# CAYMAN ISLANDS PUBLIC SERVICE PENSIONS BOARD

JUDICIAL PENSION PLAN

ACTUARIAL VALUATION FOR IAS19
REPORTING

OPENING BALANCE ACCOUNTING AS AT JULY 1, 2004

DETERMINATION OF EXPENSE FOR THE 12 MONTHS ENDING JUNE 30, 2005

December 7, 2006



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### 1. Introduction and Purpose

- 1.1 This report presents the results of actuarial calculations made to determine (1) the financial position of the Judicial Pension Plan of the Government of Cayman Islands ("the Government") as at July 1, 2004 and (2) the profit and loss charges associated with the Plan for the financial year ending June 30, 2005 in terms of the IAS19 standard published by the International Accounting Standards Board ("IASB"). We understand that the Government of Cayman Islands follows the International Public Sector Accounting Standards ("IPSAS"). In many areas, such as pension accounting, the International Public Accounting Standards Board has not yet prescribed its own specific standard but has relied on standards developed by the IASB. If and when IPSAS publishes its own pension accounting standards, it is expected that these will replace IAS19.
- 1.2 After consultation with the Auditor General of the Cayman Islands and the Financial Secretary of the Government, we have assumed that IAS19 will be adopted, retrospectively, for the first time as of July 1, 2004.
- 1.3 This report exclusively covers the <u>Judicial Pension Plan</u> ("the Plan") the provisions of which are detailed in the Judges' Emoluments and Allowance Order, 2005 ("the 2005 Order") which came into effect on October 28, 2005. It does not extend to consideration of other employee benefit arrangements sponsored by the Government. Although the 2005 Order came into effect after the 2005 Financial Year, the majority of the provisions were in place already and it was considered desirable to account for these obligations under IAS19 for the full 2005 Financial Year.
- 1.4 The results set out in this Report are based on our understanding of IAS19 and its application to the Plan. They have been prepared for the specific requirements of IAS19 and should not be used for any other purpose. In any actuarial assessment there is inherent uncertainty associated with the results as assumptions are made about future events. In particular this Report does not constitute an actuarial valuation of the Plan for funding purposes and does not present any recommendation of contributions or funding levels.



- 1.5 The Public Service Pensions Board ("PSPB") Trustees, who are responsible for the management of the Plan, have established an investment policy for the Plan's assets, which are pooled together with the assets of other public service pension plans. This policy has been determined by reference to the liabilities of all of the plans under management and consists of assets that are subject to changes in the market place. One consequence of this investment policy, and the methodology and assumptions used for determining the Plan's liabilities under IAS19, is that the difference between the market value of the Plan's assets and its IAS19 liabilities (i.e. its IAS19 "surplus" or "deficit") is expected to be volatile. Indeed, the amount of any surplus or deficit could change significantly over periods as short as a day (in the event of significant market movements). The results reported in the Tables should not, therefore, be taken as an indication of the Plan's financial position in accordance with IAS19 on any date other than July 1, 2004.
- 1.6 This report is provided solely for the use of the Government which is the Plan sponsor, and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose. Except where we expressly agree in writing, it should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this Report or any advice relating to its contents. The Government may make a copy of this Report available to its auditors, but we make no representation as to the suitability of this Report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Government's auditors in this regard. The Government should draw the provisions of this paragraph to the attention of its auditors when passing this Report to them
- 1.7 All monetary amounts shown in this report are expressed in Cayman Island Dollars (CI\$).



### 2. Summary of Results

The table below shows a summary of the key results for financial year 2005.

| Balance Sheet at Beginning of Year   | <u>July 1, 2004</u><br>(CI\$) |
|--|-------------------------------|
| 1. Defined Benefit Obligation (DBO)  | 795,491                       |
| 2. Assets at Fair Value  | 592,271                       |
| 3. Defined Benefit Asset / (Liability)   | (203,220)                     |
| <ul><li>4. Net Unrecognized Liabilities (Assets)</li><li>(1) - (2) + (3)</li></ul> | 0                             |
|  | Financial Year                |
| Pension Expense for Year   | 2005<br>(CI\$)                |
| 1. Employer Service Cost, net of Participant Contributions                         | 155,174                       |
| 2. Employer Pension Expense  | 158,419                       |

Employer Service Cost represents the pension cost to the Government associated with financial year benefit accruals and is net of participant contributions. Pension Expense is the expense under IAS19, inclusive of Employer Service Cost, amortizations and net interest (Financial Year 2005 details are shown in Table 2).

**Table 1** shows the results of the calculations and the reconciliation of funded status at July 1, 2004. The actuarial liabilities are presented using the actuarial methods and assumptions prescribed by IAS19.

**Table 2** shows the calculation of Pension Expense for the financial year 2005, according to the procedures set out in IAS19.



#### 3. Data

- 3.1 The starting point for our calculations is the membership information for the Plan as at January 1, 2005, supplied by the PSPB for purposes of the actuarial valuation carried out for funding purposes. The results were then adjusted by backward projection to reflect the position as of July 1, 2004. This process was discussed and agreed with the Auditor General. A summary of the January 1, 2005 data can be found in Appendix A.
- 3.2 Reliance has been placed on financial statements and cash flow information for the Plan provided by the PSPB that has not yet been audited. If the auditing process reveals substantial changes, the results presented in this report may need to be revised.
- 3.3 In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the PSPB. We have not completed any detailed validation checks on the information provided. We have, however, carried out broad consistency checks on the membership data prior to carrying out the January 1, 2005 valuation for funding purposes.

### 4. Funding Arrangements

- 4.1 The assets of the Plan are held as a part of the Public Service Pension Fund (the "Fund") and managed by the PSPB. The assets of two other plans, including the Public Service Pension Plan, are pooled together to constitute the Fund. The assets are allocated to each of the three participating plans through an internal accounting mechanism that tracks, for each accounting period, the incoming contributions and outgoing benefit payments and credits the fund earnings and debits the ongoing expense in proportion to the opening value of assets allocated and the cash flow for the period.
- 4.2 Reliance has been placed on financial statements and cash flow information for the Plan provided by the PSPB that has not yet been audited. If the auditing process reveals substantial changes, the results presented in this report may need to be revised.
- 4.3 Contributions to the Plan are based on actuarial valuations that are required, at least once every three years.



4.4 The Fund currently has an investment policy under which the targeted exposure to equities is 60%-65%, and to high quality long-term bonds 30%-35%, with the balance being held in short-term cash positions. As of June 30, 2004, the Fund portfolio's composition was as follows:

| TOTAL Fund as of June 30, 2004 | CI\$ 129,978,813.22 |
|--------------------------------|---------------------|
| Cash - Term Deposits           | 25,340,894.50       |
| Cash                           | 5,361,005.08        |
| Other                          | 4,242,271.67        |
| Bonds                          | 60,513,728.33       |
| US Equities                    | 1,577,437.50        |
| Global Equities                | CI\$ 32,943,476.14  |

4.5 The above represents the total fund assets as of June 30, 2004. As this report concerns the valuation of the Judicial Pension Plan only, the above amount should be adjusted to remove the value of assets allocated to the Public Service Pension Plan and the Parliamentarian Pension Plan. This adjustment is as follows:

| TOTAL Fund as of June 30, 2004                     | CI\$ 129,978,813 |
|--|------------------|
| Public Service Pension Plan Share of Fund          | 126,847,031      |
| Parliamentarians Pension Plan Share of Fund        | 2,539,511        |
| Balance of Fund Available to Judicial Pension Plan | CI\$ 592,271     |



#### 5. Actuarial Basis

- 5.1 The principal plan provisions, as used for purposes of this valuation, are outlined in Appendix C.
- 5.2 Appendix B summarizes the actuarial cost method and assumptions used. These are intended to satisfy IAS19 requirements.
- 5.3 Under IAS19 the assumptions are the responsibility of the Plan sponsor. The assumptions used in this report were recommended by us and have been accepted by the Financial Secretary.
- 5.4 One of the principal assumptions is the discount rate, which should be based upon the yields available on high quality (typically "AA") corporate bonds at the accounting date with a term that matches that of the liabilities.
- 5.5 The assumptions made for the expected rates of return on assets have been derived by considering best estimates for the expected long-term real rates of return from the main asset classes and the investment policy targets.
- 5.6 The other assumptions should be chosen to reflect a best estimate of the future long-term experience. In practice there is some flexibility in the choice of assumptions, albeit limited, and we have discussed this flexibility with the Financial Secretary. Except for the discount rate, all of the other assumptions adopted are the same as those employed for the actuarial valuation carried out as at January 1, 2005.
- 5.7 A summary of the principal economic assumptions is as follows:

|                                   | <u>July 1, 2004</u> |
|-----------------------------------|---------------------|
| Discount Rate                     | 6.50%               |
| Expected Long-Term Rate of Return | 7.00%               |
| Salary Increases                  | 4.00%               |
| Pension Increases                 | 2.50%               |



#### 6. Results

- 6.1 The main results of the valuation are shown in Tables 1 and 2.
- Table 1 shows the opening IAS19 balance sheet as of July 1, 2004, the date of adoption of the IAS19 standard.
- 6.3 Table 2 shows the determination of expense for the twelve months ending June 30, 2005. The amount shown is net of expected participant contributions. Although in the majority the participant contributions are reimbursed to the participants, we understand that the cost of the contribution reimbursement is accounted for elsewhere.
- 6.4 The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation or price inflation will lead to an increase in reported cost.

\*\*\*\*\*\*\*\*\*\*



We would be pleased to answer questions concerning this report, or to provide any additional information or analysis that may be required.

Respectfully submitted,

Watson Wyatt Worldwide

Tony R. Broomhead, F.I.A., A.S.A. Senior International Consultant

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The undersigned was formerly a Senior International Consultant with Watson Wyatt Worldwide and is currently a full time employee of the Public Service Pensions Board of the Cayman Islands. The undersigned participated extensively in the development of this report and the results therein, during both his employment with Watson Wyatt Worldwide and his subsequent employment with the Public Service Pensions Board.

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Public Service Pensions Board

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### FUNDED STATUS AT JULY 1, 2004

|    |      |   | Total<br>(CI\$) |
|----|------|---|-----------------|
| A. | Actu | narial Value of Benefit Obligations                           |                 |
|    | 1.   | Defined Benefit Obligation                                    | 795,491         |
|    |      |   |                 |
| В. | Fun  | ded Status  |                 |
|    | 1.   | Defined Benefit Obligation                                    | (795,491)       |
|    | 2.   | Assets at Fair Value  | 592,271         |
|    | 3.   | Funded Status   | (203,220)       |
|    | 4.   | Unrecognized Net Transitional Liability                       | 0               |
|    | 5.   | Unrecognized Past Service Cost                                | 0               |
|    | 6.   | Unrecognized Net (Gain) or Loss                               | 0               |
|    | 7.   | Restriction to Defined Benefit Asset due to the Asset Ceiling | <u>0</u>        |
|    | 8.   | Defined Benefit Asset / (Liability)                           | (203,220)       |
|    | 9.   | Fair Value of Reimbursement Rights                            | 0               |
|    | 10.  | Average Remaining Service (Years)                             | 6.75            |



#### **DETERMINATION OF PENSION EXPENSE FOR FINANCIAL YEAR 2005**

| Com | unananta of Dancian Ermanaa              |                         | Total (CI\$)       |
|-----|--|-------------------------|--------------------|
|     | nponents of Pension Expense              |                         |                    |
| 1.  | Service Cost                             |                         | 155,174            |
|     | a. Total Service Cost                    | 203,977                 |                    |
|     | b. Expected Participant Contributions    | (48,803)                |                    |
|     | c. Net Employer Service Cost             | 155,174                 |                    |
| 2.  | Past Service Costs                       |                         | 0                  |
| 3.  | Cost of Settlements, Curtailments, Term  | nination Benefits       | <u>0</u>           |
| 4.  | Subtotal: (1)+(2)+(3)                    |                         | 155,174            |
| 5.  | Interest Cost                            |                         | 51,707             |
| 6.  | Expected Return on Assets                |                         | (48,462)           |
| 7.  | Expected Return on Reimbursement Rig     | ghts                    | 0                  |
| 8.  | Subtotal: (5)+(6)+(7)                    |                         | $3,24\overline{5}$ |
| 9.  | Recognition of Net Transitional Liabilit | V                       | 0                  |
| 10. | Recognition of Net (Gain)/Loss           |                         | 0                  |
| 11. | Change in the Effect of the Asset Ceilin | g                       | 0                  |
| 12. | Other Adjustments                        |                         |                    |
| 13. | Subtotal: (9)+(10)+(11)+(12)             |                         | $\frac{0}{0}$      |
| 14. | Pension Expense (Income): (4)+(8)+(13    |                         | 158,419            |
| Exp | oected Financial Year 2005 Contribution  | ns and Benefit Payments |                    |
| 1.  | Employer Contributions                   |                         | 151,288            |
| 2.  | Employee Contributions                   |                         | 48,803             |
| 3.  | Benefit Payments                         |                         | 0                  |
| ٠.  |  |                         | V                  |

#### Notes:

B.

A.

- Interest Cost allows for the expected benefit payments.
- Expected Return on Assets allows for the expected employer and employee contributions and benefit payments.
- Recognition of Unrecognized Net (Gain) or Loss is based on accumulated gains and losses in excess of 10% of the larger of the Defined Benefit Obligation and the Fair Value of Assets as of the beginning of the year. There is no amortization required for FY 2005.



### **SUMMARY OF MEMBERSHIP DATA AT JANUARY 1, 2005**

| Α.            | Active | <b>Members</b> |
|---------------|--------|----------------|
| 1 <b>3.</b> 0 | 110110 | MICHIDOLS      |

|    | 1.                | Number                                | 3       |
|----|-------------------|---------------------------------------|---------|
|    | 2.                | Total Annual Payroll (CI\$)           | 488,027 |
|    | 3.                | Average Age (years)                   | 56.50   |
|    | 4.                | Average Credited Past Service (years) | 3.03    |
| В. | Tor               | minated Vested                        |         |
| ь, | Terminateu vesteu |                                       |         |
|    | 1.                | Number                                | 0       |
|    | 2.                | Total Annual Accrued Benefits (CI\$)  | N/A     |
|    |                   |                                       |         |
| C. | Ret               | irees and Beneficiaries               |         |
|    | 1.                | Number                                | 0       |
|    | 2.                | Total Annual Pension Benefits (CI\$)  | N/A     |



#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

IAS19 Basis

A. Cost Method: Projected Unit Credit (as required by IAS19)

#### **B.** Economic Assumptions:

| 1. | Discount Rate                     | 6.50% |
|----|-----------------------------------|-------|
| 2. | Expected Long-Term Rate of Return | 7.00% |
| 3. | Salary Increases                  | 4.00% |
| 4  | Pension Increases                 | 2.50% |

#### **C.** Other Assumptions:

1. Mortality:

It is not anticipated that the mortality rates of the participants will be significantly different to that of employees of U.S. corporations. Standard U.S. mortality rates have been used for the valuation. The rates used are based on the UP-1994 Table and sample rates are shown below:

| Age | Males   | Females |
|-----|---------|---------|
| 20  | .000545 | .000305 |
| 30  | .000862 | .000377 |
| 40  | .001153 | .000763 |
| 50  | .002773 | .001536 |
| 60  | .008576 | .004773 |
| 70  | .025516 | .014763 |
| 80  | .066696 | .042361 |
| 90  | .164442 | .125016 |



#### APPENDIX B

**C.** Other Assumptions (continued):

2. Disability: No disability incident rates have been used.

3. Turnover: None.

4. Retirement Age: Age 65.

5. Family Assumptions:

a. Percentage of Employees

with Spouse - 100% if currently married.

b. Age of Wife - As provided in the data.

**D.** Asset Valuation: Fair (Market) Value.



#### **OUTLINE OF PRINCIPAL PLAN PROVISIONS**

The following is a summary of the provisions under the Defined Benefit part of The Judges' Emoluments and Allowance Order, 2005. Not all of the features are identified here - only those that are the most important for assessing the liabilities and costs of the Plan.

1. Eligibility: Only the following are eligible participants:

Chief Justice Anthony Smellie

Justice Priya Levers

Justice Alexander Henderson

2. Pensionable Service: Service as a Judge of the Grand Court.

3. Pensionable Earnings: Annual base salary while serving as a Judge of the Grand

Court.

4. Final Pensionable Earnings: Average of Pensionable Earnings over the final 36

months prior to retirement, resignation, death or

disability.

5. Participant Contributions: 10% of Pensionable Earnings.

6. Government Contributions: To be determined by actuarial valuations.

7. Normal Retirement Age: Age 65.

8. Eligibility for Retirement Pension: After eight years of judicial service and attaining Normal

Retirement Age or after completing 20 years of judicial

service.

9. Retirement Benefits:

a. Pension at Retirement - An annual pension equal to 1/300 times the number of

completed months of Pensionable Service times Final Pensionable Earnings. The pension cannot exceed 4/5ths of Final Pensionable Earnings. For months of service prior to September 1997, the pension factor will be 1/600 per month rather than 1/300 per month. However, if the member repays all gratuities received during judicial service, then the pension factor for service prior to September 1997 will be the original 1/300 per month.



9. Retirement Benefits (cont'd):

b. Commutation -Up to ¼ of the retirement pension can be commuted for a

lump sum. The pension to lump sum conversion will be

determined by the Plan's actuarial factors.

c. Pension Increases -Pensions in payment may be adjusted annually to match

annual cost-of-living increases up to 5% and on a sliding

scale thereafter.

d.. Early Retirement -Allowed from age 55 subject to completing eight or more

> years of judicial service. For retirements prior to age 60, the benefits will be reduced in accordance with the Plan

actuarial tables.

Benefits on Death After A spouse's pension equal to 50% of the pensioner's 10.

Retirement or While Eligible

benefit. An additional equivalent amount is divided equally among any children under the age of 18 (or 23 if to Retire:

in full-time education).

11. Benefits on Disablement A pension based on accrued normal retirement pension

is payable upon receipt of medical evidence of

permanent disability and incapacity to perform duties.

An additional pension is payable to an officer who is permanently injured in discharge of duty equal to one-

third of the participant's Final Pensionable Earnings.

