbH	1
AI GENEVE	2
UNIQUE ZURICH A	1
F WIEN GROUP	1

Statistics on Input/Output Data

	(I)SCC	(I)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)JNOA
Max	439.000,00	131,00	775.859,00	220.551,00	4.891,00	6.961.160,00	53.780.800,00	370.100,00	371.514,00
Min	0,00	0,00	7.787,00	5.763,00	117,00	23.338,00	1.394.199,00	26.100,00	4.981,00
Average	67.982,59	39,13	95.888,00	52.625,72	885,13	1.453.755,56	17.924.879,28	200.462,91	102.344,22
SD	81.948,45	31,93	142.328,28	51.497,39	957,61	1.477.005,16	11.338.027,33	84.157,05	83.635,17

Correlation

	(I)SCC	(I)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)JNOA
(I)SCC	1,00	0,08	0,51	0,15	0,10	0,76	0,87	0,23	0,59
(I)NSCC	0,08	1,00	0,24	0,69	0,70	0,18	0,34	0,58	0,47
(I)DONOL	0,51	0,24	1,00	0,48	0,42	0,78	0,69	0,30	0,85
(I)DOL	0,15	0,69	0,48	1,00	0,84	0,26	0,41	0,55	0,71
(I)E	0,10	0,70	0,42	0,84	1,00	0,24	0,36	0,51	0,62
(I)AF	0,76	0,18	0,78	0,26	0,24	1,00	0,90	0,37	0,74
(O)WLU	0,87	0,34	0,69	0,41	0,36	0,90	1,00	0,54	0,81
(O)ATM	0,23	0,58	0,30	0,55	0,51	0,37	0,54	1,00	0,49
(O)JNOA	0,59	0,47	0,85	0,71	0,62	0,74	0,81	0,49	1,00

2003
Model Name = Non-controllable(NC+HC)

No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)					
1	HKIA	1.00	1	HKIA	1.00										
2	NARITA A	1.00	1	NARITA A	1.00										
3	APACld. MELB.	1.00	1	APACld. MELB.	1.00										
4	AUCKLAND IALtd	1.00	1	AUCKLAND IALtd	1.00										
5	BRISBANE ACldt	1.00	1	BRISBANE ACldt	1.00										
6	WACLtd PERTH	1.00	1	WACLtd PERTH	1.00										
7	SYDNEY ACldt.	1.00	1	SYDNEY ACldt.	1.00										
8	ADMTL	1.00	1	ADMTL	1.00										
9	GALGARY A A	1.00	1	GALGARY A A	1.00										
10	GTA A	0.51	31	APACld. MELB.	0.04	BRISBANE ACldt	0.99	WACLtd PERTH	0.60	OTTAWA IA	1.07	YVR AS	0.34		
11	OTTAWA IA	1.00	1	OTTAWA IA	1.00										
12	YVR AS	1.00	1	YVR AS	1.00										
13	ASUR	1.00	1	ASUR	1.00										
14	INDIANAPOLIS A A	1.00	1	INDIANAPOLIS A A	1.00										
15	MWAA NATIONAL	1.00	1	MWAA NATIONAL	1.00										
16	MWAA DULLES	0.84	27	BRISBANE ACldt	0.13	YVR AS	0.42	MWAA NATIONAL	0.79						
17	AD ROMA SPA	0.64	30	AUCKLAND IALtd	0.06	BRISBANE ACldt	0.93	AI GENEVE	1.26	UNIQUE ZURICH A	0.17	F WIEN GROUP	0.09		
18	SAGA TORINO SPA	1.00	1	SAGA TORINO SPA	1.00										
19	AD FIRENZE SPA	1.00	1	AD FIRENZE SPA	1.00										
20	AER RIANTA	1.00	1	AER RIANTA	1.00										
21	BRUSSELS AIC	0.74	29	APACld. MELB.	0.52	BRISBANE ACldt	0.06	GALGARY A A	0.35	MWAA NATIONAL	0.08	AI GENEVE	0.62		
22	COPENH. AIRPORTS A/S	0.81	28	AUCKLAND IALtd	1.01	BRISBANE ACldt	0.83	BAA STANSTED	0.04	F HAMBURG GmbH	0.33				
23	OSLO F A/S	1.00	1	OSLO F A/S	1.00										
24	CZECH A A	1.00	1	CZECH A A	1.00										
25	BAA STANSTED	1.00	1	BAA STANSTED	1.00										
26	MANCHESTER AG Plc.	1.00	1	MANCHESTER AG Plc.	1.00										
27	F MUNCHEN GmbH	1.00	1	F MUNCHEN GmbH	1.00										
28	F HAMBURG GmbH	1.00	1	F HAMBURG GmbH	1.00										
29	AI GENEVE	1.00	1	AI GENEVE	1.00										
30	UNIQUE ZURICH A	1.00	1	UNIQUE ZURICH A	1.00										
31	F WIEN GROUP	1.00	1	F WIEN GROUP	1.00										
32	ATHENS IA	0.39	32	APACld. MELB.	0.26	BRISBANE ACldt	0.30	WACLtd PERTH	0.00	YVR AS	0.07	ASUR	0.20	MWAA NATIONAL	0.09

Indústries Aeroportuàries 2004	(IN)SCC	(IN)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATM	(O)INOA
HKIA	439000	21	141726	52480	958	5143532	55046760	190300	168753
NARITA A A	259000	20	780588	89326	891	6700760	54749286	186633	390215
APACLtd. MELB.	80000	14	23994	11349	188	844200	22665310	163300	91963
AUCKLAND IALtd	60500	47	6589	11343	281	676113	12673430	154800	39329
BRISBANE ACLtd	23150	31	19077	8136	143	964305	15302238	144700	58823
WACLtd PERTH	11060	7	19099	6955	132	510896	8532000	53000	33739
SYDNEY ACLtd.	109020	46	46659	21517	286	3614655	31176000	266700	170658
ADMTL	64000	20	40156	26646	600	692091	12874828	235200	50401
CALGARY A A	54813	53	26303	7568	162	409188	10414039	136000	26376
GTA A	69677	52	255521	62462	1041	3681940	28292360	370100	128563
OTTAWA IA	0	0	18329	7364	163	225905	3609885	69600	12565
YVR AS	108156	48	38494	22692	284	565180	16763000	270400	81346
ASUR	33000	18	47234	7935	619	882557	13974360	250802	24572
INDIANAPOLIS A A	67500	30	19010	15300	415	1161599	17114800	212558	49425
MWAA NATIONAL	0	0	39856	34011	300	883912	15970870	268600	63653
MWAA DULLES	48000	24	64778	44637	460	1772074	25783080	469600	102980
AD ROMA SpA	70000	87	155269	155839	2314	2389895	32213038	353900	188044
SAGA TORINO SpA	6000	7	18604	17944	447	72537	3289648	57800	14968
AD FIRENZE SpA	0	0	9432	9676	133	29633	1518747	24096	6031
DUBLIN A A	90000	55	215694	159941	2382	760341	23640850	271137	289750
BRUSSELS AIC	77000	44	114914	52305	768	1023085	20970237	252069	106100
COPENH. AIRPORTS A/S	88000	78	45731	82170	1485	976124	22391075	272500	109754
OSLO F A/S	40000	42	100321	32315	552	1173815	15534160	186800	132325
CZECH A A	3500	30	40173	27134	1709	979689	10165263	144962	47699
BAA STANSTED	40007	25	69938	52430	988	1699984	23179610	177400	139977
MANCHESTER AG Plc.	113110	131	200761	107852	2573	2041956	29653000	261700	206025
F MÜNCHEN GmbH	53000	107	320442	220874	4946	2061913	29912785	370534	355200
F HAMBURG GmbH	19000	12	31968	74140	716	332963	10619193	151430	69950
AI GENEVE	24000	26	51898	49939	556	200872	9094330	166600	73700
UNIQUE ZÜRICH A	55400	102	104000	85494	1260	1913791	20882296	266700	155625
F WIEN AG	56250	55	97373	169953	357	712171	16881779	224800	138121
ATHENS IA	42100	20	80000	34600	698	2061262	14755252	191000	67740

RESULTATS DEA 2004.2 INOC

Model Name = Non-controllable(NCN-I-C)		2004			
No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1,0			
	(IN)SCC	439.000,0	439.000	0,00	0,00%
	(IN)NSCC	21,0	21	0,00	0,00%
	(I)DONOL	141.726,0	141.726	0,00	0,00%
	(I)DOL	52.480,0	52.480	0,00	0,00%
	(I)E	958,0	958	0,00	0,00%
	(I)AF	5.143.532,0	5.143.532	0,00	0,00%
	(O)WLU's	55.046.760,0	55.046.760	0,00	0,00%
	(O)ATM	190.300,0	190.300	0,00	0
	(O)INOA	168.753,0	168.753	0,00	0,00%
2	NARITA A A	1,0			
	(IN)SCC	259.000,0	259.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0,00%
	(I)DONOL	780.588,0	780.588	0,00	0,00%
	(I)DOL	89.326,0	89.326	0,00	0,00%
	(I)E	891,0	891	0,00	0,00%
	(I)AF	6.700.760,0	6.700.760	0,00	0
	(O)WLU's	54.749.286,0	54.749.286	0,00	0,00%
	(O)ATM	186.633,0	186.633	0,00	0,00%
	(O)INOA	390.215,0	390.215	0,00	0,00%
3	APAC Ltd. MELB.	1,0			
	(IN)SCC	80.000,0	80.000	0,00	0,00%
	(IN)NSCC	14,0	14	0,00	0,00%
	(I)DONOL	23.994,0	23.994	0,00	0,00%
	(I)DOL	11.349,0	11.349	0,00	0
	(I)E	188,0	188	0,00	0,00%
	(I)AF	844.200,0	844.200	0,00	0,00%
	(O)WLU's	22.665.310,0	22.665.310	0,00	0,00%
	(O)ATM	165.300,0	165.300	0,00	0,00%
	(O)INOA	91.963,0	91.963	0,00	0,00%
4	AUCKLAND IALtd	1,0			
	(IN)SCC	60.500,0	60.500	0,00	0,00%
	(IN)NSCC	47,0	47	0,00	0
	(I)DONOL	6.589,0	6.589	0,00	0,00%
	(I)DOL	11.343,0	11.343	0,00	0,00%
	(I)E	281,0	281	0,00	0,00%
	(I)AF	676.113,0	676.113	0,00	0,00%
	(O)WLU's	12.673.430,0	12.673.430	0,00	0,00%
	(O)ATM	154.800,0	154.800	0,00	0,00%
	(O)INOA	39.329,0	39.329	0,00	0,00%
5	BRISBANE ACLtd	1,0			
	(IN)SCC	23.150,0	23.150	0,00	0,00%
	(IN)NSCC	31,0	31	0,00	0,00%
	(I)DONOL	19.077,0	19.077	0,00	0,00%
	(I)DOL	8.136,0	8.136	0,00	0,00%
	(I)E	143,0	143	0,00	0,00%
	(I)AF	964.305,0	964.305	0,00	0,00%
	(O)WLU's	15.302.238,0	15.302.238	0,00	0,00%
	(O)ATM	144.700,0	144.700	0,00	0
	(O)INOA	58.823,0	58.823	0,00	0,00%
6	WA CLtd PERTH	1,0			
	(IN)SCC	11.060,0	11.060	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	19.099,0	19.099	0,00	0,00%
	(I)DOL	6.955,0	6.955	0,00	0,00%
	(I)E	132,0	132	0,00	0,00%
	(I)AF	510.896,0	510.896	0,00	0
	(O)WLU's	8.532.000,0	8.532.000	0,00	0,00%
	(O)ATM	53.000,0	53.000	0,00	0,00%
	(O)INOA	33.739,0	33.739	0,00	0,00%

7	SYDNEY ACLtd.	1,0			
	(IN)SCC	109.020,0	109.020	0,00	0,00%
	(IN)NSCC	46,0	46	0,00	0,00%
	(I)DONOL	46.659,0	46.659	0,00	0,00%
	(I)DOL	21.517,0	21.517	0,00	0
	(I)E	286,0	286	0,00	0,00%
	(I)AF	3.614.655,0	3.614.655	0,00	0,00%
	(O)WLU	31.176.000,0	31.176.000	0,00	0,00%
	(O)ATM	266.700,0	266.700	0,00	0,00%
	(O)INOA	170.658,0	170.658	0,00	0,00%
8	ADMTL	1,0			
	(IN)SCC	64.000,0	64.000	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	40.156,0	40.156	0,00	0,00%
	(I)DOL	26.646,0	26.646	0,00	0,00%
	(I)E	600,0	600	0,00	0,00%
	(I)AF	692.091,0	692.091	0,00	0,00%
	(O)WLU	12.874.828,0	12.874.828	0,00	0,00%
	(O)ATM	235.200,0	235.200	0,00	0,00%
	(O)INOA	50.401,0	50.401	0,00	0,00%
9	CALGARY A A	1,0			
	(IN)SCC	54.813,0	54.813	0,00	0,00%
	(IN)NSCC	53,0	53	0,00	0,00%
	(I)DONOL	26.303,0	26.303	0,00	0,00%
	(I)DOL	7.568,0	7.568	0,00	0,00%
	(I)E	162,0	162	0,00	0,00%
	(I)AF	409.188,0	409.188	0,00	0,00%
	(O)WLU	10.414.039,0	10.414.039	0,00	0,00%
	(O)ATM	136.000,0	136.000	0,00	0
	(O)INOA	26.376,0	26.376	0,00	0,00%
10	GTAA	0,5			
	(IN)SCC	69.677,0	69.677	0,00	0,00%
	(IN)NSCC	52,0	52	0,00	0,00%
	(I)DONOL	255.521,0	51.822	-203.698,64	-79,72%
	(I)DOL	62.462,0	29.713	-32.748,55	-52,43%
	(I)E	1.041,0	395	-645,70	-62,03%
	(I)AF	3.681.940,0	1.751.515	-1.930.424,74	-52,43%
	(O)WLU	28.292.360,0	32.033.080	3.740.719,94	13,22%
	(O)ATM	370.100,0	370.100	0,00	0,00%
	(O)INOA	128.563,0	128.563	0,00	0,00%
11	OTTAWA IA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	18.329,0	18.329	0,00	0,00%
	(I)DOL	7.364,0	7.364	0,00	0
	(I)E	163,0	163	0,00	0,00%
	(I)AF	225.905,0	225.905	0,00	0,00%
	(O)WLU	3.609.885,0	3.609.885	0,00	0,00%
	(O)ATM	69.600,0	69.600	0,00	0,00%
	(O)INOA	12.565,0	12.565	0,00	0,00%
12	YVR AS	1,0			
	(IN)SCC	108.156,0	108.156	0,00	0,00%
	(IN)NSCC	48,0	48	0,00	0
	(I)DONOL	38.494,0	38.494	0,00	0,00%
	(I)DOL	22.692,0	22.692	0,00	0,00%
	(I)E	284,0	284	0,00	0,00%
	(I)AF	565.180,0	565.180	0,00	0,00%
	(O)WLU	16.763.000,0	16.763.000	0,00	0,00%
	(O)ATM	270.400,0	270.400	0,00	0,00%
	(O)INOA	81.346,0	81.346	0,00	0,00%
13	ASUR	1,0			
	(IN)SCC	33.000,0	33.000	0,00	0,00%
	(IN)NSCC	18,0	18	0,00	0,00%
	(I)DONOL	47.234,0	47.234	0,00	0,00%
	(I)DOL	7.935,0	7.935	0,00	0,00%
	(I)E	619,0	619	0,00	0,00%
	(I)AF	882.557,0	882.557	0,00	0,00%
	(O)WLU	13.974.360,0	13.974.360	0,00	0,00%
	(O)ATM	250.802,0	250.802	0,00	0
	(O)INOA	24.572,0	24.572	0,00	0,00%

14	INDIANAPOLIS A A	1,0			
	(IN)SCC	67.500,0	67.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0,00%
	(I)DONOL	19.010,0	19.010	0,00	0,00%
	(I)DOL	15.300,0	15.300	0,00	0,00%
	(I)E	415,0	415	0,00	0,00%
	(I)AF	1.161.599,0	1.161.599	0,00	0
	(O)WLU _s	17.114.800,0	17.114.800	0,00	0,00%
	(O)ATM	212.558,0	212.558	0,00	0,00%
	(O)INOA	49.425,0	49.425	0,00	0,00%
15	MWAA NATIONAL	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	39.856,0	39.856	0,00	0,00%
	(I)DOL	34.011,0	34.011	0,00	0
	(I)E	300,0	300	0,00	0,00%
	(I)AF	883.912,0	883.912	0,00	0,00%
	(O)WLU _s	15.970.870,0	15.970.870	0,00	0,00%
	(O)ATM	268.600,0	268.600	0,00	0,00%
	(O)INOA	63.653,0	63.653	0,00	0,00%
16	MWAA DULLES	1,0			
	(IN)SCC	48.000,0	48.000	0,00	0,00%
	(IN)NSCC	24,0	24	0,00	0
	(I)DONOL	64.778,0	64.778	0,00	0,00%
	(I)DOL	44.637,0	44.637	0,00	0,00%
	(I)E	460,0	460	0,00	0,00%
	(I)AF	1.772.074,0	1.772.074	0,00	0,00%
	(O)WLU _s	25.783.080,0	25.783.080	0,00	0,00%
	(O)ATM	469.600,0	469.600	0,00	0,00%
	(O)INOA	102.980,0	102.980	0,00	0,00%
17	AD ROMA SpA	0,7			
	(IN)SCC	70.000,0	70.000	0,00	0,00%
	(IN)NSCC	87,0	87	0,00	0,00%
	(I)DONOL	155.269,0	105.745	-49.523,52	-31,90%
	(I)DOL	155.839,0	95.690	-60.148,74	-38,60%
	(I)E	2.314,0	1.210	-1.103,79	-47,70%
	(I)AF	2.389.895,0	1.627.631	-762.264,31	-31,90%
	(O)WLU _s	32.213.038,0	32.213.038	0,00	0,00%
	(O)ATM	353.900,0	422.793	68.892,79	0,1947
	(O)INOA	188.044,0	188.044	0,00	0,00%
18	SAGA TORINO SpA	1,0			
	(IN)SCC	6.000,0	6.000	0,00	0,00%
	(IN)NSCC	7,0	7	0,00	0,00%
	(I)DONOL	18.604,0	18.604	0,00	0,00%
	(I)DOL	17.944,0	17.944	0,00	0,00%
	(I)E	447,0	447	0,00	0,00%
	(I)AF	72.537,0	72.537	0,00	0
	(O)WLU _s	3.289.648,0	3.289.648	0,00	0,00%
	(O)ATM	57.800,0	57.800	0,00	0,00%
	(O)INOA	14.968,0	14.968	0,00	0,00%
19	AD FIRENZE SpA	1,0			
	(IN)SCC	0,0	0	0,00	0,00%
	(IN)NSCC	0,0	0	0,00	0,00%
	(I)DONOL	9.432,0	9.432	0,00	0,00%
	(I)DOL	9.676,0	9.676	0,00	0
	(I)E	133,0	133	0,00	0,00%
	(I)AF	29.633,0	29.633	0,00	0,00%
	(O)WLU _s	1.518.747,0	1.518.747	0,00	0,00%
	(O)ATM	24.096,0	24.096	0,00	0,00%
	(O)INOA	6.031,0	6.031	0,00	0,00%
20	DUBLIN A A	1,0			
	(IN)SCC	90.000,0	90.000	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0
	(I)DONOL	215.694,0	215.694	0,00	0,00%
	(I)DOL	159.941,0	159.941	0,00	0,00%
	(I)E	2.382,0	2.382	0,00	0,00%
	(I)AF	760.341,0	760.341	0,00	0,00%
	(O)WLU _s	23.640.850,0	23.640.850	0,00	0,00%
	(O)ATM	271.137,0	271.137	0,00	0,00%
	(O)INOA	289.750,0	289.750	0,00	0,00%

21	BRUSSELS AIC	0,8			
	(IN)SCC	77.000,0	77.000	0,00	0,00%
	(IN)NSCC	44,0	44	0,00	0,00%
	(I)DONOL	114.914,0	55.244	-59.669,75	-51,93%
	(I)DOL	52.305,0	39.306	-12.999,02	-24,85%
	(I)E	788,0	495	-272,90	-35,53%
	(I)AF	1.023.085,0	768.824	-254.260,54	-24,85%
	(O)WLU's	20.970.237,0	20.970.237	0,00	0,00%
	(O)ATM	252.069,0	252.069	0,00	0
	(O)INOA	106.100,0	106.100	0,00	0,00%
22	COPENH. AIRPORTS A/S	1,0			
	(IN)SCC	88.000,0	88.000	0,00	0,00%
	(IN)NSCC	78,0	78	0,00	0,00%
	(I)DONOL	45.731,0	45.731	0,00	0,00%
	(I)DOL	82.170,0	82.170	0,00	0,00%
	(I)E	1.485,0	1.485	0,00	0,00%
	(I)AF	976.124,0	976.124	0,00	0
	(O)WLU's	22.391.075,0	22.391.075	0,00	0,00%
	(O)ATM	272.500,0	272.500	0,00	0,00%
	(O)INOA	109.754,0	109.754	0,00	0,00%
23	OSLO F A/S	1,0			
	(IN)SCC	40.000,0	40.000	0,00	0,00%
	(IN)NSCC	42,0	42	0,00	0,00%
	(I)DONOL	100.321,0	100.321	0,00	0,00%
	(I)DOL	32.315,0	32.315	0,00	0
	(I)E	552,0	552	0,00	0,00%
	(I)AF	1.173.815,0	1.173.815	0,00	0,00%
	(O)WLU's	15.534.160,0	15.534.160	0,00	0,00%
	(O)ATM	186.800,0	186.800	0,00	0,00%
	(O)INOA	132.325,0	132.325	0,00	0,00%
24	CZECH A A	1,0			
	(IN)SCC	3.500,0	3.500	0,00	0,00%
	(IN)NSCC	30,0	30	0,00	0
	(I)DONOL	40.173,0	40.173	0,00	0,00%
	(I)DOL	27.134,0	27.134	0,00	0,00%
	(I)E	1.709,0	1.709	0,00	0,00%
	(I)AF	979.689,0	979.689	0,00	0,00%
	(O)WLU's	10.165.263,0	10.165.263	0,00	0,00%
	(O)ATM	144.962,0	144.962	0,00	0,00%
	(O)INOA	47.699,0	47.699	0,00	0,00%
25	BAA STANSTED	1,0			
	(IN)SCC	40.007,0	40.007	0,00	0,00%
	(IN)NSCC	25,0	25	0,00	0,00%
	(I)DONOL	69.938,0	69.938	0,00	0,00%
	(I)DOL	52.430,0	52.430	0,00	0,00%
	(I)E	988,0	988	0,00	0,00%
	(I)AF	1.699.984,0	1.699.984	0,00	0,00%
	(O)WLU's	23.179.610,0	23.179.610	0,00	0,00%
	(O)ATM	177.400,0	177.400	0,00	0
	(O)INOA	139.977,0	139.977	0,00	0,00%
26	MANCHESTER AG Plc.	0,9			
	(IN)SCC	113.110,0	113.110	0,00	0,00%
	(IN)NSCC	131,0	131	0,00	0,00%
	(I)DONOL	200.781,0	177.089	-23.672,50	-11,79%
	(I)DOL	107.852,0	95.135	-12.717,24	-11,79%
	(I)E	2.573,0	1.950	-623,31	-24,23%
	(I)AF	2.041.956,0	1.801.181	-240.774,86	-0,1179
	(O)WLU's	29.653.000,0	31.379.910	1.726.910,17	5,82%
	(O)ATM	261.700,0	400.259	138.558,82	52,95%
	(O)INOA	206.025,0	206.025	0,00	0,00%
27	F MÜNCHEN GmbH	1,0			
	(IN)SCC	53.000,0	53.000	0,00	0,00%
	(IN)NSCC	107,0	107	0,00	0,00%
	(I)DONOL	320.442,0	320.442	0,00	0,00%
	(I)DOL	220.874,0	220.874	0,00	0
	(I)E	4.946,0	4.946	0,00	0,00%
	(I)AF	2.061.913,0	2.061.913	0,00	0,00%
	(O)WLU's	29.912.785,0	29.912.785	0,00	0,00%
	(O)ATM	370.534,0	370.534	0,00	0,00%
	(O)INOA	355.200,0	355.200	0,00	0,00%

28	F HAMBURG GmbH	1,0			
	(IN)SCC	19.000,0	19.000	0,00	0,00%
	(IN)NSCC	12,0	12	0,00	0
	(I)DONOL	31.968,0	31.968	0,00	0,00%
	(I)DOL	74.140,0	74.140	0,00	0,00%
	(I)E	716,0	716	0,00	0,00%
	(I)AF	332.963,0	332.963	0,00	0,00%
	(O)WLU	10.619.193,0	10.619.193	0,00	0,00%
	(O)ATM	151.430,0	151.430	0,00	0,00%
	(O)INOA	69.950,0	69.950	0,00	0,00%
29	AI GENÈVE	1,0			
	(IN)SCC	24.000,0	24.000	0,00	0,00%
	(IN)NSCC	26,0	26	0,00	0,00%
	(I)DONOL	51.898,0	51.898	0,00	0,00%
	(I)DOL	49.939,0	49.939	0,00	0,00%
	(I)E	556,0	556	0,00	0,00%
	(I)AF	200.872,0	200.872	0,00	0,00%
	(O)WLU	9.094.330,0	9.094.330	0,00	0,00%
	(O)ATM	166.600,0	166.600	0,00	0
	(O)INOA	73.700,0	73.700	0,00	0,00%
30	UNIQUE ZURICH A	1,0			
	(IN)SCC	55.400,0	55.400	0,00	0,00%
	(IN)NSCC	102,0	102	0,00	0,00%
	(I)DONOL	104.000,0	104.000	0,00	0,00%
	(I)DOL	85.494,0	85.494	0,00	0,00%
	(I)E	1.260,0	1.260	0,00	0,00%
	(I)AF	1.913.791,0	1.913.791	0,00	0
	(O)WLU	20.882.296,0	20.882.296	0,00	0,00%
	(O)ATM	266.700,0	266.700	0,00	0,00%
	(O)INOA	155.625,0	155.625	0,00	0,00%
31	F WIEN AG	1,0			
	(IN)SCC	56.250,0	56.250	0,00	0,00%
	(IN)NSCC	55,0	55	0,00	0,00%
	(I)DONOL	97.373,0	97.373	0,00	0,00%
	(I)DOL	169.953,0	169.953	0,00	0
	(I)E	357,0	357	0,00	0,00%
	(I)AF	712.171,0	712.171	0,00	0,00%
	(O)WLU	16.881.779,0	16.881.779	0,00	0,00%
	(O)ATM	224.800,0	224.800	0,00	0,00%
	(O)INOA	138.121,0	138.121	0,00	0,00%
32	ATHENS IA	0,4			
	(IN)SCC	42.100,0	42.100	0,00	0,00%
	(IN)NSCC	20,0	20	0,00	0
	(I)DONOL	80.000,0	28.141	-51.858,89	-64,82%
	(I)DOL	34.600,0	14.743	-19.857,09	-57,39%
	(I)E	698,0	238	-460,31	-65,95%
	(I)AF	2.061.262,0	878.295	-1.182.967,24	-57,39%
	(O)WLU	14.755.252,0	17.557.083	2.801.831,30	18,99%
	(O)ATM	191.000,0	191.000	0,00	0,00%
	(O)INOA	67.740,0	67.740	0,00	0,00%

DEA model = Non-controllable(NCN-I-C)
 Problem = Industries Aeroportuàries 2004

No. of DMUs = 32

No. of Input items = 6

Input(1) = (I)NSCC (Non-controllable variable)

Input(2) = (I)NSCC (Non-controllable variable)

Input(3) = (I)DONOL

Input(4) = (I)DOL

Input(5) = (I)E

Input(6) = (I)AF

No. of Output items = 3

Output(1) = (O)WLU

Output(2) = (O)ATM

Output(3) = (O)INO

No. of DMUs = 32

Average = 0,94426281

SD = 0,14601352

Maximum = 1

Minimum = 0,42609565

No. of DMUs in Data = 32

No. of DMUs with inappropriate Data = 0

No. of evaluated DMUs = 32

Average of scores = 0,944262807

No. of efficient DMUs = 27

No. of inefficient DMUs = 5

No. of over iteration DMUs = 0

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	(I)NSCC	(I)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)INO
Max	439.000,00	131,00	780.588,00	220.874,00	4.946,00	6.700.760,00	55.046.760,00	469.600,00	390.215,00
Min	0,00	0,00	6.589,00	6.955,00	132,00	29.633,00	1.518.747,00	24.096,00	6.031,00
Average	68.882,59	39,13	101.372,84	55.072,72	900,22	1.473.716,81	19.676.359,66	213.053,78	112.324,06
SD	82.280,30	31,93	143.418,84	53.994,92	981,02	1.462.241,17	12.131.544,06	96.280,79	92.544,15

Correlation

	(I)NSCC	(I)NSCC	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATM	(O)INO
(I)NSCC	1,00	0,12	0,50	0,17	0,11	0,77	0,85	0,16	0,50
(I)NSCC	0,12	1,00	0,25	0,66	0,70	0,17	0,33	0,53	0,53
(I)DONOL	0,50	0,25	1,00	0,51	0,43	0,76	0,72	0,28	0,84
(I)DOL	0,17	0,66	0,51	1,00	0,80	0,25	0,43	0,52	0,77
(I)E	0,11	0,70	0,43	0,80	1,00	0,22	0,37	0,48	0,69
(I)AF	0,77	0,17	0,76	0,25	0,22	1,00	0,91	0,34	0,67
(O)WLU	0,85	0,33	0,72	0,43	0,37	0,91	1,00	0,50	0,78
(O)ATM	0,16	0,53	0,28	0,52	0,48	0,34	0,50	1,00	0,48
(O)INO	0,50	0,53	0,84	0,77	0,69	0,67	0,78	0,48	1,00

Frequency in Reference Set

Reference	Frequency
HKIA	0
NARITA A A	0
APACld. MELB.	3
AUCKLAND IALtd	0
BRISBANE ACltd	4
WACLd PERTH	0
SYDNEY ACltd.	0
ADMTL	0
CALGARY A A	2
OTTAWA IA	0
YVR AS	3
ASUR	2
INDIANAPOLIS A A	0
MWAA NATIONAL	2
MWAA DULLES	0
SAGA TORINO SpA	0
AD FIRENZE SpA	0
DUBLIN A A	0
COPENH. AIRPORTS A/S	1
OSLO F A/S	2
CZECH A A	0
BAA STANSTED	0
F MUNCHEN GmbH	1
F HAMBURG GmbH	1
AI GENEVE	3
UNIQUE ZURICH A	2
F WIEN AG	0

Model Name = Non-controllable(NCN+G) 2004															
No.	DMU	Score	Rank	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)	Reference set (lambda)						
1	HKIA	1,00	1	HKIA											
2	NARITA A A	1,00	1	NARITA A A											
3	APACld MELB	1,00	1	APACld MELB											
4	AUCKLAND IALtd	1,00	1	AUCKLAND IALtd											
5	BRISBANE ACld	1,00	1	BRISBANE ACld											
6	WACLd PERTH	1,00	1	WACLd PERTH											
7	SYDNEY ACld	1,00	1	SYDNEY ACld											
8	ADMTL	1,00	1	ADMTL											
9	CALGARY A A	1,00	1	CALGARY A A											
10	GTA A	0,48	31	APACld MELB	0,16	BRISBANE ACld	1,17	YVR AS	0,27	ASUR	0,02	MWAA NATIONAL	0,35		
11	OTTAWA IA	1,00	1	OTTAWA IA	1,00										
12	YVR AS	1,00	1	YVR AS	1,00										
13	ASUR	1,00	1	ASUR	1,00										
14	INDIANAPOLIS A A	1,00	1	INDIANAPOLIS A A	1,00										
15	MWAA NATIONAL	1,00	1	MWAA NATIONAL	1,00										
16	MWAA DULLES	1,00	1	MWAA DULLES	1,00										
17	AD ROMA SpA	0,68	30	BRISBANE ACld	0,97	COPENH. AIRPORTS A/S	0,08	F HAMBURG GmbH	0,06	AI GENÈVE	1,20	UNIQUE ZURICH A	0,18		
18	SAGA TORINO SpA	1,00	1	SAGA TORINO SpA	1,00										
19	AD FIRENZE SpA	1,00	1	AD FIRENZE SpA	1,00										
20	DUBLIN A A	1,00	1	DUBLIN A A	1,00										
21	BRUSSELS AIC	0,75	29	APACld MELB	0,98	BRISBANE ACld	0,13	CALGARY A A	0,21	YVR AS	0,17	OSLO F A/S	0,103	AI GENÈVE	0,55
22	COPENH. AIRPORTS A/S	1,00	1	COPENH. AIRPORTS A/S	1,00										
23	OSLO F A/S	1,00	1	OSLO F A/S	1,00										
24	CZECH A A	1,00	1	CZECH A A	1,00										
25	BAA STANSTED	1,00	1	BAA STANSTED	1,00										
26	MANCHESTER A/G Pic.	0,88	28	CALGARY A A	1,38	OSLO F A/S	0,40	F MÜNCHEN GmbH	0,27	AI GENÈVE	0,08121	UNIQUE ZURICH A	0,10339		
27	F MÜNCHEN GmbH	1,00	1	F MÜNCHEN GmbH	1,00										
28	F HAMBURG GmbH	1,00	1	F HAMBURG GmbH	1,00										
29	AI GENÈVE	1,00	1	AI GENÈVE	1,00										
30	UNIQUE ZURICH A	1,00	1	UNIQUE ZURICH A	1,00										
31	F WIEN AG	1,00	1	F WIEN AG	1,00										
32	ATHENS IA	0,43	32	APACld MELB	0,30	BRISBANE ACld	0,36	YVR AS	0,06	ASUR	0,09	MWAA NATIONAL	0,18		

2001	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATMs	(O)JNOA
HKIA	95536	38763	717	3996251	53548760	186400	217570
NARITA A A	103320	52682	837	6071958	42188370	124600	338937
AUCKLAND IALtd	9504	7967	182	499202	102933540	147900	49952
WACLtd PERTH	6814	4062	102	372545	5546490	57600	27056
SYDNEY ACLtd.	34961	24584	435	1803146	28742200	317300	151889
ADMTL	38920	20075	473	294774	11786210	232400	45139
GTAA	164001	42155	643	1970392	31082880	406300	111617
ASUR	21037	7200	169	739297	11719790	194900	13867
MWAA NATIONAL	35909	28648	510	694797	13418880	244000	44811
MWAA DUILLES	52156	36566	652	1305284	20863510	396900	71053
AD ROMA SpA	148059	161715	2159	2442830	26906697	283700	165400
AD FIRENZE SpA	8984	8404	200	24059	1535929	31000	4253
BRUSSELS AIC	114043	49245	696	921070	25522157	305500	106132
COPENH. AIRPORTS A/S	29476	60331	1182	966716	21926644	288800	86026
OSLO F A/S	56044	31434	524	1176250	14614756	194800	108730
CZECH A A	31977	16444	1324	704674	6937774	115500	39043
BAA STANSTED	62095	33640	636	1261060	14107480	148900	82243
MANCHESTER AG Plc.	130912	92279	1473	1556824	20211770	181000	141319
F MÜNCHEN GmbH	205946	176205	4230	1979924	25747259	321800	180500
UNIQUE ZÜRICH A	64389	68018	1017	1439878	25941591	309200	151454
ATHENS IA	47549	14442	469	1764293	10884204	138000	37236

Model Name = CCR(CCR-I)

Workbook Name = K:\Aerports 2001 INOCIAEROPORTS 2001.PAS 3 MODEL TRES ETAPES.FULL.xls

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1			
	DONOL	95536	95536	0	0,00%
	DOL	38763	38763	0	0,00%
	E	717	717	0	0,00%
	AF	3996251	3996251	0	0,00%
	WLUs	53548760	53548760	0	0,00%
	ATMs	186400	186400	0	0,00%
	INOA	217570	217570	0	0,00%
2	NARITA A A	1			
	DONOL	103320	103320	0	0,00%
	DOL	52682	52682	0	0,00%
	E	837	837	0	0,00%
	AF	6071958	6071958	0	0,00%
	WLUs	42188370	42188370	0	0,00%
	ATMs	124600	124600	0	0,00%
	INOA	338937	338937	0	0,00%
3	AUCKLAND IALtd	1			
	DONOL	9504	9504	0	0,00%
	DOL	7967	7967	0	0,00%
	E	182	182	0	0,00%
	AF	499202	499202	0	0,00%
	WLUs	10293540	10293540	0	0,00%
	ATMs	147900	147900	0	0,00%
	INOA	49952	49952	0	0,00%
4	WACLtd PERTH	1			
	DONOL	6814	6814	0	0,00%
	DOL	4062	4062	0	0,00%
	E	102	102	0	0,00%
	AF	372545	372545	0	0,00%
	WLUs	5546490	5546490	0	0,00%
	ATMs	57600	57600	0	0,00%
	INOA	27056	27056	0	0,00%
5	SYDNEY ACLtd.	1			
	DONOL	34961	34961	0	0,00%
	DOL	24584	24584	0	0,00%
	E	435	435	0	0,00%
	AF	1803146	1803146	0	0,00%
	WLUs	28742200	28742200	0	0,00%
	ATMs	317300	317300	0	0,00%
	INOA	151889	151889	0	0,00%
6	ADMTL	1			
	DONOL	38920	38920	0	0,00%
	DOL	20075	20075	0	0,00%
	E	473	473	0	0,00%
	AF	294774	294774	0	0,00%
	WLUs	11786210	11786210	0	0,00%
	ATMs	232400	232400	0	0,00%
	INOA	45139	45139	0	0,00%
7	GTAA	0,81824642			
	DONOL	164001	34965,6205	-129035,379	-78,68%
	DOL	42155	22909,8884	-19245,1116	-45,65%
	E	643	526,132449	-116,867551	-18,18%
	AF	1970392	1612266,2	-358125,796	-18,18%
	WLUs	31082880	31082880	0	0,00%
	ATMs	406300	462866,452	56566,4522	13,92%
	INOA	111617	124456,271	12839,2712	11,50%

8	ASUR	1			
	DONOL	21037	21037	0	0,00%
	DOL	7200	7200	0	0,00%
	E	169	169	0	0,00%
	AF	739297	739297	0	0,00%
	WLUs	11719790	11719790	0	0,00%
	ATMs	194900	194900	0	0,00%
	INOA	13867	13867	0	0,00%
9	MWAA NATIONAL	0,80096374			
	DONOL	35909	28761,807	-7147,19302	-19,90%
	DOL	28648	17264,9595	-11383,0405	-39,73%
	E	510	402,259893	-107,740107	-21,13%
	AF	694797	556507,204	-138289,796	-19,90%
	WLUs	13418880	14588410,4	1169530,41	8,72%
	ATMs	244000	244000	0	0,00%
	INOA	44811	64218,0652	19407,0652	43,31%
10	MWAA DULLES	0,84876179			
	DONOL	52156	44268,0198	-7887,98017	-15,12%
	DOL	36566	23746,7415	-12819,2585	-35,06%
	E	652	553,392686	-98,607314	-15,12%
	AF	1305284	1107875,18	-197408,818	-15,12%
	WLUs	20863510	24020271,7	3156761,7	15,13%
	ATMs	396900	396900	0	0,00%
	INOA	71053	84182,4011	13129,4011	18,48%
11	AD ROMA SpA	0,56618351			
	DONOL	148059	83828,5642	-64230,4358	-43,38%
	DOL	161715	48606,296	-113108,704	-69,94%
	E	2159	1135,23454	-1023,76546	-47,42%
	AF	2442830	1383090,06	-1059739,94	-43,38%
	WLUs	26906697	38372496,6	-11465799,6	-42,61%
	ATMs	283700	660188,077	376488,077	132,71%
	INOA	165400	165400	0	0,00%
12	AD FIRENZE SpA	1			
	DONOL	8984	8984	0	0,00%
	DOL	8404	8404	0	0,00%
	E	200	200	0	0,00%
	AF	24059	24059	0	0,00%
	WLUs	1535929	1535929	0	0,00%
	ATMs	31000	31000	0	0,00%
	INOA	4253	4253	0	0,00%
13	BRUSSELS AIC	1			
	DONOL	114043	114043	0	0,00%
	DOL	49245	49245	0	0,00%
	E	696	696	0	0,00%
	AF	921070	921070	0	0,00%
	WLUs	25522157	25522157	0	0,00%
	ATMs	305500	305500	0	0,00%
	INOA	106132	106132	0	0,00%
14	COPENH. AIRPORTS A/S	1			
	DONOL	29476	29476	0	0,00%
	DOL	60331	60331	0	0,00%
	E	1182	1182	0	0,00%
	AF	966716	966716	0	0,00%
	WLUs	21926644	21926644	0	0,00%
	ATMs	288800	288800	0	0,00%
	INOA	86026	86026	0	0,00%

15	OSLO F A/S	0,89289594			
	DONOL	56044	27737,9417	-28306,0583	-50,51%
	DOL	31434	20334,6594	-11099,3406	-35,31%
	E	524	467,877473	-56,1225275	-10,71%
	AF	1176250	1050268,85	-125981,151	-10,71%
	WLUs	14614756	22983364,6	8368608,57	57,26%
	ATMs	194800	344887,191	150087,191	77,05%
	INOA	108730	108730	0	0,00%
16	CZECH A A	0,51506466			
	DONOL	31977	12711,4993	-19265,5007	-60,25%
	DOL	16444	8469,72331	-7974,27669	-48,49%
	E	1324	195,992824	-1128,00718	-85,20%
	AF	704674	362952,676	-341721,324	-48,49%
	WLUs	6937774	8478275,04	1540501,04	22,20%
	ATMs	115500	132800,19	17300,1904	14,98%
	INOA	39043	39043	0	0,00%
17	BAA STANSTED	0,61499976			
	DONOL	62095	24641,7884	-37453,2116	-60,32%
	DOL	33640	16935,0988	-16704,9012	-49,66%
	E	636	391,139848	-244,860152	-38,50%
	AF	1261060	775551,599	-485508,401	-38,50%
	WLUs	14107480	17684403,7	3576923,7	25,35%
	ATMs	148900	272790,238	123890,238	83,20%
	INOA	82243	82243	0	0,00%
18	MANCHESTER AG Plc.	0,72646962			
	DONOL	130912	81468,0587	-49443,9413	-37,77%
	DOL	92279	45708,4325	-46570,5675	-50,47%
	E	1473	1070,08974	-402,910256	-27,35%
	AF	1556824	1130985,33	-425838,667	-27,35%
	WLUs	20211770	33592097,8	13380327,8	66,20%
	ATMs	181000	596119,586	415119,586	229,35%
	INOA	141319	141319	0	0,00%
19	F MUNCHEN GmbH	0,65130371			
	DONOL	205946	134133,395	-71812,6055	-34,87%
	DOL	176205	71149,1857	-105055,814	-59,62%
	E	4230	1672,73103	-2557,26897	-60,46%
	AF	1979924	1289531,85	-690392,147	-34,87%
	WLUs	25747259	45369286,2	19622027,2	76,21%
	ATMs	321800	859319,947	537519,947	167,04%
	INOA	180500	180500	0	0,00%
20	UNIQUE ZURICH A	0,93811501			
	DONOL	64389	60404,2873	-3984,71269	-6,19%
	DOL	68018	37564,8928	-30453,1072	-44,77%
	E	1017	873,139792	-143,860208	-14,15%
	AF	1439878	1350771,16	-89106,8372	-6,19%
	WLUs	25941591	33797317,2	7855726,22	30,28%
	ATMs	309200	551272,771	242072,771	78,29%
	INOA	151454	151454	0	0,00%
21	ATHENS IA	0,51686916			
	DONOL	47549	15802,7223	-31746,2777	-66,77%
	DOL	14442	7464,62447	-6977,37553	-48,31%
	E	469	183,122224	-285,877776	-60,95%
	AF	1764293	713527,884	-1050765,12	-59,56%
	WLUs	10884204	10884204	0	0,00%
	ATMs	138000	139834,56	1834,55961	1,33%
	INOA	37236	37236	0	0,00%

Model Name = CCR(CCR-I)

Workbook Name = K:\Aeroports 2001 INOC\AEROPORTS 2001.PAS 3 MODEL TRES ETAPES.FULL.xls

Rank	DMU	Score
1	COPENH. AIRPORTS A/S	1
1	HKIA	1
1	NARITA A A	1
1	AUCKLAND IALtd	1
1	WACLtd PERTH	1
1	SYDNEY ACLtd.	1
1	ADMTL	1
1	BRUSSELS AIC	1
1	ASUR	1
1	AD FIRENZE SpA	1
11	UNIQUE ZURICH A	0,9381
12	OSLO F A/S	0,8929
13	MWAA DULLES	0,8488
14	GTAA	0,8182
15	MWAA NATIONAL	0,8010
16	MANCHESTER AG Plc.	0,7265
17	F MÜNCHEN GmbH	0,6513
18	BAA STANSTED	0,6150
19	AD ROMA SpA	0,5662
20	ATHENS IA	0,5169
21	CZECH A A	0,5151

No.	DMU	Score	Rank	Reference set (lambda)				
1	HKIA	1	1	HKIA	1			
2	NARITA A A	1	1	NARITA A A	1			
3	AUCKLAND IALtd	1	1	AUCKLAND IALtd	1			
4	WACLtd PERTH	1	1	WACLtd PERTH	1			
5	SYDNEY ACLtd.	1	1	SYDNEY ACLtd.	1			
6	ADMTL	1	1	ADMTL	1			
7	GTAA	0,8182	14	AUCKLAND IALtd	2,3212	ASUR	0,6134	
8	ASUR	1	1	ASUR	1			
9	MWAA NATIONAL	0,8010	15	AUCKLAND IALtd	0,7927	ADMTL	0,5454	
10	MWAA DULLES	0,8488	13	AUCKLAND IALtd	1,0039	ADMTL	0,5719	ASUR 0,5926
11	AD ROMA SpA	0,5662	19	AUCKLAND IALtd	1,7513	ADMTL	1,7262	
12	AD FIRENZE SpA	1	1	AD FIRENZE SpA	1			
13	BRUSSELS AIC	1	1	BRUSSELS AIC	1			
14	COPENH. AIRPORTS A/S	1	1	COPENH. AIRPORTS A/S	1			
15	OSLO F A/S	0,8929	12	AUCKLAND IALtd	1,9666	ADMTL	0,2325	
16	CZECH A A	0,5151	21	AUCKLAND IALtd	0,6242	ADMTL	0,1742	
17	BAA STANSTED	0,6150	18	AUCKLAND IALtd	1,3785	ADMTL	0,2965	
18	MANCHESTER AG Plc.	0,7265	16	AUCKLAND IALtd	1,2030	ADMTL	1,7994	
19	F MÜNCHEN GmbH	0,6513	17	AUCKLAND IALtd	0,6405	ADMTL	3,2900	
20	UNIQUE ZURICH A	0,9381	11	AUCKLAND IALtd	2,0909	ADMTL	1,0414	
21	ATHENS IA	0,5169	20	WACLtd PERTH	1,1886	ASUR	0,3662	

Workbook Name = K:\Aeroports 2001 INOC\AEROPORTS 2001.PAS 3 MODEL TRES ETAPES.FULL.xls
 Data File = K:\Aeroports 2001 INOC\AEROPORTS 2001.PAS 3 MODEL TRES ETAPES.xlsHoja2
 DEA model = CCR(CCR-I)

No. of DMUs = 21	Frequency in Reference Set	
No. of Input items = 4	Reference	Frequency to other DMUs
Input(1) = DONOL	HKIA	0
Input(2) = DOL	NARITA A A	0
Input(3) = E	AUCKLAND IALtd	10
Input(4) = AF	WACLtd PERTH	1
No. of Output items = 3	SYDNEY ACLtd.	0
Output(1) = WLUs	ADMTL	9
Output(2) = ATMs	ASUR	3
Output(3) = INOA	AD FIRENZE SpA	0
	BRUSSELS AIC	0
Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)	COPENH. AIRPORTS A/S	0

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
Max	205946	176205	4230	6071958	53548760	406300	338937
Min	6814	4062	102	24059	1535929	31000	4253
Average	69601,52381	46421,85714	887,1428571	1523105,905	20167947,2	220309,5	103534,619
SD	54400,34261	45341,70194	889,1577227	1331212,002	12166234,2	100859,7	78125,60283

Correlation

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
DONOL	1	0,8159	0,7426	0,4911	0,5841	0,4924	0,6154
DOL	0,815942577	1	0,9085	0,3216	0,3921	0,4269	0,5230
E	0,742589531	0,9085	1	0,2251	0,2596	0,3298	0,4052
AF	0,491065449	0,3216	0,2251	1	0,8332	0,0650	0,9146
WLUs	0,584067568	0,3921	0,2596	0,8332	1	0,4318	0,8661
ATMs	0,492387148	0,4269	0,3298	0,0650	0,4318	1	0,2205
INOA	0,615396684	0,5230	0,4052	0,9146	0,8661	0,2205	1

Data with respect to the chosen Model

No.	DMU		
	None	No. of DMUs in Data =	21
		No. of DMUs with inappropriate Data =	0
No. of DMUs	21	No. of evaluated DMUs =	21
Average	0,85189873	Average of scores =	0,85189873
SD	0,17615168	No. of efficient DMUs =	10
Maximum	1	No. of inefficient DMUs =	11
Minimum	0,515064663	No. of over iteration DMUs =	0

Indústries Aeroportuàries 2002	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU\$	(O)ATMs	(O)INOA
HKIA	125712	28805	575	3071049	58927840	197700	207175
WACLtd PERTH	8364	4296	83	338351	4892810	48600	30262
SYDNEY ACltd.	48058	20874	392	1786742	28313530	254700	153417
ADMTL	30724	21604	374	374130	11229060	225500	45588
GTAA	158416	43036	777	2364140	29013840	383200	108456
OTTAWA IA	16301	5972	150	387282	3217000	68500	9976
MWAA NATIONAL	38397	31409	245	753124	12908060	215700	50238
MWAA DUILLES	41410	21288	358	1423489	20253480	372600	76070
AD ROMA SpA	135747	136253	1977	2079767	26647933	282800	169340
BRUSSELS AIC	89218	46563	669	986816	19815130	256900	103461
COPENH. AIRPORTS A/S	30033	21332	381	932759	22009113	266900	97144
OSLO F A/S	50430	38605	497	1096934	14034821	177500	108984
CZECH A A	29515	18484	1292	689954	6834739	115400	41795
BAA STANSTED	73253	33667	622	1423032	15880670	166800	112396
MANCHESTER AG Plc.	152744	91962	1479	1314163	25691430	211100	174983
F MÜNCHEN GmbH	197250	172686	3896	1864072	25412805	330900	173100
UNIQUE ZURICH A	57453	74484	920	1528484	22166168	282200	139249
ATHENS IA	61655	25194	639	1674106	12817278	159500	49844

Model Name = CCR(CCR-I)

Workbook Name = K:\Aeroports 2002 INOCIAEROPORTS 2002.PAS 3 MODEL TRES.ETAPES.FULLA.xls

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1			
	DONOL	125712	125712	0	0,00%
	DOL	28805	28805	0	0,00%
	E	575	575	0	0,00%
	AF	3071049	3071049	0	0,00%
	WLUs	58927840	58927840	0	0,00%
	ATMs	197700	197700	0	0,00%
	INOA	207175	207175	0	0,00%
2	WACLtd PERTH	1			
	DONOL	8364	8364	0	0,00%
	DOL	4296	4296	0	0,00%
	E	83	83	0	0,00%
	AF	338351	338351	0	0,00%
	WLUs	4892810	4892810	0	0,00%
	ATMs	48600	48600	0	0,00%
	INOA	30262	30262	0	0,00%
3	SYDNEY ACLtd.	1			
	DONOL	48058	48058	0	0,00%
	DOL	20874	20874	0	0,00%
	E	392	392	0	0,00%
	AF	1786742	1786742	0	0,00%
	WLUs	28313530	28313530	0	0,00%
	ATMs	254700	254700	0	0,00%
	INOA	153417	153417	0	0,00%
4	ADMTL	1			
	DONOL	30724	30724	0	0,00%
	DOL	21604	21604	0	0,00%
	E	374	374	0	0,00%
	AF	374130	374130	0	0,00%
	WLUs	11229060	11229060	0	0,00%
	ATMs	225500	225500	0	0,00%
	INOA	45588	45588	0	0,00%
5	GTAA	0,63848481			
	DONOL	158416	47940,4694	-110475,531	-69,74%
	DOL	43036	27477,8322	-15558,1678	-36,15%
	E	777	483,823352	-293,176648	-37,73%
	AF	2364140	1509467,48	-854672,524	-36,15%
	WLUs	29013840	29013840	0	0,00%
	ATMs	383200	383200	0	0,00%
	INOA	108456	119539,988	11083,9885	10,22%
6	OTTAWA IA	0,66628998			
	DONOL	16301	7655,43415	-8645,56585	-53,04%
	DOL	5972	3979,08377	-1992,91623	-33,37%
	E	150	66,9963715	-83,0036285	-55,34%
	AF	387282	258042,116	-129239,884	-33,37%
	WLUs	3217000	3715749,23	498749,228	15,50%
	ATMs	68500	68500	0	0,00%
	INOA	9976	13981,5802	4005,58021	40,15%
7	MWAA NATIONAL	1			
	DONOL	38397	38397	0	0,00%
	DOL	31409	31409	0	0,00%
	E	245	245	0	0,00%
	AF	753124	753124	0	0,00%
	WLUs	12908060	12908060	0	0,00%
	ATMs	215700	215700	0	0,00%
	INOA	50238	50238	0	0,00%
8	MWAA DULLES	1			
	DONOL	41410	41410	0	0,00%
	DOL	21288	21288	0	0,00%
	E	358	358	0	0,00%
	AF	1423489	1423489	0	0,00%
	WLUs	20253480	20253480	0	0,00%
	ATMs	372600	372600	0	0,00%
	INOA	76070	76070	0	0,00%
9	AD ROMA SpA	0,70267583			
	DONOL	135747	95386,1356	-40360,8644	-29,73%
	DOL	136253	67185,174	-69067,826	-50,69%
	E	1977	1169,27547	-807,724525	-40,86%
	AF	2079767	1461402	-618365,002	-29,73%
	WLUs	26647933	40696326,3	14048393,3	52,72%
	ATMs	282800	724666,149	441866,149	156,25%
	INOA	169340	169340	0	0,00%

10	BRUSSELS AIC	0,9166049			
	DONOL	89218	55812,8752	-33405,1248	-37,44%
	DOL	46563	36316,2317	-10246,7683	-22,01%
	E	669	613,208677	-55,7913231	-8,34%
	AF	986816	904520,379	-82295,6207	-8,34%
	WLUs	19815130	20913456,1	1098326,13	5,54%
	ATMs	256900	256900	0	0,00%
	INOA	103461	103461	0	0,00%
11	COPENH. AIRPORTS A/S	1			
	DONOL	30033	30033	0	0,00%
	DOL	21332	21332	0	0,00%
	E	381	381	0	0,00%
	AF	932759	932759	0	0,00%
	WLUs	22009113	22009113	0	0,00%
	ATMs	266900	266900	0	0,00%
	INOA	97144	97144	0	0,00%
12	OSLO F A/S	0,93772109			
	DONOL	50430	38498,2176	-11931,7824	-23,66%
	DOL	38605	26539,6016	-12065,3984	-31,25%
	E	497	466,047384	-30,9526159	-6,23%
	AF	1096934	1028618,15	-68315,8486	-6,23%
	WLUs	14034821	24011993,9	9977172,9	71,09%
	ATMs	177500	286295,677	108795,677	61,29%
	INOA	108984	108984	0	0,00%
13	CZECH A A	0,56935766			
	DONOL	29515	15182,5472	-14332,4528	-48,56%
	DOL	18484	10524,0069	-7959,99305	-43,06%
	E	1292	184,94395	-1107,05605	-85,69%
	AF	689954	392830,593	-297123,407	-43,06%
	WLUs	6834739	9300016,02	2465277,02	36,07%
	ATMs	115400	115400	0	0,00%
	INOA	41795	41795	0	0,00%
14	BAA STANSTED	0,75486445			
	DONOL	73253	36098,5621	-37154,4379	-50,72%
	DOL	33667	25414,0215	-8252,9785	-24,51%
	E	622	451,669124	-170,330876	-27,38%
	AF	1423032	1074196,27	-348835,729	-24,51%
	WLUs	15880670	25273645,1	9392975,15	59,15%
	ATMs	166800	305113,299	138313,299	82,92%
	INOA	112396	112396	0	0,00%
15	MANCHESTER AG Plc.	1			
	DONOL	152744	152744	0	0,00%
	DOL	91962	91962	0	0,00%
	E	1479	1479	0	0,00%
	AF	1314163	1314163	0	0,00%
	WLUs	25691430	25691430	0	0,00%
	ATMs	211100	211100	0	0,00%
	INOA	174983	174983	0	0,00%
16	F MUNCHEN GmbH	0,71595973			
	DONOL	197250	141223,057	-56026,9434	-28,40%
	DOL	172686	88408,159	-84277,841	-48,80%
	E	3896	1450,75579	-2445,24421	-62,76%
	AF	1864072	1334600,48	-529471,516	-28,40%
	WLUs	25412805	30354313,2	4941508,21	19,44%
	ATMs	330900	394503,766	63603,7662	19,22%
	INOA	173100	173100	0	0,00%
17	UNIQUE ZURICH A	0,85898693			
	DONOL	57453	49351,3187	-8101,6813	-14,10%
	DOL	74484	34970,6123	-39513,3877	-53,05%
	E	920	620,099275	-299,900725	-32,60%
	AF	1528484	1312946,25	-215537,748	-14,10%
	WLUs	22166168	31889720,2	9723552,24	43,87%
	ATMs	282200	420566,47	138366,47	49,03%
	INOA	139249	139249	0	0,00%
18	ATHENS IA	0,44235179			
	DONOL	61655	24146,2894	-37508,7106	-60,84%
	DOL	25194	11144,611	-14049,389	-55,76%
	E	639	196,567276	-442,432724	-69,24%
	AF	1674106	740543,787	-933562,213	-55,76%
	WLUs	12817278	12817278	0	0,00%
	ATMs	159500	159500	0	0,00%
	INOA	49844	49844	0	0,00%

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Rank	DMU	Score
1	MANCHESTER AG Plc.	1
1	HKIA	1
1	WACLtdPERTH	1
1	SYDNEY AGLtd.	1
1	ADMTL	1
1	COPENH. AIRPORTS A/S	1
1	MWAA DULLES	1
1	MWAA NATIONAL	1
9	OSLO F A/S	0,9377
10	BRUSSELS AIC	0,9166
11	UNIQUE ZURICH A	0,8590
12	BAA STANSTED	0,7549
13	F MÜNCHEN GmbH	0,7160
14	AD ROMA SpA	0,7027
15	OTTAWA IA	0,6663
16	GTAA	0,6385
17	CZECH AA	0,5694
18	ATHENS IA	0,4424

No.	DMU	Score	Rank	Reference set (lambda)						
1	HKIA	1	1	HKIA	1					
2	WACLtdPERTH	1	1	WACLtdPERTH	1					
3	SYDNEY AGLtd.	1	1	SYDNEY AGLtd.	1					
4	ADMTL	1	1	ADMTL	1					
5	GTAA	0,6385	16	HKIA	0,0488	MWAA D	0,4456	CPH	0,7775	
6	OTTAWA IA	0,6663	15	ADMTL	0,0075	MWAA D	0,1793			
7	MWAA NATIONAL	1	1	MWAA NATIONAL	1					
8	MWAA DULLES	1	1	MWAA DULLES	1					
9	AD ROMA SpA	0,7027	14	ADMTL	2,5877	CPH	0,5288			
10	BRUSSELS AIC	0,9166	10	ADMTL	0,2593	CPH	0,5870	MAG	0,1978	
11	COPENH. AIRPORTS A/S	1	1	CPH	1					
12	OSLO F A/S	0,9377	9	CPH	1,0341	MAG	0,0487			
13	CZECH AA	0,5694	17	ADMTL	0,0463	CPH	0,3813	MAG	0,0151	
14	BAA STANSTED	0,7549	12	CPH	1,1323	MAG	0,0137			
15	MANCHESTER AG Plc.	1	1	MAG	1					
16	F MÜNCHEN GmbH	0,7160	13	ADMTL	1,0890	MAG	0,7055			
17	UNIQUE ZURICH A	0,8590	11	ADMTL	0,3789	CPH	1,2556			
18	ATHENS IA	0,4424	18	HKIA	0,0600	SYDNEY	0,0068	MWAA D	0,2812	CPH
										0,1541

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DEA model = CCR(CCR-I)

Problem = Indústries Aeroportuàries 2002

Frequency in Reference Set

	Reference	Frequency to other DMUs
No. of DMUs = 18	HKIA	2
No. of Input items = 4	WACLtd PERTH	0
Input(1) = DONOL	SYDNEY ACLtd.	1
Input(2) = DOL	ADMTL	6
Input(3) = E	MWAA NATIONAL	0
Input(4) = AF	MWAA DULLES	3
No. of Output items = 3	COPENH. AIRPORTS A/S	8
Output(1) = WLUs	MANCHESTER AG Plc.	5
Output(2) = ATMs		
Output(3) = INOA		

Returns to Scale = Constant ($0 \leq \text{Sum of Lambda} < \text{Infinity}$)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
Max	197250	172686	3896	3071049	58927840	383200	207175
Min	8364	4296	83	338351	3217000	48600	9976
Average	74704,4	46473	851,4	1338244,1	20003650,4	223138,9	102859,9
SD	54074,9	43980,03	876,3	714494,1	12236200,4	90312,4	56131,8

Correlation

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
DONOL	1	0,7949	0,7540	0,7092	0,6179	0,5389	0,7545
DOL	0,7949	1	0,9178	0,3975	0,2967	0,4675	0,6415
E	0,7540	0,9178	1	0,3411	0,2179	0,3601	0,5195
AF	0,7092	0,3975	0,3411	1	0,8810	0,5236	0,7874
WLUs	0,6179	0,2967	0,2179	0,8810	1	0,4785	0,8464
ATMs	0,5389	0,4675	0,3601	0,5236	0,4785	1	0,4915
INOA	0,7545	0,6415	0,5195	0,7874	0,8464	0,4915	1

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU	No. of DMUs in Data =	18
	None	No. of DMUs with inappropriate Data	0
		No. of evaluated DMUs =	18
No. of DMUs	18	Average of scores =	0,8446276
Average	0,8446276	No. of efficient DMUs =	8
SD	0,1769871	No. of inefficient DMUs =	10
Maximum	1	No. of over iteration DMUs =	0
Minimum	0,4423518		

Indústries Aeroportuàries 2003	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLUs	(O)ATMs	(O)INOA
HKIA	60029	28055	472	2258637	53780800	211700	198532
NARITA A A	106451	49750	837	4005265	48083910	171000	371514
WACLtd PERTH	9505	4506	74	318458	5356840	51600	30798
SYDNEY ACLtd.	45766	21389	360	1721973	29854000	252000	159724
ADMTL	32386	17492	258	403964	11385930	230100	48003
GTAA	183518	45176	813	2729535	27468880	370100	114553
OTTAWA IA	15836	6580	155	227854	3263000	69800	10788
MWAA NATIONAL	39133	32794	270	816968	14253480	250800	58117
MWAA DULLES	43910	21472	343	1337009	19606210	335400	81662
AD ROMA SpA	120902	118101	1675	1899468	27561599	300800	171945
SAGA TORINO SpA	16557	17046	219	58909	2990578	54700	12690
BRUSSELS AIC	65020	35006	506	718136	21267336	252200	99962
COPENH. AIRPORTS A/S	28331	18934	370	1289927	21071317	259000	102095
OSLO F A/S	48678	28743	412	950216	14294890	175900	117109
CZECH A A	23872	15686	1367	591479	8100842	130400	46656
BAA STANSTED	30733	20807	410	1435668	20173450	171300	112396
MANCHESTER AG Plc.	114599	66424	1124	981082	26813000	247165	170729
F MÜNCHEN GmbH	233273	173420	3331	1692300	26479308	343000	265600
UNIQUE ZURICH A	64787	58752	741	1267867	20923367	269400	152449
ATHENS IA	54217	24667	586	1717199	13264484	170100	53589

Anàlisi de l'eficiència de l'empresa aeroportuària en l'actual marc desregulador.

Model Name = CCR(CCR-I)

Workbook Name = K:\Aerports 2003 INOCIAEROPORTS 2003.PAS 3 MODEL TRES ETAPES.FULL.xls

No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1			
	DONOL	60029	60029	0	0,00%
	DOL	28055	28055	0	0,00%
	E	472	472	0	0,00%
	AF	2258637	2258637	0	0,00%
	WLUs	53780800	53780800	0	0,00%
	ATMs	211700	211700	0	0,00%
	INOA	198532	198532	0	0,00%
2	NARITA A A	1			
	DONOL	106451	106405,931	-45,0688882	-0,04%
	DOL	49750	49729,4164	-20,5836265	-0,04%
	E	837	837	0	0,00%
	AF	4005265	4003586,52	-1678,47844	-0,04%
	WLUs	48083910	69439651,9	21355741,9	44,41%
	ATMs	171000	586145,651	415145,651	242,78%
	INOA	371514	371514	0	0,00%
3	WACLtd PERTH	1			
	DONOL	9505	9505	0	0,00%
	DOL	4506	4506	0	0,00%
	E	74	74	0	0,00%
	AF	318458	318458	0	0,00%
	WLUs	5356840	5356840	0	0,00%
	ATMs	51600	51600	0	0,00%
	INOA	30798	30798	0	0,00%
4	SYDNEY ACLtd.	1			
	DONOL	45766	45766	0	0,00%
	DOL	21389	21389	0	0,00%
	E	360	360	0	0,00%
	AF	1721973	1721973	0	0,00%
	WLUs	29854000	29854000	0	0,00%
	ATMs	252000	252000	0	0,00%
	INOA	159724	159724	0	0,00%
5	ADMTL	1			
	DONOL	32386	32386	0	0,00%
	DOL	17492	17492	0	0,00%
	E	258	258	0	0,00%
	AF	403964	403964	0	0,00%
	WLUs	11385930	11385930	0	0,00%
	ATMs	230100	230100	0	0,00%
	INOA	48003	48003	0	0,00%
6	GTAA	0,58583274			
	DONOL	183518	53904,255	-129613,745	-70,63%
	DOL	45176	26465,58	-18710,42	-41,42%
	E	813	422,710761	-390,289239	-48,01%
	AF	2729535	1599050,98	-1130484,02	-41,42%
	WLUs	27468880	27468880	0	0,00%
	ATMs	370100	370100	0	0,00%
	INOA	114553	114553	0	0,00%
7	OTTAWA IA	0,76422545			
	DONOL	15836	9596,85058	-6239,14942	-39,40%
	DOL	6580	5028,60343	-1551,39657	-23,58%
	E	155	75,9831716	-79,0168284	-50,98%
	AF	227854	174131,825	-53722,1754	-23,58%
	WLUs	3263000	3661419,42	398419,42	12,21%
	ATMs	69800	69800	0	0,00%
	INOA	10788	15367,7258	4579,72579	42,45%
8	MWAA NATIONAL	0,99249586			
	DONOL	39133	34047,4577	-5085,64233	-13,00%
	DOL	32794	17290,6954	-15503,3046	-47,27%
	E	270	267,973881	-2,02611901	-0,75%
	AF	816968	810837,354	-6130,64592	-0,75%
	WLUs	14253480	14253480	0	0,00%
	ATMs	250800	250800	0	0,00%
	INOA	58117	59344,7853	1227,78534	2,11%
9	MWAA DULLES	1			
	DONOL	43910	43910	0	0,00%
	DOL	21472	21472	0	0,00%
	E	343	343	0	0,00%
	AF	1337009	1337009	0	0,00%
	WLUs	19606210	19606210	0	0,00%
	ATMs	335400	335400	0	0,00%
	INOA	81662	81662	0	0,00%
10	AD ROMA SpA	0,70874145			
	DONOL	120902	85688,2583	-35213,7417	-29,13%
	DOL	118101	62774,4848	-55326,5152	-46,85%
	E	1675	874,475112	-800,524888	-47,79%
	AF	1899468	1346231,7	-553236,302	-29,13%
	WLUs	27561599	27561599	0	0,00%
	ATMs	300800	300800	0	0,00%
	INOA	171945	171945	0	0,00%

11	SAGA TORINO SpA	1				
	DONOL	16557	16557	0	0,00%	
	DOL	17046	17046	0	0,00%	
	E	219	219	0	0,00%	
	AF	58909	58909	0	0,00%	
	WLUs	2990578	2990578	0	0,00%	
	ATMs	54700	54700	0	0,00%	
	INOA	12690	12690	0	0,00%	
12	BRUSSELS AIC	1				
	DONOL	65020	65020	0	0,00%	
	DOL	35006	35006	0	0,00%	
	E	506	506	0	0,00%	
	AF	718136	718136	0	0,00%	
	WLUs	21267336	21267336	0	0,00%	
	ATMs	252200	252200	0	0,00%	
	INOA	99962	99962	0	0,00%	
13	COPENH. AIRPORTS A/S	1				
	DONOL	28331	28331	0	0,00%	
	DOL	18934	18934	0	0,00%	
	E	370	370	0	0,00%	
	AF	1289927	1289927	0	0,00%	
	WLUs	21071317	21071317	0	0,00%	
	ATMs	259000	259000	0	0,00%	
	INOA	102095	102095	0	0,00%	
14	OSLO F A/S	1				
	DONOL	48678	48678	0	0,00%	
	DOL	28743	28743	0	0,00%	
	E	412	412	0	0,00%	
	AF	950216	950216	0	0,00%	
	WLUs	14294890	14294890	0	0,00%	
	ATMs	175900	175900	0	0,00%	
	INOA	117109	117109	0	0,00%	
15	CZECH A A	0,80692964				
	DONOL	23872	19263,0243	-4608,9757	-19,31%	
	DOL	15686	10277,071	-5408,92897	-34,48%	
	E	1367	165,723455	-1201,27654	-87,88%	
	AF	591479	477281,935	-114197,065	-19,31%	
	WLUs	8100842	9318330,07	1217488,07	15,03%	
	ATMs	130400	130400	0	0,00%	
	INOA	46656	46656	0	0,00%	
16	BAA STANSTED	1				
	DONOL	30733	30733	0	0,00%	
	DOL	20807	20807	0	0,00%	
	E	410	410	0	0,00%	
	AF	1435668	1435668	0	0,00%	
	WLUs	20173450	20173450	0	0,00%	
	ATMs	171300	171300	0	0,00%	
	INOA	112396	112396	0	0,00%	
17	MANCHESTER AG Plc.	1				
	DONOL	114599	114599	0	0,00%	
	DOL	66424	66424	0	0,00%	
	E	1124	1124	0	0,00%	
	AF	981082	981082	0	0,00%	
	WLUs	26813000	26813000	0	0,00%	
	ATMs	247165	247165	0	0,00%	
	INOA	170729	170729	0	0,00%	
18	F MUNCHEN GmbH	0,87521733				
	DONOL	233273	204164,572	-29108,4279	-12,48%	
	DOL	173420	142323,873	-31096,1267	-17,93%	
	E	3331	2184,7388	-1146,2612	-34,41%	
	AF	1692300	1481130,29	-211169,713	-12,48%	
	WLUs	26479308	44924717	18445409	69,66%	
	ATMs	343000	501484,952	158484,952	46,21%	
	INOA	265600	265600	0	0,00%	
19	UNIQUE ZURICH A	1				
	DONOL	64787	64787	0	0,00%	
	DOL	58752	58752	0	0,00%	
	E	741	741	0	0,00%	
	AF	1267867	1267867	0	0,00%	
	WLUs	20923367	20923367	0	0,00%	
	ATMs	269400	269400	0	0,00%	
	INOA	152449	152449	0	0,00%	
20	ATHENS IA	0,48826076				
	DONOL	54217	25074,5582	-29142,4418	-53,75%	
	DOL	24667	12043,9281	-12623,0719	-51,17%	
	E	586	196,417664	-389,582336	-66,48%	
	AF	1717199	835620,7	-881578,3	-51,34%	
	WLUs	13264484	13264484	0	0,00%	
	ATMs	170100	170100	0	0,00%	
	INOA	53589	63017,3659	9428,36587	17,59%	

Model Name = CCR(CCR-I)
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Ra	DMU	Score
1	UNIQUE ZURICH A	1
1	HKIA	1
1	NARITA A A	1
1	WACLtd PERTH	1
1	SYDNEY AGLtd	1
1	ADMTL	1
1	MANCHESTER AG Plc.	1
1	BAA STANSTED	1
1	OSLO F A/S	1
1	MWAA DULLES	1
1	COPENH. AIRPORTS A/S	1
1	SAGA TORINO Spa	1
1	BRUSSELS AIC	1
14	MWAA NATIONAL	0.9925
15	F MUNCHEN GmbH	0.8752
16	CZECH A A	0.8069
17	OTTAWA IA	0.7642
18	AD ROMA Spa	0.7087
19	GTAA	0.5858
20	ATHENS IA	0.4883

No.	DMU	Score	Rank	Reference set (lambda)
1	HKIA	1	1	HKIA
2	NARITA A A	1	1	SYDNEY 2,3256
3	WACLtd PERTH	1	1	WACLtd P
4	SYDNEY AGLtd	1	1	SYDNEY AGLtd
5	ADMTL	1	1	ADMTL
6	GTAA	0.5858	19	HKIA 0,1197 SYDNEY 0,0868 ADMTL 0,2101 MWAA D. 0,8186
7	OTTAWA IA	0.7642	17	ADMTL 0,2028 MWAA D 0,0690
8	MWAA NATIONAL	0.9925	14	HKIA 0,0099 ADMTL 0,3953 MWAA D 0,4703
9	MWAA DULLES	1	1	MWAA D.
10	AD ROMA Spa	0.7087	18	HKIA 0,0587 BIAC 0,2226 MAG 0,2147 UNIQUE 0,6651
11	SAGA TORINO Spa	1	1	SAGAT
12	BRUSSELS AIC	1	1	BIAC
13	COPENH. AIRPORTS A/S	1	1	CPH
14	OSLO F A/S	1	1	OSLO F A/S
15	CZECH A A	0.8069	16	WACLtd P. 0,7457 ADMTL 0,2938 CPH 0,0939
16	BAA STANSTED	1	1	BAA STN
17	MANCHESTER AG Plc.	1	1	MAG
18	F MUNCHEN GmbH	0.8752	15	SAGAT 3,2199 MAG 1,3164
19	UNIQUE ZURICH A	1	1	UNIQUE
20	ATHENS IA	0.4883	20	SYDNEY AGLtd 0,2196 MWAA D 0,3422

Workbook Name = K:\Aeroports 2003 INOC\AEROPORTS 2003.PAS 3 MODEL TRES ETAPES.FULL.xls

Data File = K:\Aeroports 2003 INOC\AEROPORTS 2003.PAS 3 MODEL TRES ETAPES.xlsHoja2

DEA model = CCR(CCR-I)

Problem = Indústries Aeroportuàries 2003

Frequency in Reference Set

No. of DMUs = 20

No. of Input items = 4

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLUs

Output(2) = ATMs

Output(3) = INOA

Reference Frequency to other DMUs

HKIA	3
WACLtd PERTH	1
SYDNEY ACLtd.	3
ADMTL	4
MWAA DULLES	4
SAGA TORINO SpA	1
BRUSSELS AIC	1
COPENH. AIRPORTS	1
OSLO F A/S	0
BAA STANSTED	0
MANCHESTER AG P 2	
UNIQUE ZURICH A 1	

Returns to Scale = Constant ($0 \leq \sum \text{Lambda} < \text{Infinity}$)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
Max	233273	173420	3331	4005265	53780800	370100	371514
Min	9505	4506	74	58909	2990578	51600	10788
Average	66875,15	40240	716,15	1321095,7	20799661,05	215823,25	118945,55
SD	56834,9	39468,8	722,7582	919577,4	12903318,24	89586,2552	86889,76

Correlation

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
DONOL	1	0,8551	0,8068	0,5605	0,4786	0,6702	0,6434
DOL	0,8551	1	0,9175	0,3332	0,3447	0,5626	0,6079
E	0,8068	0,9175	1	0,2774	0,2543	0,4479	0,5334
AF	0,5605	0,3332	0,2774	1	0,8366	0,4370	0,8154
WLUs	0,4786	0,3447	0,2543	0,8366	1	0,4626	0,8490
ATMs	0,6702	0,5626	0,4479	0,4370	0,4626	1	0,4087
INOA	0,6434	0,6079	0,5334	0,8154	0,8490	0,4087	1

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
-----	-----

None

No. of DMUs in Data = 20

No. of DMUs with inappropriate Data = 0

No. of DMUs 20

No. of evaluated DMUs = 20

Average 0,911085161

Average of scores = 0,911085161

SD 0,153071711

Maximum 1

No. of efficient DMUs = 12

Minimum 0,488260756

No. of inefficient DMUs = 8

No. of over iteration DMUs = 0

Indústries Aeroportuàries 2004	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU's	(O)ATMs	(O)INOA
HKIA	93754	38157	670	3365420	55046760	190300	168753
NARITA A A	103856	48593	737	5545829	54749286	186633	390215
WACLtd PERTH	17230	6463	121	474737	8532000	53000	33739
ADMTL	31791	19869	280	547923	12874828	235200	50401
GTAA	230910	57732	962	3403117	28292360	370100	128563
OTTAWA IA	18329	7364	163	225905	3609885	69600	12565
INDIANAPOLIS A A	16974	13661	371	998840	17114800	212558	49425
MWAA NATIONAL	39856	34011	300	883912	15970870	268600	63653
AD ROMA SpA	148178	132666	1887	2034518	32213038	353900	188044
BRUSSELS AIC	80794	42748	590	836148	20970237	252069	106100
COPENH. AIRPORTS A/S	40407	29329	367	862474	22391075	272500	109754
OSLO F A/S	48108	28371	444	1030541	15534160	186800	132325
CZECH A A	34361	23083	1311	837964	10165263	144962	47699
BAA STANSTED	65135	48830	878	1583248	23179610	177400	139977
MANCHESTER AG Plc.	135971	81278	1569	1538831	29653000	261700	206025
F MÜNCHEN GmbH	265321	186115	3499	1737426	29912785	370534	355200
UNIQUE ZURICH A	79048	64982	887	1454627	20882296	266700	155625
ATHENS IA	75985	32863	663	1957811	14755252	191000	67740

Model Name = CCR(CCR-I)

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No.	DMU I/O	Score Data	Projection	Difference	%
1	HKIA	1			
	DONOL	93754	93754	0	0,00%
	DOL	38157	38157	0	0,00%
	E	670	670	0	0,00%
	AF	3365420	3365420	0	0,00%
	WLUss	55046760	55046760	0	0,00%
	ATMs	190300	190300	0	0,00%
	INOA	168753	168753	0	0,00%
2	NARITA A A	1			
	DONOL	103856	103856	0	0,00%
	DOL	48593	48593	0	0,00%
	E	737	737	0	0,00%
	AF	5545829	5545829	0	0,00%
	WLUss	54749286	54749286	0	0,00%
	ATMs	186633	186633	0	0,00%
	INOA	390215	390215	0	0,00%
3	WACLtd PERTH	1			
	DONOL	17230	17230	0	0,00%
	DOL	6463	6463	0	0,00%
	E	121	121	0	0,00%
	AF	474737	474737	0	0,00%
	WLUss	8532000	8532000	0	0,00%
	ATMs	53000	53000	0	0,00%
	INOA	33739	33739	0	0,00%
4	ADMTL	1			
	DONOL	31791	31791	0	0,00%
	DOL	19869	19869	0	0,00%
	E	280	280	0	0,00%
	AF	547923	547923	0	0,00%
	WLUss	12874828	12874828	0	0,00%
	ATMs	235200	235200	0	0,00%
	INOA	50401	50401	0	0,00%
5	GTAA	0,58543951			
	DONOL	230910	55437,1859	-175472,814	-75,99%
	DOL	57732	33798,5935	-23933,4065	-41,46%
	E	962	563,192804	-398,807196	-41,46%
	AF	3403117	1780908,49	-1622208,51	-47,67%
	WLUss	28292360	28751944,7	459584,704	1,62%
	ATMs	370100	370100	0	0,00%
	INOA	128563	128563	0	0,00%
6	OTTAWA IA	0,78169328			
	DONOL	18329	9070,29549	-9258,70451	-50,51%
	DOL	7364	5756,38929	-1607,61071	-21,83%
	E	163	86,240755	-76,759245	-47,09%
	AF	225905	176588,42	-49316,5803	-21,83%
	WLUss	3609885	3967078,18	357193,183	9,89%
	ATMs	69600	69600	0	0,00%
	INOA	12565	15025,766	2460,76598	19,58%
7	INDIANAPOLIS A A	1			
	DONOL	16974	16974	0	0,00%
	DOL	13661	13661	0	0,00%
	E	371	371	0	0,00%
	AF	998840	998840	0	0,00%
	WLUss	17114800	17114800	0	0,00%
	ATMs	212558	212558	0	0,00%
	INOA	49425	49425	0	0,00%
8	MWAA NATIONAL	1			
	DONOL	39856	39856	0	0,00%
	DOL	34011	34011	0	0,00%
	E	300	300	0	0,00%
	AF	883912	883912	0	0,00%
	WLUss	15970870	15970870	0	0,00%
	ATMs	268600	268600	0	0,00%
	INOA	63653	63653	0	0,00%
9	AD ROMA SpA	0,65144965			
	DONOL	148178	88676,9634	-59501,0366	-40,16%
	DOL	132666	63430,7874	-69235,2126	-52,19%
	E	1887	962,839106	-924,160894	-48,98%
	AF	2034518	1325386,03	-709131,969	-34,86%
	WLUss	32213038	32213038	0	0,00%
	ATMs	353900	392972,229	39072,2287	11,04%
	INOA	188044	188044	0	0,00%

10	BRUSSELS AIC	0,97714023			
	DONOL	80794	41197,3116	-39596,6884	-49,01%
	DOL	42748	29800,0203	-12947,9797	-30,29%
	E	590	391,465676	-198,534324	-33,65%
	AF	836148	817033,85	-19114,1496	-2,29%
	WLUs	20970237	20970237	0	0,00%
	ATMs	252069	255311,443	3242,44336	1,29%
	INOA	106100	106100	0	0,00%
11	COPENH. AIRPORTS A/S	1			
	DONOL	40407	40407	0	0,00%
	DOL	29329	29329	0	0,00%
	E	367	367	0	0,00%
	AF	862474	862474	0	0,00%
	WLUs	22391075	22391075	0	0,00%
	ATMs	272500	272500	0	0,00%
	INOA	109754	109754	0	0,00%
12	OSLO F A/S	1			
	DONOL	48108	48108	0	0,00%
	DOL	28371	28371	0	0,00%
	E	444	444	0	0,00%
	AF	1030541	1030541	0	0,00%
	WLUs	15534160	15534160	0	0,00%
	ATMs	186800	186800	0	0,00%
	INOA	132325	132325	0	0,00%
13	CZECH A A	0,58542453			
	DONOL	34361	18795,5749	-15565,4251	-45,30%
	DOL	23083	13513,3543	-9569,64569	-41,46%
	E	1311	205,032047	-1105,96795	-84,36%
	AF	837964	490564,677	-347399,323	-41,46%
	WLUs	10165263	11155577,6	990314,644	9,74%
	ATMs	144962	144962	0	0,00%
	INOA	47699	47699	0	0,00%
14	BAA STANSTED	0,76098457			
	DONOL	65135	49566,73	-15568,27	-23,90%
	DOL	48830	32355,5617	-16474,4383	-33,74%
	E	878	443,822105	-434,177895	-49,45%
	AF	1583248	1204827,3	-378420,7	-23,90%
	WLUs	23179610	23179610	0	0,00%
	ATMs	177400	260295,11	82895,11	46,73%
	INOA	139977	139977	0	0,00%
15	MANCHESTER AG Plc.	0,90038907			
	DONOL	135971	105178,157	-30792,8429	-22,65%
	DOL	81278	73181,8229	-8096,17713	-9,96%
	E	1569	1195,89357	-373,106428	-23,78%
	AF	1538831	1385546,61	-153284,386	-9,96%
	WLUs	29653000	29653000	0	0,00%
	ATMs	261700	361701,821	100001,821	38,21%
	INOA	206025	206025	0	0,00%
16	F MUNCHEN GmbH	1			
	DONOL	265321	265321	0	0,00%
	DOL	186115	186115	0	0,00%
	E	3499	3499	0	0,00%
	AF	1737426	1737426	0	0,00%
	WLUs	29912785	29912785	0	0,00%
	ATMs	370534	370534	0	0,00%
	INOA	355200	355200	0	0,00%
17	UNIQUE ZURICH A	0,80156705			
	DONOL	79048	63362,2722	-15685,7278	-19,84%
	DOL	64982	41287,5152	-23694,4848	-36,46%
	E	887	632,64746	-254,35254	-28,68%
	AF	1454627	1165981,07	-288645,925	-19,84%
	WLUs	20882296	22012890,7	1130594,69	5,41%
	ATMs	266700	266700	0	0,00%
	INOA	155625	155625	0	0,00%
18	ATHENS IA	0,49672933			
	DONOL	75985	22782,9598	-53202,0402	-70,02%
	DOL	32863	16324,0159	-16538,9841	-50,33%
	E	663	323,511301	-339,488699	-51,20%
	AF	1957811	972502,141	-985308,859	-50,33%
	WLUs	14755252	16935534,6	2180282,64	14,78%
	ATMs	191000	191000	0	0,00%
	INOA	67740	67740	0	0,00%

Model Name = CCR(CCR-I)
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Rank	DMU	Score	Rank	Reference set (lambda)	Score
1	F MÜNCHEN GmbH	1	1	HKIA	1
1	HKIA	1	1	NARITAA A	1
1	NARITAA A	1	1	WACLtd P.	1
1	WACLtd PERTH	1	1	ADMTL	1
1	ADMTL	1	1	NARITAA A	0,1357
1	OSLO F A/S	1	16	ADMTL	1,0618
1	COPENH. AIRPORTS A/S	1	13	INDIANAP. A A	0,0287
1	INDIANAPOLIS A A	1	1	INDIANAP. A A	1
1	MWAA NATIONAL	1	1	MWAA N.	1
10	BRUSSELS AIC	0,9771	15	CPH	1,2456
11	MANCHESTERAG Plc.	0,9004	10	CPH	0,9153
12	UNIQUE ZURICH A	0,8016	10	CPH	1
13	OTTAWA IA	0,7817	1	OSLO F A/S	1
14	BAA STANSTED	0,7610	17	ADMTL	0,1083
15	AD ROMA SpA	0,6514	14	NARITAA A	0,0437
16	GTAA	0,5854	11	CPH	0,8468
17	CZECH A A	0,5854	1	F MÜN. GmbH	1
18	ATHENSIA	0,4967	18	NARITAA A	0,0366
1	DMU	Score	Rank	Reference set (lambda)	Score
1	HKIA	1	1	HKIA	1
2	NARITAA A	1	1	NARITAA A	1
3	WACLtd PERTH	1	1	WACLtd P.	1
4	ADMTL	1	1	ADMTL	1
5	GTAA	0,5854	16	NARITAA A	0,1357
6	OTTAWA IA	0,7817	13	ADMTL	0,2700
7	INDIANAPOLIS A A	1	1	INDIANAP. A A	1
8	MWAA NATIONAL	1	1	MWAA N.	1
9	AD ROMA SpA	0,6514	15	CPH	1,2456
10	BRUSSELS AIC	0,9771	10	CPH	0,9153
11	COPENH. AIRPORTS A/S	1	1	CPH	1
12	OSLO F A/S	1	1	OSLO F A/S	1
13	CZECH A A	0,5854	17	ADMTL	0,1083
14	BAA STANSTED	0,7610	14	NARITAA A	0,0437
15	MANCHESTERAG Plc.	0,9004	11	CPH	0,8468
16	F MÜNCHEN GmbH	1	1	F MÜN. GmbH	1
17	UNIQUE ZURICH A	0,8016	12	CPH	0,4534
18	ATHENSIA	0,4967	18	NARITAA A	0,0366
				INDIANAP. A A	0,4471
				INDIANAP. A A	0,0287
				INDIANAP. A A	0,1626
				CPH	0,6686
				OSLO F A/S	0,3744
				OSLO F A/S	0,2663
				F MÜN. GmbH	0,2192
				OSLO F A/S	0,6708
				INDIANAP. A A	0,5725
				CPH	0,0481
				CPH	0,2293

Workbook Name = K:\AEROPORTS 2004 INOC\AEROPORTS 2004.PAS 3 MODEL TRES ETAPES.FULLA.
 Data File = K:\AEROPORTS 2004 INOC\AEROPORTS 2004.PAS 3 MODEL TRES ETAPES.xlsHoja2
 DEA model = CCR(CCR-I)
 Problem = Indústries Aeroportuàries 2004

No. of DMUs = 18	Frequency in Reference Set
No. of Input items = 4	Reference Frequency to other DMUs
Input(1) = DONOL	HKIA 0
Input(2) = DOL	NARITA A A 3
Input(3) = E	WACLtd PERTH 0
Input(4) = AF	ADMTL 3
No. of Output items = 3	INDIANAPOLIS A 4
Output(1) = WLUs	MWAA NATION/ 0
Output(2) = ATMs	COPENH. AIRPORT 7
Output(3) = INOA	OSLO F A/S 3
	F MÜNCHEN Gml 4

Returns to Scale = Constant ($0 \leq \text{Sum of Lambda} < \text{Infinity}$)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
Max	265321	186115	3499	5545829	55046760	370534	390215
Min	16974	6463	121	225905	3609885	53000	12565
Average	84778,2222	49784,1667	872,166667	1628848,39	23102639,2	225753,111	133655,722
SD	69042,4864	44051,4403	790,007683	1279131,5	13558671,3	86528,7615	100421,05

Correlation

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
DONOL	1	0,84299794	0,80534539	0,49880095	0,49812993	0,75316128	0,68559346
DOL	0,84299794	1	0,93930609	0,2545721	0,39617659	0,72626784	0,71318542
E	0,80534539	0,93930609	1	0,19820406	0,30898527	0,59784683	0,65454918
AF	0,49880095	0,2545721	0,19820406	1	0,86944553	0,25326311	0,71795171
WLUs	0,49812993	0,39617659	0,30898527	0,86944553	1	0,35284846	0,77783388
ATMs	0,75316128	0,72626784	0,59784683	0,25326311	0,35284846	1	0,45499209
INOA	0,68559346	0,71318542	0,65454918	0,71795171	0,77783388	0,45499209	1

DMUs with inappropriate Data with respect to the chosen Model

No. of DMUs	18	No. of DMUs in Data =	18
Average	0,86337873	No. of DMUs with inappropriate Data =	0
SD	0,17274452	No. of evaluated DMUs =	18
Maximum	1	Average of scores =	0,86337873
Minimum	0,49672933	No. of efficient DMUs =	9
		No. of inefficient DMUs =	9
		No. of over iteration DMUs =	0

TAULA 4.1.16.- Categorització i conjunt de referències de les Indústries per l'any 2001.

IDÚSTRIA AEROPÒRTUAR	Category	Score	Reference set
AUCKLAND IALtd	1	1	AUCKLAND IALtd
ASUR	1	1	ASUR
BAA STANSTED	1	0,687	AUCKLAND IALtd
UNIQUE ZURICH A	1	0,974	AUCKLAND IALtd
APACLtd. MELB.	2	1	APACLtd. MELB.
BRISBANE ACLtd	2	1	BRISBANE ACLtd
WACLtd PERTH	2	0,873	APACLtd. MELB.
SYDNEY ACLtd.	2	0,903	APACLtd. MELB.
AD ROMA SpA	2	0,541	APACLtd. MELB.
SAGA TORINO SpA	2	1	SAGA TORINO SpA
AD FIRENZE SpA	2	1	AD FIRENZE SpA
BRUSSELS AIC	2	0,995	APACLtd. MELB.
COPENH. AIRPORTS A/S	2	0,958	APACLtd. MELB.
F HAMBURG GmbH	2	1	F HAMBURG GmbH
ATHENS IA	2	0,356	APACLtd. MELB.
HKIA	3	0,623	APACLtd. MELB.
NARITA A A	3	0,914	BRISBANE ACLtd
ADMTL	3	0,870	OTTAWA IA
CALGARY A A	3	1	CALGARY A A
GTA A	3	0,559	APACLtd. MELB.
OTTAWA IA	3	1	OTTAWA IA
YVR AS	3	1	YVR AS
INDIANAPOLIS A A	3	1	INDIANAPOLIS A A
MWAA NATIONAL	3	0,671	YVR AS
MWAA DUILLES	3	0,631	YVR AS
DUBLIN A A Pic.	3	1	DUBLIN A A Pic.
OSLO F A/S	3	0,613	APACLtd. MELB.
CZECH A A	3	0,395	YVR AS
MANCHESTER AG Pic.	3	0,424	YVR AS
F MÜNCHEN GmbH	3	0,402	YVR AS
AI GENÈVE	3	1	AI GENÈVE
F WIEN AG	3	1	F WIEN AG

Workbook Name = E:\CAT_PA.2001.xls, Full 1.xls
 Data File = E:\CAT_PA.2001.xlsFull1
 DEA model = DEA-Solver Pro4.1/ Categorical Variable(CAT-1-C)
 Problem = Indústries Aeroportuàries 2001

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	756884	184488	4472	6637260	53548760	406300	338937
Min	7473	4466	112	24059	1535929	31000	4253
Average	88335.31	49066.06	846.125	1263028	17572447	2066893.8	95191.13
SD	135395	49057.65	876.1029	1385884	11088630	94351.64	77572.85

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0.428942	0.35747	0.807865	0.625617	0.103891	0.816011
DOL	0.428942	1	0.808814	0.294996	0.399587	0.394039	0.648006
E	0.35747	0.808814	1	0.257127	0.332714	0.377063	0.531801
AF	0.807865	0.284996	0.257127	1	0.859137	0.158562	0.751655
WLUs	0.625617	0.399587	0.332714	0.859137	1	0.526219	0.795369
ATM	0.103891	0.394039	0.377063	0.158562	0.526219	1	0.363553
INOA	0.816011	0.648006	0.531801	0.751655	0.795369	0.363553	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,824719
 No. of efficient DMUs = 14
 No. of inefficient DMUs = 18
 No. of over iteration DMUs = 0

[CAT-1-C] LP started at 11-30-2005 11:51:06 and completed at 11-30-2005 11:51:06
 Elapsed time = 1 seconds
 Total number of simplex iterations = 256

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
No. of DMUs	None
Average	0,824718719
SD	0,222085495
Maximum	1
Minimum	0,355811404

Frequency in Reference Set

Reference	Frequency to other DMUs
APACLd.MELB.	9
AUCKLAND IALtd	6
BRISBANE ACLtd	6
CALGARY A.A	0
OTTAWA IA	1
YVR AS	8
ASUR	1
INDIANAPOLIS A.A	4
SAGA TORINO SpA	1
AD FIRENZE SpA	0
DUBLIN A.A Plc.	0
F HAMBURG GmbH	3
AI GENEVE	2
F WIEN AG	2

Statistics by Category

Category	1
No. of DMUs	4
Average	0,915097329
SD	0,132232195
Maximum	1
Minimum	0,686828764
Category	2
No. of DMUs	11
Average	0,875211106
SD	0,209163328
Maximum	1
Minimum	0,355811404
Category	3
No. of DMUs	17
Average	0,770781618
SD	0,232209458
Maximum	1
Minimum	0,395449814

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT_PA.2002.xls.. Full 2.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)	BRISBANE ACLtd	1,38		
1	HKIA	0,61	26	3	APACLtd. MELB.	2,02			
2	NARITA A A	1,00	1	3	NARITA A A	1,00			
3	APACLtd. MELB.	1,00	1	2	APACLtd. MELB.	1,00			
4	AUCKLAND IALtd	1,00	1	1	AUCKLAND IALtd	1,00			
5	BRISBANE ACLtd	1,00	1	2	BRISBANE ACLtd	1,00			
6	WACLtd PERTH	0,84	23	2	APACLtd. MELB.	0,39	SAGA TORINO SpA	0,02	
7	SYDNEY ACLtd.	0,96	17	2	APACLtd. MELB.	2,01			
8	ADMTL	0,97	16	3	YVRAS	0,68	SAGA TORINO SpA	0,39	
9	CALGARY A A	1,00	1	3	CALGARY A A	1,00			
10	IGTAA	0,45	30	3	APACLtd. MELB.	0,37	BRISBANE ACLtd	0,42	YVRAS
11	OTTAWA IA	0,55	27	3	BRISBANE ACLtd	0,06	CALGARY A A	0,43	ASUR
12	YVRAS	1,00	1	3	YVRAS	1,00			
13	ASUR	1,00	1	1	ASUR	1,00			
14	INDIANAPOLIS A A	1,00	1	3	INDIANAPOLIS A A	1,00			
15	MWAA NATIONAL	0,87	21	3	BRISBANE ACLtd	0,39	YVRAS	0,53	
16	MWAA DULLES	0,94	18	3	BRISBANE ACLtd	1,09	YVRAS	0,70	
17	AD ROMA SpA	0,64	25	2	APACLtd. MELB.	1,47	SAGA TORINO SpA	1,49	F HAMBURG GmbH
18	SAGA TORINO SpA	1,00	1	2	SAGA TORINO SpA	1,00			
19	AD FIRENZE SpA	1,00	1	2	AD FIRENZE SpA	1,00			
20	DUBLIN A A Pic.	1,00	1	3	DUBLIN A A Pic.	1,00			
21	BRUSSELS AIC	0,89	20	2	APACLtd. MELB.	1,05	SAGA TORINO SpA	0,22	AD FIRENZE SpA
22	COPENH. AIRPORTS A/S	0,97	15	2	APACLtd. MELB.	0,35	AUCKLAND IALtd	0,91	F HAMBURG GmbH
23	OSLO F A/S	0,70	24	3	APACLtd. MELB.	0,31	AUCKLAND IALtd	0,23	YVRAS
24	CZECH A A	0,45	29	3	APACLtd. MELB.	0,15	AUCKLAND IALtd	0,06	YVRAS
25	BAA STANSTED	0,85	22	1	AUCKLAND IALtd	2,10			
26	MANCHESTER AG Plc.	0,54	28	3	YVRAS	1,41	DUBLIN A A Pic.	0,25	
27	F MUNCHEN GmbH	0,43	31	3	YVRAS	1,26	AI GENEVE	1,04	F WIEN AG
28	F HAMBURG GmbH	1,00	1	2	F HAMBURG GmbH	1,00			
29	AI GENEVE	1,00	1	3	AI GENEVE	1,00			
30	UNIQUE ZURICH A	0,90	19	1	AUCKLAND IALtd	2,60			
31	F WIEN AG	1,00	1	3	F WIEN AG	1,00			
32	ATHENS IA	0,41	32	2	APACLtd. MELB.	0,33	AUCKLAND IALtd	0,62	ASUR

Workbook Name = E:\CAT_PA_2002.xls, Full 2.xls
 Data File = E:\CAT_PA_2002.xls\Full1
 DEA model = DEA-Solver Pro4.1\ Categorical Variable(CAT-I-C)
 Problem = Industries Aeroportuàries 2002

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLU's
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU's	ATM	INOA
Max	810855	193712	4568	6821590	58927840	383200	376425
Min	7814	5126	118	22963	1390494	26900	4112
Average	91626,69	50430,78	851,4375	1330644	17610032	197562,5	97710
SD	144195,2	47899,59	901,6385	1390138	12015868	85936,27	79271,48

Correlation

	DONOL	DOL	E	AF	WLU's	ATM	INOA
DONOL	1	0,439287	0,346848	0,827585	0,670728	0,204114	0,846082
DOL	0,439287	1	0,847325	0,298279	0,414891	0,504805	0,654132
E	0,346848	0,847325	1	0,252626	0,331152	0,452253	0,50093
AF	0,827585	0,298279	0,252626	1	0,903385	0,293735	0,786188
WLU's	0,670728	0,414891	0,331152	0,903385	1	0,494467	0,818163
ATM	0,204114	0,504805	0,452253	0,293735	0,494467	1	0,404449
INOA	0,846082	0,654132	0,50093	0,786188	0,818163	0,404449	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,843048
 No. of efficient DMUs = 14
 No. of inefficient DMUs = 18
 No. of over iteration DMUs = 0

[CAT-I-C]LP started at 11:30:2005 13:00:25 and completed at 11:30:2005 13:00:26
 Elapsed time = 0 seconds
 Total number of simplex iterations = 265

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None
No. of DMUs	32
Average	0,843048245
SD	0,206987582
Maximum	1
Minimum	0,406173513

Frequency in Reference Set

Reference	Frequency to other DMUs
NARITA A A	0
APACld. MELB.	10
AUCKLAND IALtd	6
BRISBANE ACldt	5
CALGARY A A	2
YVR AS	8
ASUR	2
INDIANAPOLIS A A	0
SAGA TORINO Spa	4
AD FIRENZE Spa	1
DUBLIN A Pic.	1
F HAMBURG GmbH	3
AT GENEVE	1
F WIEN AG	2

Statistics by Category

Category	No. of DMUs	Average	SD	Maximum	Minimum
1	4	0,938508814	0,064290255	1	0,850481955
2	11	0,882234471	0,184366515	1	0,406173513
3	17	0,795231142	0,228596394	1	0,427392291

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT_PA.2003.xls.Full 1.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)						
1	HKIA	0.53	29	3	APAC Ltd. MELB.	2.64					
2	NARITA A A	0.92	17	3	APAC Ltd. MELB.	4.67					
3	APAC Ltd. MELB.	1.00	1	2	APAC Ltd. MELB.	1.00					
4	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00					
5	BRISBANE AC Ltd	1.00	1	2	BRISBANE AC Ltd	1.00					
6	WACLtd PERTH	0.81	21	2	APAC Ltd. MELB.	0.38	F HAMBURG GmbH	0.01			
7	SYDNEY AC Ltd.	0.90	18	2	APAC Ltd. MELB.	2.01					
8	ADMTL	0.78	22	3	YVR AS	0.77	AD FIRENZE SpA	0.24			
9	CALGARY A A	1.00	1	3	CALGARY A A	1.00					
10	GTA A	0.41	31	3	APAC Ltd. MELB.	0.52	BRISBANE AC Ltd	0.41	CALGARY A A	0.86	YVR AS
11	OTTAWA IA	0.67	24	3	CALGARY A A	0.11	YVR AS	0.17	ASUR	0.03	
12	YVR AS	1.00	1	3	YVR AS	1.00					
13	ASUR	1.00	1	1	ASUR	1.00					
14	INDIANAPOLIS A A	1.00	1	3	INDIANAPOLIS A A	1.00					
15	MWAA NATIONAL	0.95	16	3	BRISBANE AC Ltd	0.46	YVR AS	0.65			
16	MWAA DULLES	0.82	20	3	BRISBANE AC Ltd	1.03	YVR AS	0.67			
17	AD ROMA SpA	0.58	26	2	APAC Ltd. MELB.	1.34	F HAMBURG GmbH	0.95			
18	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00					
19	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00					
20	DUBLIN A Plc.	1.00	1	3	DUBLIN A Plc.	1.00					
21	BRUSSELS AIC	0.85	19	2	APAC Ltd. MELB.	0.97	SAGA TORINO SpA	0.16	AD FIRENZE SpA	2.94	F HAMBURG GmbH
22	COPENH. AIRPORTS A/S	0.65	25	2	APAC Ltd. MELB.	0.95	AUCKLAND IALtd	0.72	F HAMBURG GmbH	0.03	
23	OSLO F A/S	0.78	23	3	APAC Ltd. MELB.	0.58	YVR AS	0.83	F HAMBURG GmbH	0.08	
24	CZECH A A	0.54	28	3	APAC Ltd. MELB.	0.31	AUCKLAND IALtd	0.05	YVR AS	0.25	
25	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00					
26	MANCHESTER AG Plc.	0.52	30	3	YVR AS	1.39	DUBLIN A A Plc.	0.22	AI GENEVE	0.00	
27	F MUNCHEN GmbH	0.55	27	3	YVR AS	1.54	DUBLIN A A Plc.	0.18	AI GENEVE	1.38	
28	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00					
29	AI GENEVE	1.00	1	3	AI GENEVE	1.00					
30	UNIQUE ZURICH A	1.00	1	1	UNIQUE ZURICH A	1.00					
31	F WIEN AG	1.00	1	3	F WIEN AG	1.00					
32	ATHENS IA	0.41	32	2	APAC Ltd. MELB.	0.52	AUCKLAND IALtd	0.46	ASUR	0.09	

Workbook Name = E:\CAT.PA.2003.xls:Full 1.xls
 Data File = E:\CAT.PA.2003.xls:Full1
 DEA model = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Problem = Industries Aeroportuàries 2003

No. of DMUs = 32
 No. of input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data		DOL	E	AF	WLUs	ATM	INOA
Max	DONOL	775.859,0	220.551,0	4.891,0	6.961.160,0	53.780.800,0	371.514,0
Min		7.787,0	5.763,0	117,0	23.338,0	1.394.199,0	4.981,0
Average		95.886,0	52.625,7	885,1	1.453.755,6	17.928.507,1	102.344,2
SD		142.328,3	51.497,4	957,6	1.477.005,2	11.335.930,9	83.635,2

Correlation	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0,479871	0,421997	0,77578147	0,691338582	0,29683374	0,845696147
DOL	0,479871064	1	0,835771	0,25524199	0,413214006	0,54790059	0,714186656
E	0,42199691	0,835771	1	0,23988715	0,363278835	0,50852306	0,621382888
AF	0,775781471	0,255242	0,239887	1	0,902416419	0,36710028	0,737856669
WLUs	0,691338582	0,413214	0,363279	0,90241642	1	0,53536002	0,812408472
ATM	0,296833745	0,547901	0,508523	0,36710028	0,535360017	1	0,491221748
INOA	0,845696147	0,714187	0,621383	0,73785667	0,812408472	0,49122175	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,83296754
 No. of efficient DMUs = 15
 No. of inefficient DMUs = 17
 No. of over iteration DMUs = 0

[CAT-I-C]LP started at 11-30-2005 13:30:43 and completed at 11-30-2005 13:30:43
 Elapsed time = 0 seconds
 Total number of simplex iterations = 274

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None
No. of DMUs	32
Average	0,832967544
SD	0,200860748
Maximum	1
Minimum	0,406261095

Frequency in Reference Set

Reference	Frequency to other DMUs
APACLD.MELB.	11
AUCKLAND IALtd	3
BRISBANE ACLtd	3
CALGARY A A	2
YVR.AS	9
ASUR	2
INDIANAPOLIS A A	0
SAGA TORINO Spa	1
AD FIRENZE Spa	2
DUBLIN A A Plc.	2
BAA STANSTED	0
F HAMBURG GmbH	5
AIGENÈVE	2
UNIQUE ZURICH A	0
F WIEN AG	0

Statistics by Category

Category	1
No. of DMUs	4
Average	1
SD	0
Maximum	1
Minimum	1
Category	2
No. of DMUs	11
Average	0,836275777
SD	0,196599962
Maximum	1
Minimum	0,406261095
Category	3
No. of DMUs	17
Average	0,791525168
SD	0,207119137
Maximum	1
Minimum	0,406840611

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT.PA.2004.xls.xls.Fulla 1.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)	Score	Rank	Category	Reference set (lambda)	Score	Rank	Category	Reference set (lambda)	Score	Rank	Category	Reference set (lambda)	Score	Rank	Category	Reference set (lambda)	
1	HKIA	0.53	29	3	APACLItd.MELB.	2.43	29	3	APACLItd.MELB.	0.96	29	3	APACLItd.MELB.	0.96	29	3	APACLItd.MELB.	0.96	29	3	APACLItd.MELB.	0.96
2	NARITA A	0.83	22	3	APACLItd.MELB.	2.46	22	3	APACLItd.MELB.	0.96	22	3	APACLItd.MELB.	0.96	22	3	APACLItd.MELB.	0.96	22	3	APACLItd.MELB.	0.96
3	APACLItd.MELB.	1.00	1	2	APACLItd.MELB.	1.00	1	2	APACLItd.MELB.	1.00	1	2	APACLItd.MELB.	1.00	1	2	APACLItd.MELB.	1.00	1	2	APACLItd.MELB.	1.00
4	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00	1	1	AUCKLAND IALtd	1.00
5	BRISBANE ACItd	1.00	1	1	BRISBANE ACItd	1.00	1	1	BRISBANE ACItd	1.00	1	1	BRISBANE ACItd	1.00	1	1	BRISBANE ACItd	1.00	1	1	BRISBANE ACItd	1.00
6	WACLtd.PERTH	0.62	27	2	APACLItd.MELB.	0.38	27	2	APACLItd.MELB.	0.00	27	2	SAGA TORINO SpA	0.00	27	2	APACLItd.MELB.	0.38	27	2	APACLItd.MELB.	0.38
7	SYDNEY ACItd.	1.00	1	2	SYDNEY ACItd.	1.00	1	2	SYDNEY ACItd.	1.00	1	2	SYDNEY ACItd.	1.00	1	2	SYDNEY ACItd.	1.00	1	2	SYDNEY ACItd.	1.00
8	ADMTL	0.78	23	3	AUCKLAND IALtd	0.14	23	3	AUCKLAND IALtd	0.79	23	3	YVR AS	0.79	23	3	AUCKLAND IALtd	0.14	23	3	AUCKLAND IALtd	0.79
9	CALGARY A A	1.00	1	3	CALGARY A A	1.00	1	3	CALGARY A A	1.00	1	3	CALGARY A A	1.00	1	3	CALGARY A A	1.00	1	3	CALGARY A A	1.00
10	GTA A	0.39	32	3	APACLItd.MELB.	0.55	32	3	APACLItd.MELB.	0.44	32	3	BRISBANE ACItd	0.44	32	3	APACLItd.MELB.	0.55	32	3	APACLItd.MELB.	0.55
11	OTTAWA IA	0.71	26	3	YVR AS	0.22	26	3	YVR AS	0.04	26	3	ASUR	0.04	26	3	YVR AS	0.22	26	3	YVR AS	0.22
12	YVR AS	1.00	1	3	YVR AS	1.00	1	3	YVR AS	1.00	1	3	YVR AS	1.00	1	3	YVR AS	1.00	1	3	YVR AS	1.00
13	ASUR	1.00	1	1	ASUR	1.00	1	1	ASUR	1.00	1	1	ASUR	1.00	1	1	ASUR	1.00	1	1	ASUR	1.00
14	INDIANAPOLIS A A	0.89	20	3	AUCKLAND IALtd	0.92	20	3	AUCKLAND IALtd	0.29	20	3	BRISBANE ACItd	0.29	20	3	ASUR	0.92	20	3	ASUR	0.92
15	MWAA NATIONAL	0.93	18	3	AUCKLAND IALtd	0.05	18	3	AUCKLAND IALtd	0.02	18	3	BRISBANE ACItd	0.02	18	3	YVR AS	0.05	18	3	YVR AS	0.05
16	MWAA DULLES	1.00	1	3	MWAA DULLES	1.00	1	3	MWAA DULLES	1.00	1	3	MWAA DULLES	1.00	1	3	MWAA DULLES	1.00	1	3	MWAA DULLES	1.00
17	AD ROMA SpA	0.76	24	1	BRUSSELS AIC	0.43	24	1	BRUSSELS AIC	0.69	24	1	COPENH. AIRPORTS A/S	0.69	24	1	BAA STANSTED	0.43	24	1	BAA STANSTED	0.43
18	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00	1	2	SAGA TORINO SpA	1.00
19	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00	1	2	AD FIRENZE SpA	1.00
20	DUBLIN A P.Ic.	1.00	1	3	DUBLIN A P.Ic.	1.00	1	3	DUBLIN A P.Ic.	1.00	1	3	DUBLIN A P.Ic.	1.00	1	3	DUBLIN A P.Ic.	1.00	1	3	DUBLIN A P.Ic.	1.00
21	BRUSSELS AIC	1.00	1	1	BRUSSELS AIC	1.00	1	1	BRUSSELS AIC	1.00	1	1	BRUSSELS AIC	1.00	1	1	BRUSSELS AIC	1.00	1	1	BRUSSELS AIC	1.00
22	COPENH. AIRPORTS A/S	1.00	1	1	COPENH. AIRPORTS A/S	1.00	1	1	COPENH. AIRPORTS A/S	1.00	1	1	COPENH. AIRPORTS A/S	1.00	1	1	COPENH. AIRPORTS A/S	1.00	1	1	COPENH. AIRPORTS A/S	1.00
23	OSLO F A/S	0.88	21	3	APACLItd.MELB.	1.13	21	3	APACLItd.MELB.	0.10	21	3	DUBLIN A P.Ic.	0.10	21	3	DUBLIN A P.Ic.	1.13	21	3	DUBLIN A P.Ic.	1.13
24	CZECH A A	0.44	30	3	APACLItd.MELB.	0.13	30	3	APACLItd.MELB.	0.19	30	3	YVR AS	0.19	30	3	YVR AS	0.13	30	3	YVR AS	0.13
25	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00	1	1	BAA STANSTED	1.00
26	MANCHESTER AG P.Ic.	0.62	28	3	APACLItd.MELB.	1.20	28	3	APACLItd.MELB.	0.33	28	3	DUBLIN A P.Ic.	0.33	28	3	DUBLIN A P.Ic.	1.20	28	3	DUBLIN A P.Ic.	1.20
27	F MUNCHEN GmbH	0.72	25	3	APACLItd.MELB.	0.93	25	3	APACLItd.MELB.	0.93	25	3	DUBLIN A P.Ic.	0.93	25	3	DUBLIN A P.Ic.	0.93	25	3	DUBLIN A P.Ic.	0.93
28	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00	1	2	F HAMBURG GmbH	1.00
29	AI GENEVE	1.00	1	3	AI GENEVE	1.00	1	3	AI GENEVE	1.00	1	3	AI GENEVE	1.00	1	3	AI GENEVE	1.00	1	3	AI GENEVE	1.00
30	UNIQUE ZURICH A	0.90	19	1	BRISBANE ACItd	0.16	19	1	BRISBANE ACItd	0.26	19	1	COPENH. AIRPORTS A/S	0.26	19	1	BRUSSELS AIC	0.16	19	1	COPENH. AIRPORTS A/S	0.16
31	F WIEN AG	1.00	1	1	F WIEN AG	1.00	1	1	F WIEN AG	1.00	1	1	F WIEN AG	1.00	1	1	F WIEN AG	1.00	1	1	F WIEN AG	1.00
32	ATHENS IA	0.42	31	2	APACLItd.MELB.	0.78	31	2	APACLItd.MELB.	0.23	31	2	ASUR	0.23	31	2	F WIEN AG	0.78	31	2	F WIEN AG	0.78

Workbook Name = E:\CAT.PA.2004.xls Fulla 1.xls

Data File = E:\CAT.PA.2004.xls Full1

DEA model = DEA-Solver Pro4.1f Categorical Variable(CAT-I-C)

Problem = Indústries Aeroportuàries 2004

No. of DMUs = 32

No. of Input items = 4

Input(1) = DONOL

Input(2) = DOL

Input(3) = E

Input(4) = AF

No. of Output items = 3

Output(1) = WLU's

Output(2) = ATMs

Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU's	ATMs	INOA
Max	780588	220874	4946	6700760	55046760	469600	390215
Min	6889	6955	132	29633	1518747	24098	6081
Average	101372.8	55072.72	900.2188	1473717	19676360	213053.8	112324.1
SD	143418.8	53994.92	981.0237	1462241	12131544	96280.79	92544.15

Correlation

	DONOL	DOL	E	AF	WLU's	ATMs	INOA
DONOL	1	0.507616	0.428654	0.762856	0.715096	0.275674	0.840773
DOL	0.507616	1	0.803083	0.24818	0.431173	0.51917	0.769074
E	0.428654	0.803083	1	0.221643	0.371923	0.476817	0.688461
AF	0.762856	0.24818	0.221643	1	0.911443	0.340595	0.674337
WLU's	0.715096	0.431173	0.371923	0.911443	1	0.49592	0.779731
ATMs	0.275674	0.51917	0.476817	0.340595	0.49592	1	0.481896
INOA	0.840773	0.769074	0.688461	0.674337	0.779731	0.481896	1

No. of DMUs in Data = 32

No. of DMUs with inappropriate Data = 0

No. of evaluated DMUs = 32

Average of scores = 0,856886

No. of efficient DMUs = 17

No. of inefficient DMUs = 15

No. of over iteration DMUs = 0

[CAT-I-C] LP started at 11-30-2005 13:58:15 and completed at 11-30-2005 13:58:16

Elapsed time = 0 seconds

Total number of simplex iterations = 280

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU	Model
	None	
No. of DMUs		32
Average	0,856886062	
SD	0,194264134	
Maximum		1
Minimum	0,393191543	

Frequency in Reference Set

Reference	Frequency to other DMUs
APAC Ltd. MELB.	9
AUCKLAND Intl	4
BRISBANE AC Ltd	4
SYDNEY AC Ltd.	1
CALGARY A.A.	1
YVR AS	5
ASUR	3
MWAA DULLES	1
SAGA TORINO SpA	1
AD FIRENZE SpA	0
DUBLIN A.Pic.	3
BRUSSELS AIC	2
COPENH. AIRPORTS A/S	2
BAA STANSTED	2
F HAMBURG GmbH	0
AI GENEVE	0
F WIEN AG	3

Statistics by Category

Category	1
No. of DMUs	9
Average	0,961540193
SD	0,079068242
Maximum	1
Minimum	0,757438374
Category	2
No. of DMUs	7
Average	0,863673543
SD	0,221932338
Maximum	1
Minimum	0,424009195
Category	3
No. of DMUs	16
Average	0,79504859
SD	0,201017302
Maximum	1
Minimum	0,393191543

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT.PR.2001.xls.Full 1.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)					
1	HKIA	0.62	25	2	APACLtd. MELB.	1.52	BRISBANE ACLtd	2.00	F WIEN AG	0.02
2	NARITA A A	0.92	14	1	APACLtd. MELB.	0.34	BRISBANE ACLtd	6.06		
3	APACLtd. MELB.	1.00	1	1	APACLtd. MELB.	1.00				
4	AUCKLAND IALtd	1.00	1	2	AUCKLAND IALtd	1.00				
5	BRISBANE ACLtd	1.00	1	1	BRISBANE ACLtd	1.00				
6	WACLtd PERTH	0.82	19	1	APACLtd. MELB.	0.11	BRISBANE ACLtd	0.04	INDIANAPOLIS A A	0.21
7	SYDNEY ACLtd.	0.90	16	1	APACLtd. MELB.	2.03	BRISBANE ACLtd	0.05		
8	ADMTL	0.97	13	1	CALGARY A A	0.98	OTTAWA IA	0.81	AI GENEVE	0.23
9	CALGARY A A	1.00	1	1	CALGARY A A	1.00				
10	GTA A	0.61	26	1	APACLtd. MELB.	0.95	BRISBANE ACLtd	0.17	CALGARY A A	1.44
11	OTTAWA IA	1.00	1	1	OTTAWA IA	1.00				
12	YVR AS	1.00	1	3	YVR AS	1.00				
13	ASUR	0.92	15	1	BRISBANE ACLtd	0.62	CALGARY A A	0.62		
14	INDIANAPOLIS A A	1.00	1	1	INDIANAPOLIS A A	1.00				
15	MWAA NATIONAL	0.76	22	1	CALGARY A A	1.38	INDIANAPOLIS A A	0.22		
16	MWAA DULLES	0.70	24	1	CALGARY A A	1.86	INDIANAPOLIS A A	0.57		
17	AD ROMA SpA	0.45	29	1	APACLtd. MELB.	0.31	INDIANAPOLIS A A	0.67	AI GENEVE	1.46
18	SAGA TORINO SpA	1.00	1	1	SAGA TORINO SpA	1.00				
19	AD FIRENZE SpA	0.88	18	1	OTTAWA IA	0.30	SAGA TORINO SpA	0.17		
20	DUBLIN A A Plc.	1.00	1	2	DUBLIN A A Plc.	1.00				
21	BRUSSELS AIC	0.81	20	1	APACLtd. MELB.	0.61	CALGARY A A	0.85	AI GENEVE	0.68
22	COPENH AIRPORTS A/S	0.90	17	2	APACLtd. MELB.	0.24	CALGARY A A	0.62	INDIANAPOLIS A A	0.52
23	OSLO F A/S	0.80	21	1	APACLtd. MELB.	0.98	INDIANAPOLIS A A	0.16	AI GENEVE	0.40
24	CZECH A A	0.50	27	1	INDIANAPOLIS A A	0.39	AI GENEVE	0.13		
25	BAA STANSTED	0.45	30	3	YVR AS	0.68	INDIANAPOLIS A A	0.28		
26	MANCHESTER AG Plc.	0.42	31	3	YVR AS	1.38	AI GENEVE	0.32		
27	F MUNCHEN GmbH	0.47	28	1	INDIANAPOLIS A A	0.71	AI GENEVE	2.03		
28	F HAMBURG GmbH	1.00	1	1	F HAMBURG GmbH	1.00				
29	AI GENEVE	1.00	1	1	AI GENEVE	1.00				
30	UNIQUE ZURICH A	0.75	23	1	INDIANAPOLIS A A	1.07	F HAMBURG GmbH	0.02	AI GENEVE	1.05
31	F WIEN AG	1.00	1	2	F WIEN AG	1.00				
32	ATHENS IA	0.32	32	1	APACLtd. MELB.	0.04	BRISBANE ACLtd	0.54	CALGARY A A	0.24
										INDIANAPOLIS A A 0.02

Workbook Name = E:\CAT_PR_2001.xls Full 1.xls
 Data File = E:\CAT_PR_2001.xlsFull1
 DEA model = DEA-Solver Prod. 1/ Categorical Variable(CAT-I-C)
 Problem = Industries Aeroportuàries 2001

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLU S
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU S	ATM	INOA
Max	756884	184488	4472	6637260	53548760	406300	338937
Min	7473	4488	112	24059	1535929	31000	4253
Average	88335,31	49066,06	846,125	1263028	17572447	2066693,8	95191,13
SD	135395	49057,65	876,1029	1385864	11088530	94351,64	77572,85

Correlation

	DONOL	DOL	E	AF	WLU S	ATM	INOA
DONOL	1	0,428942	0,35747	0,807865	0,625617	0,103891	0,816011
DOL	0,428942	1	0,308814	0,284996	0,399587	0,394039	0,648006
E	0,35747	0,308814	1	0,257127	0,332714	0,377063	0,531801
AF	0,807865	0,284996	0,257127	1	0,859137	0,158562	0,751655
WLU S	0,625617	0,399587	0,332714	0,859137	1	0,526219	0,795369
ATM	0,103891	0,394039	0,377063	0,158562	0,526219	1	0,363553
INOA	0,816011	0,648006	0,531801	0,751655	0,795369	0,363553	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,811793
 No. of efficient DMUs = 12
 No. of inefficient DMUs = 20
 No. of over iteration DMUs = 0

[CAT-I-C] LP started at 11-30-2005 16:05:38 and completed at 11-30-2005 16:05:39
 Elapsed time = 0 seconds
 Total number of simplex iterations = 301

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None
No. of DMUs	32
Average	0,811793044
SD	0,213233728
Maximum	1
Minimum	0,319824781

Frequency in Reference Set

Reference	Frequency to other DMUs
APAC Ltd. MELB.	10
AUCKLAND IALtd	0
BRISBANE ACLtd	7
CALGARY A.A	8
OTTAWA IA	2
YVR AS	2
INDIANAPOLIS A.A	11
SAGA TORINO SpA	1
DUBLIN A.A Pic.	0
F HAMBURG GmbH	2
AI GENEVE	8
F WIEN AG	1

Statistics by Category

Category	1
No. of DMUs	24
Average	0,815663877
SD	0,203167361
Maximum	1
Minimum	0,319824781
Category	2
No. of DMUs	5
Average	0,904865815
SD	0,145737971
Maximum	1
Minimum	0,623746815
Category	3
No. of DMUs	3
Average	0,625705093
SD	0,264947944
Maximum	1
Minimum	0,423604005

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT.PR.2002.xls.Fulla 2.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)				
1	HKIA	0.61	25	2	APACLtd.MELB.	2.02	BRISBANE ACLtd	1.38	
2	NARITAA A	1.00	1	1	NARITAA A	1.00			
3	APACLtd.MELB.	1.00	1	1	APACLtd.MELB.	1.00			
4	AUCKLAND IALtd	1.00	1	2	AUCKLAND IALtd	1.00			
5	BRISBANE ACLtd	1.00	1	1	BRISBANE ACLtd	1.00			
6	WACLtdPERTH	0.83	20	1	APACLtd.MELB.	0.39	AI GENEVE	0.01	
7	SYDNEY ACLtd.	0.96	18	1	NARITAA A	0.02	APACLtd.MELB.	1.90	
8	ADMTL	1.00	1	1	ADMTL	1.00			
9	CALGARY A A	1.00	1	1	CALGARY A A	1.00			
10	GTA A	0.49	30	1	APACLtd.MELB.	0.58	BRISBANE ACLtd	0.24	CALGARY A A
11	OTTAWA IA	0.55	26	1	BRISBANE ACLtd	0.06	CALGARY A A	0.43	ASUR
12	YVR AS	1.00	1	3	YVR AS	1.00			
13	ASUR	1.00	1	1	ASUR	1.00			
14	INDIANAPOLIS A A	1.00	1	1	INDIANAPOLIS A A	1.00			
15	MWAA NATIONAL	0.99	17	1	APACLtd.MELB.	0.00	BRISBANE ACLtd	0.34	CALGARY A A
16	MWAA DULLES	1.00	1	1	MWAA DULLES	1.00			
17	AD ROMA SpA	0.52	29	1	APACLtd.MELB.	1.11	F HAMBURG GmbH	0.24	AI GENEVE
18	SAGA TORINO SpA	1.00	1	1	SAGA TORINO SpA	1.00			
19	AD FIRENZE SpA	1.00	1	1	AD FIRENZE SpA	1.00			
20	DUBLIN A A Plc.	1.00	1	2	DUBLIN A A Plc.	1.00			
21	BRUSSELS AIC	0.73	22	1	APACLtd.MELB.	0.73	CALGARY A A	0.27	AI GENEVE
22	COPENH. AIRPORTS A/S	0.96	19	2	APACLtd.MELB.	0.37	AUCKLAND IALtd	0.72	CALGARY A A
23	OSLO F A/S	0.78	21	1	APACLtd.MELB.	1.09	AI GENEVE	0.42	
24	CZECH A A	0.52	28	1	APACLtd.MELB.	0.32	CALGARY A A	0.32	AI GENEVE
25	BAA STANSTED	0.64	24	3	APACLtd.MELB.	0.65	YVR AS	0.82	
26	MANCHESTER AG Plc.	0.54	27	3	YVR AS	1.41	DUBLIN A A Plc.	0.25	
27	F MUNCHEN GmbH	0.45	31	1	APACLtd.MELB.	0.74	AI GENEVE	1.87	
28	F HAMBURG GmbH	1.00	1	1	F HAMBURG GmbH	1.00			
29	AI GENEVE	1.00	1	1	AI GENEVE	1.00			
30	UNIQUE ZURICH A	0.70	23	1	APACLtd.MELB.	1.31	F HAMBURG GmbH	0.58	AI GENEVE
31	F WIEN AG	1.00	1	2	F WIEN AG	1.00			
32	ATHENS IA	0.31	32	1	APACLtd.MELB.	0.38	CALGARY A A	0.74	AI GENEVE

Workbook Name = E:\CAT.PR.2002.xls.Fulla 2.xls
 Data File = E:\CAT.PR.2002.xls.Full1
 DEA model = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Problem = Industries Aeroportuàries 2002

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	810855	193712	4568	6821590	58927840	383200	375425
Min	7814	5128	118	22963	1390494	26900	4112
Average	91626.69	50430.78	851.4375	1330644	17610032	197562.5	97710
SD	144195.2	47899.59	901.6385	1390138	12015868	85936.27	79271.48

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0.439287	0.346848	0.827585	0.670728	0.204114	0.846082
DOL	0.439287	1	0.847325	0.298279	0.414891	0.504805	0.654132
E	0.346848	0.847325	1	0.252825	0.331152	0.452253	0.50093
AF	0.827585	0.298279	0.252825	1	0.903386	0.293735	0.786188
WLUs	0.670728	0.414891	0.331152	0.903385	1	0.494467	0.818163
ATM	0.204114	0.504805	0.452253	0.293735	0.494467	1	0.404449
INOA	0.846082	0.654132	0.50093	0.786188	0.818163	0.404449	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,830455
 No. of efficient DMUs = 16
 No. of inefficient DMUs = 16
 No. of over iteration DMUs = 0

[CAT-I-C] LP started at 11-30-2005 17:38:56 and completed at 11-30-2005 17:38:56
 Elapsed time = 1 seconds
 Total number of simplex iterations = 305

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	Norite
No. of DMUs	32
Average	0,830454714
SD	0,217815034
Maximum	1
Minimum	0,313394736

Frequency in Reference Set

Reference	Frequency to other DMUs
NARITA A A	1
APACLID MELB	14
AUCKLAND IALID	1
BRISBANE ACLID	4
ADMTL	0
CALGARY A A	7
YVR AS	2
ASUR	1
INDIANAPOLIS A A	0
MWAA DULLES	0
SAGA TORINO SpA	0
AD FIRENZE SpA	0
DUBLIN A A Plc.	1
F HAMBURG GmbH	3
AI GENÈVE	8
F WIEN AG	0

Statistics by Category

Category	1
No. of DMUs	24
Average	0,826107788
SD	0,225340502
Maximum	1
Minimum	0,313394736
Category	2
No. of DMUs	5
Average	0,913633428
SD	0,15214381
Maximum	1
Minimum	0,61117491
Category	3
No. of DMUs	3
Average	0,726598931
SD	0,196947113
Maximum	1
Minimum	0,543842568

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I+C)
 Workbook Name = E:\CAT.PR.2003.xls.Fulla 1.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)						
1	HKIA	0.53	28	2	APACld. MELB.	2,64					
2	NARITA A A	0.92	16	1	APACld. MELB.	4,67					
3	APACld. MELB.	1,00	1	1	APACld. MELB.	1,00					
4	AUCKLAND IALtd	1,00	1	2	AUCKLAND IALtd	1,00					
5	BRISBANE ACld	1,00	1	1	BRISBANE ACld	1,00					
6	WACld PERTH	0.80	22	1	APACld. MELB.	0.38	AI GENÈVE	0,01			
7	SYDNEY ACld.	0.90	17	1	APACld. MELB.	2,01					
8	ADMTL	1,00	1	1	ADMTL	1,00					
9	CALGARY A A	1,00	1	1	CALGARY A A	1,00					
10	GTAA	0.43	31	1	APACld. MELB.	0.87	BRISBANE ACld	0,06	CALGARY A A	1,44	
11	OTTAWA IA	0.82	21	1	ADMTL	0.12	CALGARY A A	0,29	INDIANAPOLIS A A	0,01	
12	YVR AS	1,00	1	3	YVR AS	1,00					
13	ASUR	1,00	1	1	ASUR	1,00					
14	INDIANAPOLIS A A	1,00	1	1	INDIANAPOLIS A A	1,00					
15	MWAA NATIONAL	1,00	1	1	MWAA NATIONAL	1,00					
16	MWAA DULLES	0.85	19	1	BRISBANE ACld	0.58	MWAA NATIONAL	1,02			
17	AD ROMA SpA	0.51	30	1	APACld. MELB.	1,14	F HAMBURG GmbH	0,28	AI GENÈVE	0,90	
18	SAGA TORINO SpA	0.95	15	1	APACld. MELB.	0,01	AD FIRENZE SpA	1,19	F HAMBURG GmbH	0,01	
19	AD FIRENZE SpA	1,00	1	1	AD FIRENZE SpA	1,00					
20	DUBLIN A A Pic.	1,00	1	2	DUBLIN A A Pic.	1,00					
21	BRUSSELS AIC	0.71	23	1	APACld. MELB.	0.59	CALGARY A A	0,43	AI GENÈVE	0,63	
22	COPENH. AIRPORTS A/S	0.65	24	2	APACld. MELB.	0.95	AUCKLAND IALtd	0,72	F HAMBURG GmbH	0,03	
23	OSLO F A/S	0.85	20	1	APACld. MELB.	1,12	AI GENÈVE	0,41			
24	CZECH A A	0.63	27	1	APACld. MELB.	0.30	ADMTL	0,10	INDIANAPOLIS A A	0,17	
25	BAA STANSTED	0.86	18	3	APACld. MELB.	1,08	AUCKLAND IALtd	0,78		0,15	
26	MANCHESTER AG Pic.	0.52	29	3	YVR AS	1,39	DUBLIN A A Pic.	0,22	AI GENÈVE	0,00	
27	F MÜNCHEN GmbH	0.64	26	1	APACld. MELB.	0.98	AI GENÈVE	2,74			
28	F HAMBURG GmbH	1,00	1	1	F HAMBURG GmbH	1,00					
29	AI GENÈVE	1,00	1	1	AI GENÈVE	1,00					
30	UNIQUE ZÜRICH A	0.64	25	1	APACld. MELB.	1,24	F HAMBURG GmbH	0,21	AI GENÈVE	0,58	
31	F WIEN AG	1,00	1	2	F WIEN AG	1,00					
32	ATHENS IA	0.37	32	1	APACld. MELB.	0.41	CALGARY A A	0,36	ASUR	0,04	
										INDIANAPOLIS A A	0,23

Workbook Name = E:\CAT.PR.2003.xls, Fulla 1.xls
 Data File = E:\CAT.PR.2003.xlsFull1
 DEA model = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Problem = Indústries Aeroportuàries 2003

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATMs
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
Max	775859	220551	4891	6961160	53780800	370100	371514
Min	7787	5763	117	23338	1394199	26100	4981
Average	95888	52625.72	885.125	1453756	17928507	200462.9	102344.2
SD	142328.3	51497.39	957.6072	1477005	11335931	84157.05	83635.17

Correlation

	DONOL	DOL	E	AF	WLUs	ATMs	INOA
DONOL	1	0.479871	0.421997	0.775781	0.691339	0.296834	0.845696
DOL	0.479871	1	0.835771	0.255242	0.413214	0.547901	0.714187
E	0.421997	0.835771	1	0.239887	0.363279	0.508523	0.621383
AF	0.775781	0.255242	0.239887	1	0.902416	0.3671	0.737857
WLUs	0.691339	0.413214	0.363279	0.902416	1	0.53536	0.812408
ATMs	0.296834	0.547901	0.508523	0.3671	0.53536	1	0.491222
INOA	0.845696	0.714187	0.621383	0.737857	0.812408	0.491222	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0.83031
 No. of efficient DMUs = 14
 No. of inefficient DMUs = 18
 No. of over iteration DMUs = 0

[CAT-I-C] LP started at 11-30-2005 18:02:48 and completed at 11-30-2005 18:02:48
 Elapsed time = 1 seconds
 Total number of simplex iterations = 290

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None
No. of DMUs	32
Average	0.830309754
SD	0.198413658
Maximum	1
Minimum	0.365962675

Frequency in Reference Set

Reference	Frequency to other DMUs
APACId. MELB.	15
AUCKLAND IALtd	2
BRISBANE ACLtd	2
ADMTL	2
CALGARY A A	4
YVR AS	1
ASUR	1
INDIANAPOLIS A A	3
MWAA NATIONAL	3
AD FIRENZE SpA	1
DUBLIN A Plc.	1
F HAMBURG GmbH	4
AI GENEVE	9
F WIEN AG	0

Statistics by Category

Category	1
No. of DMUs	24
Average	0.833559864
SD	0.196293451
Maximum	1
Minimum	0.365962675
Category	2
No. of DMUs	5
Average	0.836358296
SD	0.204297729
Maximum	1
Minimum	0.528252881
Category	3
No. of DMUs	3
Average	0.794227975
SD	0.201658585
Maximum	1
Minimum	0.520337042

Model Name = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Workbook Name = E:\CAT_PR.2004.xls.Fulla.1.xls

No.	DMU	Score	Rank	Category	Reference set (lambda)							
1	HKIA	0.53	29	2	APACltd.MELB.	243						
2	NARITA A.A	0.83	21	1	APACltd.MELB.	246	SYDNEY ACltd.	0.96				
3	APACltd.MELB.	1.00	1	1	APACltd.MELB.	1.00						
4	AUCKLAND IALtd	1.00	1	2	AUCKLAND IALtd	1.00						
5	BRISBANE ACltd	1.00	1	1	BRISBANE ACltd	1.00						
6	WACltd PERTH	0.62	25	1	APACltd.MELB.	0.38	SAGA TORINO SpA	0.00				
7	SYDNEY ACltd.	1.00	1	1	SYDNEY ACltd.	1.00						
8	ADMTL	1.00	1	1	ADMTL	1.00						
9	CALGARY A A	1.00	1	1	CALGARY A A	1.00						
10	GTAA	0.40	31	1	APACltd.MELB.	0.92	CALGARY A A	1.13	MWAA DULLES	0.14		
11	OTTAWA IA	0.85	20	1	CALGARY A A	0.44	AI GENEVE	0.06				
12	YVR AS	1.00	1	3	YVR AS	1.00						
13	ASUR	1.00	1	1	ASUR	1.00						
14	INDIANAPOLIS A A	1.00	1	1	INDIANAPOLIS A A	1.00						
15	MWAA NATIONAL	1.00	1	1	MWAA NATIONAL	1.00						
16	MWAA DULLES	1.00	1	1	MWAA DULLES	1.00						
17	AD ROMA SpA	0.52	30	1	APACltd.MELB.	1.12	F HAMBURG GmbH	0.38	AI GENEVE	0.79		
18	SAGA TORINO SpA	1.00	1	1	SAGA TORINO SpA	1.00						
19	AD FIRENZE SpA	1.00	1	1	AD FIRENZE SpA	1.00						
20	DUBLIN A A Plc.	1.00	1	2	DUBLIN A A Plc.	1.00						
21	BRUSSELS AIC	0.75	23	1	APACltd.MELB.	0.55	CALGARY A A	0.46	AI GENEVE	0.59		
22	COPENH. AIRPORTS A/S	0.91	18	2	APACltd.MELB.	0.23	AUCKLAND IALtd	0.60	CALGARY A A	0.00	F HAMBURG GmbH	0.79
23	OSLO F A/S	0.91	19	1	APACltd.MELB.	1.18	AI GENEVE	0.32				AI GENEVE 0.13
24	CZECH A A	0.56	28	1	APACltd.MELB.	0.27	ADMTL	0.16	CALGARY A A	0.02	MWAA NATIONAL	0.22
25	BAA STANSTED	0.66	24	3	APACltd.MELB.	1.23	F HAMBURG GmbH	0.11	AI GENEVE	0.26		
26	MANCHESTER AG Plc.	0.62	26	3	APACltd.MELB.	1.20	DUBLIN A A Plc.	0.33				
27	F MUNICHEN GmbH	0.81	22	1	APACltd.MELB.	1.20	AI GENEVE	3.33				
28	F HAMBURG GmbH	1.00	1	1	F HAMBURG GmbH	1.00						
29	AI GENEVE	1.00	1	1	AI GENEVE	1.00						
30	UNIQUE ZURICH A	0.59	27	1	APACltd.MELB.	1.15	F HAMBURG GmbH	0.11	AI GENEVE	0.57		
31	F WIEN AG	1.00	1	2	F WIEN AG	1.00						
32	ATHENS IA	0.38	32	1	APACltd.MELB.	0.49	CALGARY A A	0.50	INDIANAPOLIS A A	0.02	MWAA DULLES	0.08

Workbook Name = E:\CAT_PR_2004.xls; Fulla 1.xls
 Data File = E:\CAT_PR_2004.xls; Fulla 1
 DEA model = DEA-Solver Pro4.1/ Categorical Variable(CAT-I-C)
 Problem = Indústries Aeroportuàries 2004

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLLUs
 Output(2) = ATMs
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLLUs	ATMs	INOA
Max	780588	220874	4946	6700760	55046760	469600	390215
Min	6589	6955	132	29633	1518747	24096	6031
Average	101372.8	55072.72	900.2188	1473717	19676860	213053.8	112324.1
SD	143418.8	53994.92	981.0237	1462241	12131544	96280.79	92544.15

Correlation

	DONOL	DOL	E	AF	WLLUs	ATMs	INOA
DONOL	1	0.507616	0.428654	0.762856	0.715096	0.275674	0.840773
DOL	0.507616	1	0.803083	0.24818	0.431173	0.51917	0.769074
E	0.428654	0.803083	1	0.221643	0.371923	0.476817	0.688461
AF	0.762856	0.24818	0.221643	1	0.911443	0.340596	0.674337
WLLUs	0.715096	0.431173	0.371923	0.911443	1	0.49592	0.779731
ATMs	0.275674	0.51917	0.476817	0.340596	0.49592	1	0.481896
INOA	0.840773	0.769074	0.688461	0.674337	0.779731	0.481896	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0.841509
 No. of efficient DMUs = 17
 No. of inefficient DMUs = 15
 No. of over iteration DMUs = 0

[CAT-I-C] LP started at 11-30-2005 18:25:22 and completed at 11-30-2005 18:25:23
 Elapsed time = 0 seconds
 Total number of simplex iterations = 285

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None
No. of DMUs	32
Average	0.841508658
SD	0.204082587
Maximum	1
Minimum	0.381156543

Frequency in Reference Set

Reference	Frequency to other DMUs
APAC Ltd MELB.	14
AUCKLAND Intl	1
BRISBANE ACltd	0
SYDNEY ACltd.	1
ADMTL	1
CALGARY A.A	6
YVR AS	0
ASUR	0
INDIANAPOLIS A.A	1
MWAA NATIONAL	2
MWAA DULLES	2
SAGATORINO SpA	1
AD FIRENZE SpA	0
DUBLIN A.Plc.	1
F HAMBURG GmbH	4
AI GENEVE	8
F WIEN AG	0

Statistics by Category

Category	1
No. of DMUs	24
Average	0.842137508
SD	0.208761953
Maximum	1
Minimum	0.381156543
Category	2
No. of DMUs	5
Average	0.887054392
SD	0.184244415
Maximum	1
Minimum	0.525211066
Category	3
No. of DMUs	3
Average	0.760568298
SD	0.170369997
Maximum	1
Minimum	0.617654654

Taula 4.1.21. Comparació de Propietats majoritàriament públiques o privades. 2001.

INDÚSTRIES AEROPORTUÀRIES	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU	(O)ATMs	(O)JNOAs	Discriminació
A1	156961	50398	932	5195792	53548760	186400	217570	1
A2	756884	74475	915	6637260	42188370	124600	338937	1
A3	41506	23869	595	314358	11786210	232400	45139	1
A4	18726	5833	145	233142	8659900	138400	23104	1
A5	194700	46783	705	2160404	31082880	406300	111617	1
A6	14934	5483	148	53365	3391000	72600	10182	1
A7	34380	19490	294	491155	17763740	312100	87936	1
A8	7473	10295	300	960350	18391720	244800	79344	1
A9	35909	28648	510	694797	13418880	244000	44811	1
A10	55658	39440	703	1392935	20863510	396900	71053	1
A11	156573	174207	2318	2449154	26906697	283700	165400	1
A12	19750	19096	425	29551	2970632	64900	11329	1
A13	228981	135993	2511	654679	20534530	284500	290914	1
A14	134556	57458	767	1014618	25522157	305500	106132	1
A15	64090	35286	588	1320376	14614756	194800	108730	1
A16	36687	18488	1589	792245	6937774	115500	39043	1
A17	143876	102079	1639	1710993	20211770	181000	141319	1
A18	214646	184488	4472	2063566	25747259	321800	180500	1
A19	39182	79840	809	220285	10271352	158600	65494	1
A20	41793	38823	539	140740	8030944	163200	61335	1
A21	52500	15800	520	1930202	10884204	138000	37236	1
B1	16525	11260	211	863773	20837250	187400	73440	2
B2	9676	11774	282	508257	10293540	147900	49952	2
B3	15186	5774	127	958876	14492100	175800	51827	2
B4	9712	4466	112	409632	5546490	57600	27056	2
B5	50940	27257	482	1999183	28742200	317300	151889	2
B6	30358	7864	658	807457	11719790	194900	13867	2
B7	8984	8404	200	24059	1535929	31000	4253	2
B8	30220	68515	1347	991109	21926644	288800	86026	2
B9	66282	35639	676	1335978	14107480	148900	82243	2
B10	70784	83156	1215	1582881	25941591	309200	151454	2
B11	68298	139733	342	475719	13448250	185400	116984	2

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU	None
No. of DMUs		32
Average		0,791923158
SD		0,226712082
Maximum		1
Minimum		0,355811404

Frequency in Reference Set

Reference	Frequency to other DMUs
A2	0
A4	1
A6	3
A7	14
A8	10
A12	1
A13	0
A19	0
A20	2
B1	4
B2	0
B3	5
B6	1
B11	3

Statistics by System or Group

System	No. of DMUs	Average	SD	Maximum	Minimum
System	1				
No. of DMUs	21	0,747270822	0,242422826	1	0,355811404
Average					
SD					
Maximum					
Minimum					
System	2				
No. of DMUs	11	0,877168526	0,162031833	1	0,453511274
Average					
SD					
Maximum					
Minimum					

Input(4) = AF
 No. of Output items = 3
 Output(1) = WLU's
 Output(2) = ATMs
 Output(3) = INOAs

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU's	ATMs	INOAs
Max	756884	184488	4472	6637260	53548760	406300	338937
Min	7473	4466	112	24059	1535929	31000	4253
Average	88335,31	49066,06	846,125	1263028	17572447	206693,8	95191,13
SD	135395	49057,65	876,1029	1385864	11088530	94351,64	77572,85

Correlation

	DONOL	DOL	E	AF	WLU's	ATMs	INOAs
DONOL	1	0,428942	0,35747	0,807865	0,625617	0,103891	0,816011
DOL	0,428942	1	0,808814	0,284996	0,399587	0,394039	0,648006
E	0,35747	0,808814	1	0,257127	0,332714	0,377063	0,531801
AF	0,807865	0,284996	0,257127	1	0,859137	0,158562	0,751655
WLU's	0,625617	0,399587	0,332714	0,859137	1	0,526219	0,795369
ATMs	0,103891	0,394039	0,377063	0,158562	0,526219	1	0,363553
INOAs	0,816011	0,648006	0,531801	0,751655	0,795369	0,363553	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32
 Average of scores = 0,791923
 No. of efficient DMUs = 12
 No. of inefficient DMUs = 20
 No. of over iteration DMUs = 0

[SYS-I-C] LP started at 12-01-2005 14:11:01 and completed at 12-01-2005 14:11:01
 Elapsed time = 1 seconds
 Total number of simplex iterations = 500

Model Name = DEA-Solver Pro4.1/ System(SYS-I-C)

Workbook Name = E:\TAULES 4.20 i 4.21 PROPIETAT DEL CAPITAL.xls. Full 2.xls

No.	DMU	Score	Rank	System	Reference set (lambda)							
1	A1	0,623747	26	1	B1	1,516895	B3	2,003509	B11	1,99E-02		
2	A2	0,914829	14	1	B3	6,273941	B11	0,117772				
3	A3	0,869984	19	1	A6	1,515017	A7	0,392213				
4	A4	1	1	1	A4	1						
5	A5	0,720098	20	1	A7	0,154295	A8	1,541021				
6	A6	1	1	1	A6	1						
7	A7	1	1	1	A7	1						
8	A8	1	1	1	A8	1						
9	A9	0,670939	22	1	A7	0,669717	A8	0,142897				
10	A10	0,630808	25	1	A7	0,925193	A8	0,441779				
11	A11	0,398113	30	1	A7	1,791554	A8	9,90E-02				
12	A12	1	1	1	A12	1						
13	A13	1	1	1	A13	1						
14	A14	0,656375	23	1	A4	0,732279	A6	0,868639	A7	0,913948		
15	A15	0,630817	24	1	A2	6,16E-03	A7	0,985517	A8	0,251795		
16	A16	0,39545	31	1	A7	0,277864	A8	0,184119				
17	A17	0,423604	28	1	A7	1,384051	A20	0,319737				
18	A18	0,402112	29	1	A7	1,436218	A20	0,883749				
19	A19	1	1	1	A19	1						
20	A20	1	1	1	A20	1						
21	A21	0,355811	32	1	B1	3,53E-02	B2	0,108291	B3	0,534792	B6	0,10958
22	B1	1	1	2	B1	1						
23	B2	0,982183	13	2	A7	0,183881	A8	0,425769				
24	B3	1	1	2	B3	1						
25	B4	0,873647	17	2	B1	0,288301	B3	0,113515				
26	B5	0,901942	15	2	B1	1,993389	B3	7,88E-02	B11	1,20E-02		
27	B6	1	1	2	B6	1						
28	B7	0,881151	16	2	A6	0,301576	A12	0,172786				
29	B8	0,872299	18	2	A7	0,642495	A8	0,571645				
30	B9	0,453511	27	2	A7	0,679631	A8	0,28331				
31	B10	0,68412	21	2	A7	1,308926	A8	0,45816				
32	B11	1	1	2	B11	1						

Taula 4.4.21. Comparació de Propietats majoritàriament públiques o privades. 2004.

INDÚSTRIES AEROPORTUÀRIES	(I)DONOL	(I)DOL	(I)E	(I)AF	(O)WLU _s	(O)ATM _s	(O)NOA _s	Discriminació
A1	141726	52480	958	5143532	55046760	190300	168753	1
A2	780588	89326	891	6700760	54749286	186633	390215	1
A3	40156	26646	600	692091	12874828	235200	50401	1
A4	26303	7568	162	409188	10414039	136000	26376	1
A5	255521	62462	1041	3681940	28292360	370100	128563	1
A6	18329	7364	163	225905	3609885	69600	12565	1
A7	38494	22692	284	565180	16763000	270400	81346	1
A8	19010	15300	415	1161599	17114800	212558	49425	1
A9	39856	34011	300	883912	15970870	268600	63653	1
A10	64778	44637	460	1772074	25783080	469600	102980	1
A11	18604	17944	447	72537	3289648	57800	14968	1
A12	215694	159941	2382	760341	23640850	271137	289750	1
A13	100321	32315	552	1173815	15534160	186800	132325	1
A14	40173	27134	1709	979689	10165263	144962	47699	1
A15	200761	107852	2573	2041956	29653000	261700	206025	1
A16	320442	220874	4946	2061913	29912785	370534	355200	1
A17	31968	74140	716	332963	10619193	151430	69950	1
A18	51898	49939	556	200872	9094330	166600	73700	1
A19	80000	34600	698	2061262	14755252	191000	67740	1
B1	23994	11349	188	844200	22665310	165300	91963	2
B2	6589	11343	281	676113	12673430	154800	39329	2
B3	19077	8136	143	964305	15302238	144700	58823	2
B4	19099	6955	132	510896	8532000	53000	33739	2
B5	46659	21517	286	3614655	31176000	266700	170658	2
B6	47234	7935	619	882557	13974360	250802	24572	2
B7	155269	155839	2314	2389895	32213038	353900	188044	2
B8	9432	9676	133	29633	1518747	24096	6031	2
B9	114914	52305	768	1023085	20970237	252069	106100	2
B10	45731	82170	1485	976124	22391075	272500	109754	2
B11	69938	52430	988	1699984	23179610	177400	139977	2
B12	104000	85494	1260	1913791	20882296	266700	155625	2
B13	97373	169953	357	712171	16881779	224800	138121	2

Workbook Name = E:\TAULES 4.20 i 4.21 PROPIETAT DEL CAPITAL.xls-Full 1.xls
 Data File = E:\TAULES 4.20 i 4.21 PROPIETAT DEL CAPITAL.xlsHojas3
 DEA model = DEA-Solver Pro4.1\1\System(SYS-I-C)
 Problem = INDÚSTRIES AEROPORTUÀRIES

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLU's
 Output(2) = ATMs
 Output(3) = INOAs

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLU's	ATMs	INOAs
Max	780588	220874	4946	6700760	55046760	469800	390215
Min	6589	6955	132	29633	1518747	24096	6081
Average	101372.8	55072.72	900.2188	1473717	19676360	213053.8	112324.1
SD	143418.8	53994.92	981.0237	146224.1	12131544	96280.79	92544.15

Correlation

	DONOL	DOL	E	AF	WLU's	ATMs	INOAs
DONOL	1	0.507616	0.428654	0.762856	0.715096	0.275674	0.840773
DOL	0.507616	1	0.803083	0.24818	0.431173	0.51917	0.769074
E	0.428654	0.803083	1	0.221643	0.371923	0.476817	0.688461
AF	0.762856	0.24818	0.221643	1	0.911443	0.340595	0.674337
WLU's	0.715096	0.431173	0.371923	0.911443	1	0.49592	0.779731
ATMs	0.275674	0.51917	0.476817	0.340595	0.49592	1	0.481896
INOAs	0.840773	0.769074	0.688461	0.674337	0.779731	0.481896	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32

Average of scores = 0.835439
 No. of efficient DMUs = 15
 No. of inefficient DMUs = 17
 No. of over iteration DMUs = 0

[SYS-I-C] LP started at 12-01-2005 12:16:19 and completed at 12-01-2005 12:16:19
 Elapsed time = 1 seconds
 Total number of simplex iterations = 476

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
	None

No. of DMUs 32
 Average 0.835439022
 SD 0.19204065
 Maximum 1
 Minimum 0.424009195

Frequency in Reference Set

Reference	Frequency to other DMUs
A4	1
A7	8
A8	3
A10	1
A11	1
A12	2
A17	2
A18	1
B1	8
B2	1
B3	1
B5	1
B6	3
B8	1
B10	0
B13	5

Statistics by System or Group

System 1
 No. of DMUs 19
 Average 0.815254674
 SD 0.201102783
 Maximum 1
 Minimum 0.424009195

System 2
 No. of DMUs 13
 Average 0.864939223
 SD 0.173801202
 Maximum 1
 Minimum 0.563622043

Model Name = DEA-Solver Pro4.1/ System(SYS-I-C)

Workbook Name = E:\TAULES 4.20 i 4.21 PROPIETAT DEL CAPITAL.xls.Full 1.xls

No.	DMU	Score	Rank	System	Reference set (lambda)					
1	A1	0,525211	30	1	B1	2,428679				
2	A2	0,827642	19	1	B1	2,463843	B5	0,958834		
3	A3	0,807543	20	1	A7	0,796085	A8	9,38E-02		
4	A4	1	1	1	A4	1				
5	A5	0,48299	31	1	B1	1,826569	B6	0,231718	B13	0,044719
6	A6	0,720704	22	1	A4	0,138766	A7	0,187603		
7	A7	1	1	1	A7	1				
8	A8	0,892884	18	1	B2	0,918182	B3	0,286148	B6	0,1157
9	A9	0,936238	17	1	A7	0,534868	A8	3,64E-02	A10	0,247509
10	A10	1	1	1	A10	1				
11	A11	1	1	1	A11	1				
12	A12	1	1	1	A12	1				
13	A13	0,986681	16	1	B1	1,286111	B13	0,101725		
14	A14	0,535378	29	1	A7	0,42766	A8	0,238946	A17	1,57E-02
15	A15	0,624433	26	1	A7	2,088123	A12	0,124813		
16	A16	0,728126	21	1	A7	1,806739	A12	0,7748		
17	A17	1	1	1	A17	1				
18	A18	1	1	1	A18	1				
19	A19	0,424009	32	1	B1	0,776154	B6	0,228657	B13	0,023817
20	B1	1	1	2	B1	1				
21	B2	1	1	2	B2	1				
22	B3	1	1	2	B3	1				
23	B4	0,62171	27	2	B1	0,376045	B8	5,81E-03		
24	B5	1	1	2	B5	1				
25	B6	1	1	2	B6	1				
26	B7	0,563622	28	2	A7	1,655657	A8	0,16975	A17	0,642932
27	B8	1	1	2	B8	1				
28	B9	0,672406	25	2	A7	1,153039	A11	8,58E-02	A18	0,149578
29	B10	1	1	2	B10	1				
30	B11	0,712886	23	2	B1	1,324649	B13	0,131467		
31	B12	0,673585	24	2	B1	1,315253	B13	0,251015		
32	B13	1	1	2	B13	1				

Model Name = DEA-Solver Pro4.1/Bilateral(Bilateral)
 Workbook Name = E:\TAULA 4.22.BILATERAL.xls.Full IV.xls

Rank	DMU	Score	Group
1	NARITA A A	2,207370848	2
2	GTAA	1,960185196	2
3	AUCKLAND IALtd	1,86683833	1
4	SAGA TORINO SpA	1,758839779	1
5	UNIQUE ZURICH A	1,748232692	1
6	APACLtd. MELB.	1,563642065	1
7	OTTAWA IA	1,51073422	2
8	MWAA NATIONAL	1,428602611	2
9	ADMTL	1,350085723	2
10	ASUR	1,21984693	1
11	AI GENEVE	1,189406496	2
12	YVR AS	1,183737336	2
13	CZECH A A	1,132031487	2
14	F HAMBURG GmbH	1,117000791	1
15	BRUSSELS IAC	1,107882018	1
16	MANCHESTER AG Plc.	1,041515585	2
17	OSLO A A/S	1,00514127	2
18	CALGARY A A	0,97850093	2
19	DUBLIN A A Plc.	0,935098442	2
20	AD FIRENZE SpA	0,922509641	1
21	BRISBANE ACLtd	0,921857132	1
22	HKIA	0,911812397	2
23	BAA Ltd. STANSTED	0,880816242	1
24	AD ROMA SpA	0,856252513	1
25	INDIANAPOLIS A A	0,80754288	2
26	SYDNEY ACLtd.	0,788430975	1
27	WACLtd PERTH	0,701686881	1
28	F WIEN AG	0,655614948	1
29	COPENHAGEN A A/S	0,56493536	2
30	F MÜNCHEN GmbH	0,512748408	2
31	MWAA DULLES	0,47987372	2
32	ATHENS IA	0,372944425	1

TAULA 4.22.5. Comparació Bilateral.(*)

Grup	Indústria Aeroportuària	ÍNDEX	Conjunt de referència	Posició	
A canvi del Grup 1					
2	HKIA	0,911812397	ASUR	SAGA TORINO SpA	22
2	NARITA A A	2,207370848	AD FIRENZE SpA		1
2	ADMTL	1,350085723	ASUR		9
2	CALGARY A A	0,978500098	ASUR		18
2	GTAA	1,960185196	ASUR	SAGA TORINO SpA	2
2	OTTAWA IA	1,51073422	ASUR	SAGA TORINO SpA	7
2	YVR AS	1,183737386	ASUR	SAGA TORINO SpA	12
2	INDIANAPOLIS A A	0,80754288	AD FIRENZE SpA		25
2	MWAA NATIONAL	1,428602611	ASUR	SAGA TORINO SpA	8
2	MWAA DULLES	0,47987372	ASUR	SAGA TORINO SpA	31
2	DUBLIN A A Plc.	0,935098442	ASUR	AD FIRENZE SpA	19
2	COPENHAGEN A A/S	0,56493536	BRISBANE ACltd	BRUSSELS IAC	29
2	OSLO A A/S	1,00514127	UNIQUE ZURICH A		17
2	CZECH A A	1,132081487	UNIQUE ZUR.		13
2	MANCHESTER AG Plc.	1,041515585	ASUR		16
2	F MÜNCHEN GmbH	0,512748408	BRISBANE ACltd	ASUR	30
2	AI GENÈVE	1,189406496	UNIQUE ZURICH A		11
Mitjana					
1,129372					
Suma de posicions					
270					
A canvi del Grup 2					
1	APACLtd. MELB.	1,563642065	ADMTL	MWAA NATIONAL	6
1	AUCKLAND IALtd	1,86683833	GTAA	AI GENÈVE	3
1	BRISBANE ACltd	0,921857132	NARITA A A	INDIANAPOLIS A A	21
1	WACLtd PERTH	0,701686881	GTAA	AI GENÈVE	27
1	SYDNEY ACltd.	0,788430975	GTAA	AI GENÈVE	26
1	ASUR	1,21984693	GTAA		10
1	AD ROMA SpA	0,856252513	MWAA NATIONAL	CZECH A A	24
1	SAGA TORINO SpA	1,758839779	MWAA NATIONAL		4
1	AD FIRENZE SpA	0,322509641	NARITA A A	OTTAWA IA	20
1	BRUSSELS IAC	1,107882018	OTTAWA IA	MWAA NATIONAL	15
1	BAA Ltd. STANSTED	0,880816242	GTAA	OSLO A A/S	23
1	F HAMBURG GmbH	1,117000791	GTAA	AI GENÈVE	14
1	UNIQUE ZURICH A	1,748232692	OSLO A A/S	AI GENÈVE	5
1	F WIEN AG	0,655614948	GTAA	AI GENÈVE	28
1	ATHENS IA	0,372944425	NARITA A A	GTAA	32
Mitjana					
1,098826					
Suma de posicions					
258					

Estadístic: -0,396509
La Ho no pot rebutjar-se al nivell de significació del 10%

Hipòtesis nul·la: Ho
Els dos grups tenen la mateixa distribució de l'índex d'eficiència

Workbook Name = E:\TAULA 4.22.BILATERAL.xls Full IV.xls
 Data File = E:\TAULA 4.22.BILATERAL.xls\Full3
 DEA model = DEA-Solver Pro4.1\Bilateral(Bilateral)
 Problem = INDUSTRIES AEROPORTUARIES

No. of DMUs = 32
 No. of Input items = 4
 Input(1) = DONOL
 Input(2) = DOL
 Input(3) = E
 Input(4) = AF
 No. of Output items = 3
 Output(1) = WLUs
 Output(2) = ATM
 Output(3) = INOA

Returns to Scale = Constant (0 =< Sum of Lambda < Infinity)

Statistics on Input/Output Data

	DONOL	DOL	E	AF	WLUs	ATM	INOA
Max	780688	220874	4946	8700760	55046760	469600	390215
Min	6589	6955	132	29633	1518747	24096	6031
Average	101372.8	55072.72	900.2188	1473717	19676360	213053.8	112324.1
SD	143418.8	53994.92	981.0237	1462241	12131544	96280.79	92544.15

Correlation

	DONOL	DOL	E	AF	WLUs	ATM	INOA
DONOL	1	0.507616	0.428654	0.762856	0.715098	0.276674	0.840773
DOL	0.507616	1	0.803083	0.24818	0.431173	0.51917	0.769074
E	0.428654	0.803083	1	0.221643	0.371923	0.476817	0.688461
AF	0.762856	0.24818	0.221643	1	0.911443	0.340595	0.674337
WLUs	0.715098	0.431173	0.371923	0.911443	1	0.49592	0.779731
ATM	0.276674	0.51917	0.476817	0.340595	0.49592	1	0.481896
INOA	0.840773	0.769074	0.688461	0.674337	0.779731	0.481896	1

No. of DMUs in Data = 32
 No. of DMUs with inappropriate Data = 0
 No. of evaluated DMUs = 32

Rank sum statistics
 Group 1 258
 Group 2 270
 Test statistic 0.396509
 NormDist 0.345865

Null hypothesis: the two groups have the same distribution of efficiency score.
 The null hypothesis cannot be rejected at the significance level 10%.

DMUs with inappropriate Data with respect to the chosen Model

No.	DMU
No. of DMUs	32
Average	1.115053698
SD	0.444751732
Maximum	2.207370848
Minimum	0.372944425

Frequency in Reference Set

Reference	Frequency to other DMUs
NARITA A A	2
ADMTL	0
GTAA	9
OTTAWA IA	1
INDIANAPOLIS A A	1
MWAA NATIONAL	6
DUBLIN A A Plc.	0
OSLO A A/S	2
CZECH A A	0
ALIGENEVE	8
APAC Ltd. MELB.	14
BRISBANE AC Ltd	1
ASUR	11
SAGA TORINO SpA	5
AD FIRENZE SpA	3
BRUSSELS IAC	0
UNIQUE ZURICH A	2

Statistics by System or Group

Group	1
No. of DMUs	15
Average	1.098826357
SD	0.433934157
Maximum	1.866888833
Minimum	0.372944425
Group	2
No. of DMUs	17
Average	1.129371936
SD	0.453600849
Maximum	2.207370848
Minimum	0.47987372