IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

The Republic of Iraq, *Petitioner*, *v.* The Republic of Turkey, *Respondent*.	Civil Action No. 1:23-cv-00978-CKK

EXPERT DECLARATION OF ANNIE EMERY

I, Annie Emery, declare pursuant to 28 U.S.C. § 1746 as follows:

1. I am a Managing Director at Newstate Partners LLP, which is an advisory firm dedicated to the provision of impartial, specialist financial advice to governments, central banks, sub-sovereign or state-owned clients and other parties. I have been employed by Newstate Partners LLP for fourteen years. Prior to my work at Newstate Partners LLP, I worked as an analyst at Houlihan Lokey on the Sovereign Advisory Team for three years. I graduated from Durham University in 2006 with a degree in mathematics. My firm biography is attached as Annex A to this declaration.

2. Newstate Partners LLP has advised the Republic of Iraq ("***Iraq***") in the management of its sovereign debt for many years, including the restructuring of Iraq's Saddam-era debt and a broad range of debt management issues involving more than 50 agreements with creditors. I have participated in this advisory work. I have also worked on sovereign and sub-sovereign debt management matters (primarily on the sovereign side, although

occasionally for creditors) for the Russian Federation (prior to the invasion of Ukraine), Barbados, the Hashemite Kingdom of Jordan, Belize, the Dominican Republic, Saint Kitts and Nevis, Chad, Côte d'Ivoire, Suriname, Zambia and Liberia. Much of this work has involved structuring or restructuring sovereign bond transactions.

3. Counsel for the Petitioner the Republic of Iraq ("***Iraq***"), Vinson & Elkins LLP and Cleary Gottlieb Steen & Hamilton LLP, sought my advice in determining the calculation of interest on the amounts awarded to Iraq and the Republic of Turkey ("***Turkey***"), respectively, from the Final Award, dated February 13, 2023, in the arbitration between Iraq and Turkey ("***Final Award***") (ECF No. 1-2), and in reviewing the calculation of interest set out in the Declaration of Aloysius P. Llamzon dated September 7, 2023 ("***Llamzon Declaration***") (ECF No. 14-1).

4. I have relied on the following materials to form my opinion:

   a. The Final Award;

   b. The Llamzon Declaration;

   c. A spreadsheet containing information provided to me by counsel to Iraq setting out the respective amounts awarded to each party in the Final Award (broken down by year), and setting out the details of my interest calculations based on that information (attached as Annex B to this declaration); and

   d. Bond pricing and yield data for Turkish government bonds denominated in U.S. dollars from the Bloomberg Valuation Service database for years beginning in 2010 (the first full year for which information from this service is available), and from the Bloomberg Generic Price database for prior years (such yield data is set out in the spreadsheet attached as Annex C to this declaration). I note that the use of these two databases for these periods is consistent with the recommendation of Bloomberg for pricing and yield data.

5. I submit this declaration in support of Iraq's Reply in Support of Iraq's Petition for Confirmation, Recognition, and Enforcement of Foreign Arbitration Award. I make this declaration based on the documents referred to above, the Annexes appended hereto and facts personally known to me.

Turkey's Calculation of Interest

6. According to the Llamzon Declaration, Turkey calculated interest by ascertaining what it says is the average annual yield of U.S. dollar-denominated Turkish government bonds with a maturity as close as possible to the date of the award. Llamzon Declaration, ¶ 5. However, in my opinion Turkey's determination of the average annual yield is erroneous in several respects.

7. First, the yields applied by Turkey to calculate interest are not "average annual yields" as I believe that term would ordinarily be understood in this context. Turkey determined the average yield for each day in each year in which damages awarded by the tribunal were incurred. For purposes of calculating the interest accrued on such damages, Turkey held that yield fixed for all years until the date of Final Award or, if earlier, the maturity date of the bond (in which case it selected a new bond and applied the same methodology). In my opinion, this method is not consistent with the way the term "average annual yield" would ordinarily be understood in financial markets for purposes of the type of calculation at issue. By definition, a yield to maturity is the yield calculated on a particular date based on the price, coupon and time to maturity as of that point in time. At each subsequent date the time to maturity has reduced and, therefore, even if one were to assume the same price

(and coupon) for illustrative purposes, the yield to maturity would change. I would ordinarily expect an "average annual yield" over a period of time to reflect the variations in yields over the course of that period of time.

8. Turkey's decision to fix the rate for each amount of damages resulted in a higher amount of interest accruing in Turkey's favor than would have been the case if the average rate had been used, with the rate varied each year. This is because the yields on the bonds generally declined substantially after the time at which Turkey fixed the rates it applied.

9. Second, Turkey says that it used the fixed rate based on the assumption that the relevant bonds would have been held to maturity. Llamzon Declaration, ¶ 6. However, Turkey calculated interest on a compounded basis. None of the bonds used by Turkey bore interest at a fixed rate payable on a compounded basis. Indeed, none of the Turkish government bonds that were outstanding during the relevant periods bore interest based on a fixed rate with compounding. In my experience, it would be highly unusual for a fixed-rate bond to bear compounded interest (except in the case of a zero-coupon bond or a bond that paid interest in the form of additional bonds, but Turkey had no outstanding U.S. dollar-denominated bonds of that type).

10. Third, Turkey used the same government bond for the full period from the date on which it started accruing interest on each amount of damages, until the last accrual date on such amount (either the maturity date of the bond or the date of the Final Award, whichever was earlier). In many cases, new government bonds were issued during those periods with maturity dates closer to the date of the Final Award. In my opinion, in order to use the government bond with the maturity closest to that of the Final Award, it is necessary to

change the reference government bond each time such a new bond is issued and a full year of yield data is available.

11. Fourth, Turkey used the rates for the year prior to that in which each principal amount was to begin accruing interest. Llamzon Declaration, ¶ 5. In accordance with the Final Award, however, each principal amount was to start accruing interest as of January 1 of the year following that in which the relevant damages were incurred. ECF 1-2, ¶ 826(p). It is my opinion that it would not be correct for an amount set as of January 1 of a given year and starting to accrue interest as of that date to bear interest at the rate determined for the preceding year.

12. Finally, I note that the Llamzon Declaration did not provide information on the bonds and yields used by Turkey to determine the interest accrued in favour of Iraq on the damages awarded to Iraq. If Turkey used the same methodology it applied for the interest on its own damages, Turkey's method would result in interest accruing in the years 2015 through 2023 at a different rate on Turkey's damages than on Iraq's damages.

Calculation of Interest Up to the Final Award Date

13. I have calculated the interest accrued in favor of Iraq and Turkey based on the annual average yields on the U.S. dollar-denominated Turkish bonds with a maturity closest to the date of the Final Award. In making my calculations, I referred to paragraphs 801 to 807 and 826 of the Final Award, where the tribunal described the categories for which it was and was not awarding interest. I followed those portions of the Final Award and calculated interest for those categories of payments where the tribunal stated Turkey was entitled to interest.

14. Regarding the interest calculations up to the date of the Final Award, the tribunal ordered that the parties' interest be determined "based on the average annual US dollar denominated Turkish bond rate from 1 January of the year following which the amount was incurred, compounded annually to the date of this Award." ECF No. 1-2, ¶ 826(p), (r). Based on this order, I have set out below in Table 1, in the fifth and seventh columns, the amount of damages awarded to each party and added to the total as of January 1 of the following year, and in the sixth and eighth columns, the amount of interest accrued from January 1 to December 31 of each year, in each case with the totals for all years at the bottom.

15. To determine the appropriate interest rate for each year, I have used pricing data from the Bloomberg Valuation Service (starting in 2010) and the Bloomberg Generic Pricing database (prior to 2010), as attached in Annex C. For each year that damages were awarded, I have selected the Turkish government bond from "1 January of the year following which the amount was incurred" and with a "maturity as close as possible to the date of th[e] Award." ECF No. 1-2, ¶¶ 801, 826(p)–(r). The applicable bond in each year is the bond with a full year of representative yield data, which matured closest to February 13, 2023, as highlighted in Annex B. Bonds are identified based on their International Securities Identification Numbers (or ISINs).

16. In selecting Turkish government bonds, I have eliminated certain bonds for which the reported yields are not representative of market yields. I eliminated bonds with "put" or "call" features, meaning terms that allow bondholders (for a "put") or the issuer (for a "call") to require repayment prior to maturity. The reason is that the yields reflect the implied value of the embedded put or call option, and not solely the credit of the issuer

and relevant maturity. The inclusion of these options can affect the trading price, and therefore yield, of the bond.

17. Regarding the tribunal's instruction that the interest should be "based on the average annual yield," I reviewed the bonds with the closest maturity to the award date, and calculated a rate for each year, that I then applied to the principal (including compounded interest) determined as of January 1 of each year. Thus, like Turkey I determined the average yield for each day in each year to calculate the yield for that year. However, rather than holding this rate fixed as Turkey did, I varied the rate annually to calculate a rate for each year. Thus, for each year I calculated the interest accrued for each party by multiplying (i) the annual yield for such year, by (ii) the amount outstanding as of January 1 of such year for such party, including the principal added as of that date,[1] plus the interest accrued in the prior year, given the tribunal's direction that interest be compounded. ECF No. 1-2, ¶ 826 (p)–(r).

18. With respect to the period from January 1, 2023 to February 13, 2023, I used the average yield on a bond calculated for this period, because interest did not accrue for a full year.

19. Based on the foregoing methodology, I have calculated the accrued interest for Iraq's and Turkey's respective damages according to the year which they incurred the damages, as shown in Table 1 below (amounts are in USD).

[1] For this purpose, I excluded the amount of USD 67,607,024.62 for which Turkey was credited for the Minimum Guaranteed Throughput fees, as the tribunal ruled that no interest would accrue on this amount. ECF 1-2, ¶ 826(h).

Table 1							
				Interest Accrued on Damages Awarded to Iraq		Interest Accrued on Damages Awarded to Turkey	
Interest Accrual Start Date	**Reference Bond (ISIN)**	**Reference Bond Maturity Date**	**Average Annual Yield for the Year (%)**	**Damages added as of Jan 1**	**Accrued Interest (to following Dec 31)**	**Damages added as of Jan 1**	**Accrued Interest (to following Jan 1)**
01-Jan-91	XS0015133035	15/03/1997	10.677	-		128,676,675.27	13,738,808.62
01-Jan-92	XS0015133035	15/03/1997	9.258	-		-	13,184,825.50
01-Jan-93	US900123AC41	15/06/1999	8.221	-		-	12,791,901.43
01-Jan-94	US900123AC41	15/06/1999	11.166	-		-	18,802,674.26
01-Jan-95	US900123AC41	15/06/1999	10.610	-		-	19,861,377.31
01-Jan-96	US900123AC41	15/06/1999	8.712	-		-	18,038,741.58
01-Jan-97	US900123AC41	15/06/1999	7.929	-			17,847,782.86
01-Jan-98	XS0080403891	15/06/1999	10.818	-		474,534.18	26,332,885.79
01-Jan-99	XS0080403891	19/09/2007	11.424	-		442,249.11	30,866,786.16
01-Jan-00	US900123AJ93	19/09/2007	11.648	-		221,398.53	35,093,169.02
01-Jan-01	US900123AL40	15/06/2009	14.113	-		221,398.53	47,503,681.72
01-Jan-02	US900123AL40	15/01/2030	12.473	-		221,398.53	47,936,269.57
01-Jan-03	US900123AL40	15/01/2030	10.833	-		188,339.91	46,846,755.78
01-Jan-04	US900123AL40	15/01/2030	8.593	-		188,339.91	41,201,715.85
01-Jan-05	US900123AL40	15/01/2030	7.921	-		29,106,463.41	43,548,721.17
01-Jan-06	US900123AW05	15/01/2030	7.350	-		9,689,171.16	44,322,415.79
01-Jan-07	US900123AW05	05/02/2025	7.024	-		8,022,902.91	46,033,286.00
01-Jan-08	US900123AW05	05/02/2025	7.879	-		4,957,101.16	55,654,243.94
01-Jan-09	US900123AW05	05/02/2025	7.299	-		91,581,275.25	62,304,066.21
01-Jan-10	US900123AW05	05/02/2025	5.744	-		67,741,806.00	56,500,463.25
01-Jan-11	US900123BH29	05/02/2025	5.142	-		82,110,094.50	57,706,286.29
01-Jan-12	US900123BY51	30/03/2021	4.396	-		35,135,364.50	53,415,592.51
01-Jan-13	US900123BZ27	25/03/2022	4.353	-		-	55,218,282.24
01-Jan-14	US900123CA66	26/09/2022	4.574	-		-	60,547,375.70
01-Jan-15	US900123CA66	23/03/2023	4.289	243,086,306.80	10,425,971.70	-	59,371,624.29
01-Jan-16	US900123CA66	23/03/2023	4.392	364,629,460.20	27,148,785.16	-	63,405,030.95
01-Jan-17	US900123CA66	23/03/2023	4.556	573,776,423.33	55,540,690.11	-	68,661,347.28
01-Jan-18	US900123CA66	23/03/2023	6.030	533,267,813.17	109,014,889.66	-	95,015,591.82
01-Jan-19	US900123CA66	23/03/2023	5.849	283,216,022.00	128,684,221.12	-	97,721,010.32
01-Jan-20	US900123CA66	23/03/2023	5.237	-	121,958,762.85	-	92,613,790.71
01-Jan-21	US900123CA66	23/03/2023	3.692	-	90,481,665.86	-	68,710,520.42
01-Jan-22	US900123CA66	23/03/2023	5.035	-	127,950,981.45	-	97,164,198.29
01-Jan-23	US900123CA66	23/03/2023	2.732	-	8,507,572.74(1)	-	6,460,532.58(1)
Total					**679,713,540.66**		**1,574,421,755.18**

(1) Interest for 2023 is accrued for the period from January 1 through February 13, the date of the Final Award.

20. Based on my calculations, the net amount of interest prior to the calculation of post-award interest, is USD 894,708,214.52, in favor of Turkey. Subtracting this from the net amount of principal awarded by the tribunal to Iraq (USD 1,471,390,488.05) results in a final net amount of damages, after interest, payable to Iraq of USD 576,682,273.53.

Calculation of Post-Award Interest

21. The tribunal also ordered "the Respondent [Turkey] to pay the Claimant [Iraq] interest on the amount due to be paid to the Claimant after all amounts owed by the Claimant to the Respondent have been set-off, at the average annual U.S. dollar-denominated Turkish bond rate, compounded annually from the date of this Award until payment in full." ECF No. 1-2, ¶ 826(s).

22. Based on this statement, I have calculated Iraq's post-award interest based on a hypothetical full payment occurring on September 15, 2023. Turkey's U.S. dollar denominated bonds accrue interest on the basis of a 30/360 day count convention. Given the reference to U.S. dollar-denominated Turkish bonds as the applicable interest rate, it follows that interest should be calculated according to the same day count convention.

23. The tribunal did not specify the U.S. dollar-denominated Turkish bond to use for calculation of post-award interest. I have selected the bond with the maturity date in March 2024 (the same bond used by Turkey for its post-award interest claim as indicated in the Llamzon Declaration), (ISIN US900123CF53 maturing on March 22, 2024). The average yield on this bond from February 13 through September 15, 2023 is 7.424%. I have determined the post-award interest owed to Iraq by multiplying the net amount owed in paragraph 20 above, by the interest rate of 7.424%, multiplied by 212 days (according to the 30/360 day count convention) from the Final Award to the hypothetical payment

date, and then I divided this total by 360 days. Accordingly, Iraq's post-award interest is USD 25,212,036.39.

24. After adding Iraq's post-award interest to its net amount awarded, Turkey owes a total of USD 601,894,309.92 to Iraq as of September 15, 2023.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on: September 22, 2023

London, England

Annie Emery