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**THE COMPOSITION AND STRUCTURE OF THE
TELECOMMUNICATIONS, AUDIO-VISUAL, INSURANCE
AND COMPUTER SERVICES INDUSTRIES IN VOORBURG
GROUP MEMBER COUNTRIES**

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THE COMPOSITION AND STRUCTURE OF THE TELECOMMUNICATIONS, AUDIO-VISUAL, INSURANCE AND COMPUTER SERVICES INDUSTRIES IN VOORBURG GROUP MEMBER COUNTRIES

1. For the 1993 Voorburg Group Meeting, Australia prepared a paper which summarised the available data for the computer services, telecommunications, audio-visual and insurance industries for Voorburg Group member countries. The paper also presented a breakdown of revenue and expense for the computer services industry. This paper provides an update of the 1993 paper.

Methodology

2. As for last year, each member country was asked to update the summary data on number of businesses, total employment and revenue generated for each of the telecommunications, audio-visual, insurance and computer services industries. Member countries were also asked to update the commodity dissection of revenue and breakdown of expense items, which were provided for the first time in 1993 for the computer services industry.

Response

3. At the time of writing, updating material has been received from Canada, Denmark, France, Japan, Netherlands, United Kingdom and the United States. For the other countries it has been assumed that no new data are available and hence data from last year's tables has been re-presented for those countries.

4. Statistics for each of the industries are summarised in the attached tables 1-4. Tables 5 and 6 provide the commodity dissection of revenue and breakdown of expense items, respectively, for the computer services industries. Any countries that now have additional data to supplement the information in the attached tables are asked to supply it, and it will be incorporated in the tables prior to the Sydney meeting.

Results

Presentation

5. The list of countries in the attached tables have been presented in alphabetic order. Number of businesses (with the exception of Table 1) and total employment have been rounded to the nearest thousand; hence a zero figure indicates a number less than five hundred. Share of the economy for each of the variables has been rounded to 1

decimal point and hence a zero figure indicates a share of the total economy for the particular variable of less than 0.05%.

General Comments

6. In last year's paper it was noted that the large variations in the reported statistics of member countries indicated that there were definitional, scope and coverage differences between countries. An examination of the updated data in the attached tables indicates that while there is a greater consistency in the data across countries it would still seem to be the case that member countries may be reporting data on different bases. This may be due to using different sources (eg National Accounts or other data source estimates rather than industry survey estimates) for the data, or alternatively it would appear that there may still exist some definitional, scope and coverage differences between countries.

7. As a result of the above it is difficult to be certain that the difference in the statistics for countries is a true reflection of real differences, and hence some caution needs to be exercised in interpreting the data.

8. It is proposed that if this comparison is undertaken for next year's meeting that more comprehensive information be collected from member countries so as to ensure a consistent basis of reporting of data wherever possible.

Telecommunications Industry (Table 1)

9. The data for the telecommunications industry, shows that for all countries the percentage share of number of businesses is very small, with all reporting countries being 0.1% or less, with the exception of the United States where the 38,683 businesses in the industry represented 0.6% of all businesses in the economy.

10. In terms of employment, there is again reasonable consistency amongst the countries. In Australia, Canada, Denmark, Norway, Sweden and the United Kingdom each reported the industry's percentage of total employment in the range of 0.8% to 1.1%. Only Japan (0.4%) and France (0.7%) were below that range and only Czech Republic (1.6%), United States (1.5%) and Finland (1.4%) were above that range. All countries reported that the percentage share of employment was significantly larger than the figure for number of businesses. As noted last year, the telecommunications industry is quite often dominated by government organisations which would account for the low incidence of businesses and the high level of employment.

11. Revenue as a percentage of the total economy was not

available for France, Japan, Netherlands and United States. For the remaining countries all reported revenue percentages greater than 1.0% with Canada reporting the highest (1.9%) and Denmark and Finland reporting the lowest (1.1%).

Audio-visual Industry (Table 2)

12. For the audio-visual industry Australia was able to provide no data at all (the first survey of this industry is currently being conducted), while Norway could only supply revenue figures. France, Japan and United States did not provide revenue as a percentage of the total economy.

13. The figures reported in the audio-visual industry show that this industry is smaller in size, in terms of employment and revenue, than the other industries being examined.

14. Data on the percentage number of businesses was relatively consistent with most countries reporting in the range of 0.1% to 0.3%. The exception was the United States where the industry has 0.8% of all businesses.

15. Similarly the percentage of employment is also relatively consistent and correlates reasonably with the proportion of businesses, with the exceptions of Finland where the 0.3% of businesses generate 0.6% of employment, Sweden with 0.1% of businesses and 0.3% of employment and the United Kingdom with 0.3% of businesses and 0.5% of employment. As with the number of businesses, the United States has the highest proportion of employment with the industry having 0.8% of total employment.

16. The revenue data expressed as a percentage of the total economy shows a degree of divergence from the proportions for the other variables. For example United Kingdom revenue represents 0.8% of the total economy, yet only 0.3% of businesses and 0.5% of employment. Similarly Canada has 0.1% of businesses, 0.2% of employment and 0.3% of revenue.

Insurance Industry (Table 3)

17. Most countries could supply figures on employment and number of businesses in this industry, however, Denmark, Finland, Japan, and United States were not able to provide the revenue generated data.

18. In terms of the percentage of number of businesses both United States (2.7%) and Netherlands (2.1%) were significantly higher than any other country. There was considerable variation amongst the remaining countries with percentages varying between virtually zero (United Kingdom and Czech Republic) and 0.7% (Australia).

19. The data in respect of employment showed a greater consistency across the countries with the majority falling in the range of 0.8% to 1.3% of total employment. Only the Czech Republic (0.7%) and Norway (0.6%) were below this range, while Japan (1.4%) and United States (2.4%) were above the range.

20. As noted above not all countries were able to report revenue as a share of the total economy. For the remaining countries there was considerable variation with most falling in the range 0.6% (Sweden) to 1.6% (Australia). The exception to this was United Kingdom with 10.1% which indicates a situation unique to the United Kingdom or possible differences in defining the variable revenue.

Computer Services Industry (Table 4)

21. Data on number of businesses, total employment and revenue generated were available for virtually all countries, however, revenue shares of the total economy were not provided for France, Japan, Mexico or United States. It should be noted that the data presented for a number of countries has not been updated since last year and hence could be somewhat dated.

22. In terms of the percentage number of businesses there is a large variation ranging from virtually zero per cent (Mexico) to 2.2% (United Kingdom)

23. Likewise there is considerable variation across countries in the proportion of total employment employed in the industry. These range from 0.1% (Mexico) to 1.2% (Finland). In comparing the proportions of employment to the proportions of businesses there are some interesting contrasts. In France (0.1% of businesses, 0.8% of employment) and Japan (0.3% of businesses, 1.1% of employment) there is a small number of businesses generating a relatively large proportion of employment; while, in Netherlands (1.7% of businesses, 0.7% of employment) and United Kingdom (2.2% of businesses, 0.8% of employment) there are a large number of businesses generating a relatively small proportion of employment.

24. In relation to revenue there is a greater consistency in percentages for each of the countries with the majority falling in the range of 0.7% (Canada, Netherlands and Norway) to 1.3% (Czech Republic and Sweden). The only countries outside this range were Australia (0.2%) and Germany (0.4%), however as noted above some of these data are quite dated, for example Australian data relate to 1988 (1993 will be available shortly) and hence should be treated with caution.

Computer services - commodity items (Table 5)

25. Data on the percentage share of revenue by commodity item for the computer services has been presented for nine countries. For the majority the data remain virtually unchanged from that presented last year. The issues and comments raised in last year's paper hence are equally applicable to the data presented this year.

Expense items (Table 6)

26. As for the revenue items, data have been presented in this table for nine countries. Again the data are virtually unchanged from that presented last year and the issues and comments raised in last year's paper are equally applicable to the data presented this year.

Conclusions

27. As noted at the outset of this paper the updated data presented in this report indicate a greater consistency in data reported by member countries. Nevertheless, some of the remaining differences would suggest that some countries may be reporting data on different bases. This may result from the use of different data sources or alternatively as suggested in last year's paper there may still exist some definitional, scope and coverage differences between countries.

28. Given these constraints, it is obvious that some caution needs to be exercised in interpreting the data.

29. It is proposed that if this comparison is to be undertaken for next year's meeting that more comprehensive information, particularly with respect to scope, coverage and industry delineation, be collected from member countries so as to ensure a consistent basis of reporting of data and thereby leading to a more compatible set of international data.

30. Australia is willing to continue the analysis of participating countries in these industries and to develop and undertake the collection of more comprehensive information from member countries to enhance the comparability of the data.

TABLE 1: SIZE OF TELECOMMUNICATIONS INDUSTRY

Country	No of businesses	Total employment ('000)	Revenue Generated (millions)	Share of Total Economy (%)		
				No of bus	Employment	Revenue
Australia	3	84	\$A11,500	0.0	1.1	1.4
Canada (1992)	800	110	\$C15,701	0.1	0.9	1.6
Czech Republic	1	83	Kc 8,750	0.0	1.6	1.2
Denmark (1992)	469	22	DKK 17,834	0.1	0.8	1.1
Finland (1992)	80	16	FIM 8,828	0.0	1.4	1.1
France (1992)	427	162	ff 135,250	0.0	0.7	n.a
Japan (1991)	4,559	258	n.a	0.1	0.4	n.a
Netherlands (1993)	100	n.a	n.a	0.0	n.a	n.a
Norway	n.a	20	17,534 kr	n.a	0.9	1.3
Sweden	120	42	SEK 32,700	0.0	0.9	1.6
United Kingdom (1992)	1,260	197	£16,600	0.1	0.9	1.5
United States (1991)	38,683	1,355	\$216,582	0.6	1.5	n.a

TABLE 2: SIZE OF AUDIO-VISUAL INDUSTRY

Country	No of businesses ('000)	Total employment ('000)	Revenue Generated (millions)	Share of Total Economy (%)		
				No of bus	Employment	Revenue
Australia	n.a	n.a	n.a	n.a	n.a	n.a
Canada (1992)	2	53	\$C5,319.9	0.2	0.4	0.6
Czech Republic	1	3	Kc 1,175	0.1	0.1	0.0
Denmark (1992)	1	3	DKK 1,865	0.2	0.1	0.1
Finland (1992)	0	7	FIM 3,578	0.3	0.6	0.4
France (1992)	4	60	ff 67,100	0.2	0.2	n.a
Japan (1991)	5	104	n.a	0.1	0.2	n.a
Netherlands (1991)	1	5	Hfl 103	0.2	0.1	0.0
Norway	n.a	n.a	470 kr	n.a	n.a	0.0
Sweden	1	9	SEK 6,100	0.1	0.3	0.3
United Kingdom (1992)	5	117	£8,700	0.3	0.5	0.8
United States (1991)	49	779	\$93,430	0.8	0.8	n.a

TABLE 3: SIZE OF INSURANCE INDUSTRY

Country	No of businesses ('000)	Total employment ('000)	Revenue Generated (millions)	Share of Total Economy (%)		
				No of bus	Employment	Revenue
Australia	6	80	\$A14,995	0.7	1.0	1.6
Canada (1992)	2	n.a	\$C10,717.4	0.1	n.a	1.1
Czech Republic	0	37	Kc 5,914	0.0	0.7	0.8
Denmark (1992)	1	23	n.a	0.4	0.8	n.a
Finland (1992)	0	15	n.a	0.1	1.3	n.a
France (1992)	n.a	219	ff 129,000	n.a	1.0	1.1
Japan (1991)	44	844	n.a	0.6	1.4	n.a
Netherlands (1993)	13	71	Hfl 7,284	2.1	1.3	1.3
Norway	n.a	14	9,338 kr	n.a	0.6	0.7
Sweden	1	40	SEK 13,053	0.1	1.0	0.6
United Kingdom (1992)	1	263	£112,000	0.0	1.2	10.1
United States (1991)	166	2,197	n.a	2.7	2.4	n.a

TABLE 4: SIZE OF COMPUTER SERVICES INDUSTRY

Country	No of businesses ('000)	Total employment ('000)	Revenue Generated (millions)	Share of Total Economy (%)		
				No of bus	Employment	Revenue
Australia	4	24	\$A1,628	0.5	0.3	0.2
Canada (1992)	12	67	\$C6,417.0	0.9	0.5	0.7
Czech Republic	4	22	Kc 9,090	0.4	0.4	1.3
Denmark (1992)	3	21	DKK 15,130	0.9	0.7	1.0
Finland (1992)	1	13	FIM 7,430	1.1	1.2	0.9
France (1992)	20	175	ff 108,020	0.1	0.8	n.a
Germany	18	n.a	DM 22,413	0.9	n.a	0.4
Japan (1991)	20	657	71,276*	0.3	1.1	n.a
Mexico	0	3	P\$ 168,788	0.0	0.1	n.a
Netherlands (1992)	10	37	Hf1 3,993	1.7	0.7	0.7
New Zealand	2	8	\$NZ1,500	1.0	0.7	0.8
Norway	1	10	9,471 kr	n.a	0.4	0.7
Sweden	7	27	SEK 25,236	1.4	0.7	1.3
United Kingdom (1992)	40	168	£10,800	2.2	0.8	1.0
United States (1991)	44	779	\$91,254	0.7	0.8	n.a

* 100 million yen

TABLE 5: PERCENTAGE SHARE OF REVENUE BY COMMODITY ITEM - COMPUTER SERVICES

Commodity Item	Aust	Can	Fin	Fra (1992)	Jap (1992)	Nether (1992)	NZ	Swe	USA (1987)
Systems and user tools software	)	)	1	*	)	)	7	*	32a
Application software	)	) 14	6	7	)	) 18	5	2	a
Consultancy related to the installation of hardware	)	)	0	5	)	)	2	5)
Systems and technical consulting	)	4	2	18	) 60	) 10	7	2	) 5
Custom software development	)	13	15	12	)	a	9	24)
Programming services	) 53	5	10	4	)	25	4	4	) a
Computer facilities management services	)	6	2	5	)	5	5	*	2
Systems maintenance	)	*	4	3	)	b	3	6	b
Other professional computer services	)	7	*	0	5	d	1	3	*
Data processing and tabulation services	)	9	28	18	15	)	27	18)
Data entry services	) 25	2	1	4	3	)	1	5	) 20
Other computing processing services	)	4	*	1	2	) 13	3)
Data base services	)	2	2	1	3	)	3	1	3
Computer repair and maintenance services	) 22	4	4	2	*	4	1	*	11b
Other computer services	)	*	3	2	*	4	)	3	24c
Revenues from other sources	)	26	23	18	13	20	) 24	24	4

a Included under *Systems and user tools software*.

b Included under *Computer repair and maintenance services*.

c Includes computer integrated systems design (13.2%), computer rental and leasing (5.1%).

d Included under *programming services*.

* Figures for item not separately collected. Included elsewhere in figures.

TABLE 6: PERCENTAGE SHARE OF EXPENSES INCURRED - COMPUTER SERVICES

Expense Item	Aust	Can	Fin	Fra (1992)	Jap (1992)	Max	Nether	NZ	Swe
Wages and salaries	37	38	39	39	34	22	62	28)
Employee benefits	4	3	*	16	)	)	)	)	)39
Computer services for own use	*	3	*	)	)	)	b))
Professional services - legal, auditing, etc	*	2	*	b	b	)	1))
Advertising and sales promotion	*	3	*	)	)	)	b))
Insurance	-	-	12)))	-))
Rental and leasing of machinery	3	3	9	10	8	)	b	)	)12
Telecommunication services	)	4	*	)	)	)	1	3)
Operating supplies	)18	)	*	b	)	)	b))
Office and other supplies	)	)3	15	)	)	)	1	)	)12
Rental and leasing of land and buildings	3	6a	*	c	)	)78	3))
Utilities	2	)	*	b))	-))
Property and school taxes	-	a	*	)	b	)	b	b)
Permits, licences and other non-commodity indirect taxes	*	)	*	)3	)	)	b))
Royalties and patent fees paid	1	*	*	2	)	)	b	)	)34
Services from related parties (not included above)	*	3	3	0	)	)	3))
Depreciation	5	7	8	6	)	)	7	8)
Other operating, administrative and general expenses	27	23	15	24	58b	)	22	62b)

- a Included under rental and leasing of land and buildings.
b Included under other operating, administrative and general expenses.
c Included under rental and leasing of machinery.
* Figures for item not separately collected. Included elsewhere in figures.