

FINAL TERMS DATED AS OF 30 JUNE 2023

BNP Paribas Issuance B.V.
(incorporated in The Netherlands)
(as Issuer)

Legal entity identifier (LEI): 7245009UXRIGIRYOBR48

BNP Paribas
(incorporated in France)
(as Guarantor)

Legal entity identifier (LEI): R0MUWSFPU8MPRO8K5P83

(Note, Warrant and Certificate Programme)

"Mini Future" Certificates relating to a Commodity

SSPA product type: Mini-Future (2210)

BNP Paribas Arbitrage S.N.C.
(as Manager)

PART A - CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Base Prospectus dated 23 September 2022, each Supplement to the Base Prospectus published and approved on or before the date of these Final Terms (copies of which are available as described below) and any other Supplement to the Base Prospectus which may have been published and approved before the issue of any additional amount of Securities (the "**Supplements**") (provided that to the extent any such Supplement (i) is published and approved after the date of these Final Terms and (ii) provide for any change to the Conditions of the Securities such changes shall have no effect with respect to the Conditions of the Securities to which these Final Terms relate) (the Base Prospectus and the Supplements, together the "**Base Prospectus**").

The Base Prospectus has been approved by SIX Exchange Regulation AG ("**SIX Exchange Regulation**") in its capacity as Swiss Prospectus Office (the "**Swiss Prospectus Office**") as of 23 September 2022 and constitutes a base prospectus pursuant to article 45 of the Swiss Financial Services Act ("**FinSA**").

This document constitutes the Final Terms of the Securities described herein and must be read in conjunction with such Base Prospectus.

For the purpose of public offering in Switzerland and/or the admission to trading on SIX Swiss Exchange, these Final Terms will be or have been registered with the Swiss Prospectus Office and are or will be published pursuant to FinSA prior to the public offering of the Securities in Switzerland or the admission to trading of the Securities on SIX Swiss Exchange and the Base Prospectus and these Final Terms together will constitute the prospectus pursuant to FinSA.

Full information on BNP Paribas Issuance B.V. (the "**Issuer**"), BNP Paribas (the "**Guarantor**") and the offer of the Securities is only available on the basis of the combination of these Final Terms and the Base Prospectus. The Base Prospectus, any Supplement(s) to the Base Prospectus and these Final Terms are available free of charge during normal business hours from Principal Security Agent. Written or oral requests for such documents should be directed to the Principal Security Agent at its principal office set out at the end of the Base Prospectus or may be obtained by telephone (+41 58 212 6394) or fax (+41 58 212 6360). In addition, copies of any documents incorporated by reference will be made available, along with this Base Prospectus, for viewing on the website of BNPP at the following address www.bnpparibasmarkets.ch or any other website specified in the applicable Final Terms.

References herein to numbered Conditions are to the terms and conditions of the relevant series of Securities and words and expressions defined in such terms and conditions shall bear the same meaning in these Final Terms in so far as they relate to such series of Securities, save as where otherwise expressly provided.

These Final Terms relate to the series of Securities as set out in "Specific Provisions for each Series" below. References herein to "**Securities**" shall be deemed to be references to the relevant Securities that are the subject of these Final Terms and references to "**Security**" shall be construed accordingly.

The Securities issued pursuant to these Final Terms may be considered structured products in Switzerland pursuant to article 70 FinSA and do not constitute collective investment schemes in the meaning of the Swiss Federal Act on Collective Investment Schemes ("**CISA**"). Accordingly, holders of the Securities do not benefit from protection under the CISA or supervision by the Swiss Financial Market Supervisory Authority ("**FINMA**"). Further, investors are exposed to the Issuer's and the Guarantor's insolvency risk.

The Securities may be offered, sold or advertised, directly or indirectly, in Switzerland to retail clients (*Privatkundinnen und -kunden*) within the meaning of FinSA ("**Retail Clients**") in accordance with FinSA.

These Certificates provide for a dynamic structure with regard to the adjustment of both the Underlying and the Security Threshold.

SPECIFIC PROVISIONS FOR EACH SERIES

Series Number / ISIN Code	No. of Securities Issued	No. of Securities	Issue Price per Security	Call / Put	Exercise Price	Capitalised Exercise Price Rounding Rule	Security Threshold on the Commencement Date	Security Threshold Rounding Rule	Minimum Security Percentage	Maximum Security Percentage	Security Percentage on the Commencement Date	Dividend Percentage	Minimum Financing Rate Percentage	Maximum Financing Rate Percentage	Financing Rate Percentage on the Commencement Date	Redemption Date	Parity
CH1275981376	2,400,000	2,400,000	CHF 4.43	Call	USD 69.2308	Upwards to the next 4 digits (0.0001 points)	USD 72.00	Upwards to the next 2 digits (0.01 points)	0%	20%	4%	N/A	0%	5%	+4.50%	Open End	1
CH1275981384	2,400,000	2,400,000	CHF 4	Call	USD 69.7115	Upwards to the next 4 digits (0.0001 points)	USD 72.50	Upwards to the next 2 digits (0.01 points)	0%	20%	4%	N/A	0%	5%	+4.50%	Open End	1

Series Number / ISIN Code	Valoren Code	Commodity	Commodity Currency	Initial Futures Contract	Reuters Code of Commodity / Reuters Screen Page	Price Source	Price Source Website	Business Day Centre	Settlement Currency
CH1275981376	127598137	ICE Brent Crude Oil Future Contract	USD	September 2023	LCOU3	Intercontinental Exchange (ICE)	www.theice.com	Zurich	CHF
CH1275981384	127598138	ICE Brent Crude Oil Future Contract	USD	September 2023	LCOU3	Intercontinental Exchange (ICE)	www.theice.com	Zurich	CHF

GENERAL PROVISIONS

The following terms apply to each series of Securities:

1. **Issuer:** BNP Paribas Issuance B.V.
2. **Guarantor:** BNP Paribas
3. **Trade Date:** 29 June 2023.
4. **Issue Date:** 30 June 2023.
5. **Consolidation:** Not applicable.
6. **Type of Securities:**
 - (a) Certificates.
 - (b) The Securities are Commodity Securities.
The Certificates are OET Certificates and are OET Call Certificates.

The provisions of Annex 5 (*Additional Terms and Conditions for Commodity Securities*) and Annex 11 (*Additional Terms and Conditions for OET Certificates*) shall apply.
7. **Form of Securities:** Uncertificated Securities.
8. **Business Day Centre(s):** The applicable Business Day Centre for the purposes of the definition of "Business Day" in Condition 1 is as set out in Specific Provisions for each Series above.
9. **Settlement:** Settlement will be by way of cash payment (Cash Settled Securities).
10. **Variation of Settlement:**
 - (a) **Issuer's option to vary settlement:** The Issuer does not have the option to vary settlement in respect of the Securities.
11. **Relevant Asset(s):** Not applicable.
12. **Entitlement:** Not applicable.
13. **Conversion Rate:** The Conversion Rate equal one if the relevant Commodity Currency is the same as the Settlement Currency or otherwise the applicable rate of exchange for conversion of any amount into the relevant Settlement Currency for the purposes of determining the Settlement Price (as defined in the relevant Annex to the Terms and Conditions) or the Cash Settlement Amount (as defined in Condition 1).
14. **Settlement Currency:** The settlement currency for the payment of the Cash Settlement Amount is as set out in "Specific Provisions for each Series" above.
15. **Syndication:** The Securities will be distributed on a non-syndicated basis.
16. **Minimum Trading Size:** Not applicable.
17. **Security Agent:** BNP PARIBAS SA, Paris, Zurich Branch.
18. **Calculation Agent:** BNP Paribas Arbitrage S.N.C.
1 rue Laffitte 75009 Paris, France.
19. **Governing law:** French law.
20. **Special conditions or other modifications to the Terms and Conditions:** Not applicable
21. **Masse provisions (Condition 9.4):** Not applicable.

PRODUCT SPECIFIC PROVISIONS (ALL SECURITIES)

22. **Index Securities:** Not applicable.
23. **Share Securities/ETI Share Securities:** Not applicable.

24. ETI Securities:	Not applicable.
25. Debt Securities:	Not applicable.
26. Commodity Securities:	Applicable.
(a) Commodity/Commodities /Commodity Index/Commodity Indices:	The Securities relate to Commodities, as set out in "Specific Provisions for each Series" above (each a " Commodity ") and as more fully described in "Commodity Reference Price" below.
(b) Pricing Date(s):	The Initial Pricing Date and the Final Pricing Date.
(c) Initial Pricing Date:	The Issue Date.
(d) Final Pricing Date:	The Valuation Date or the Optional Redemption Valuation Date.
(e) Commodity Reference Price:	Brent blend light crude oil on the Intercontinental Exchange (the "ICE", "Exchange" and "Price Source") for the settlement price (the "Specified Price") for the Delivery Date (as defined below) of the futures contract, stated in U.S. Dollars per barrel, published by the Price Source on each Pricing Date.
(f) Delivery Date:	As per Conditions. The applicable Delivery Date at any time is available on the following website(s): www.bnpparibasmarkets.ch
(g) Nearby Month:	Not applicable.
(h) Specified Price:	As defined in §26(e) above.
(i) Exchange:	As defined in §26(e) above.
(j) Disruption Fallback(s):	As per Conditions.
(k) Valuation Time:	The time at which the Commodity Reference Price is published by the Price Source.
(l) Specified Maximum Days of Disruption:	As per Conditions.
(m) Weighting:	Not applicable.
(n) Rolling Futures Contract Securities:	Yes. Dislocation Event: Applicable. Dislocation Level: As per Conditions.
Futures Rollover Date:	The date selected by the Calculation Agent acting in good faith and in commercially reasonable manner within the period (" Futures Rollover Period ") starting on and including the day that is twenty (20) Relevant Business Days prior to the first notice day to but excluding the last trading day of the relevant Futures Contract.
27. Inflation Index Securities:	Not applicable.
28. Currency Securities:	Not applicable.
29. Fund Securities:	Not applicable.
30. Futures Securities:	Not applicable.
31. OET Certificates:	Applicable.
(a) Final Price:	As per OET Certificate Conditions.
(b) Valuation Date:	As per OET Certificate Conditions.

- (c) **Exercise Price:** See the "Specific Provisions for each Series" above.
- (d) **Capitalised Exercise Price:** Capitalised Exercise Price applicable, in accordance with the OET Certificate Conditions.
- OET Website(s):
www.bnpparibasmarkets.ch
- Local Business Day Centre(s): Zurich.
- (e) **Capitalised Exercise Price Rounding Rule:** See the "Specific Provisions for each Series" above.
- (f) **Dividend Percentage:** See the "Specific Provisions for each Series" above.
- (g) **Financing Rate:**
- (i) **Interbank Rate 1 Screen Page:** Not applicable.
 - (ii) **Interbank Rate 1 Specified Time:** Not applicable.
 - (iii) **Interbank Rate 2 Screen Page:** Not applicable.
 - (iv) **Interbank Rate 2 Specified Time:** Not applicable.
 - (v) **Financing Rate Percentage:** See the "Specific Provisions for each Series" above.
 - (vi) **Financing Rate Range:** See the "Specific Provisions for each Series" above.
- (h) **Automatic Early Redemption:** Applicable.
- (i) **Automatic Early Redemption Amount:** The Automatic Early Redemption Payout, in respect of each Certificate, shall be equal to :
 -in respect of *Call* Certificates:

$$\text{Max} \left(0; \left(\frac{\text{Final Price Early} - \text{Capitalised Exercise Price}}{\text{Parity} \times \text{Conversion Rate Early}} \right) \right);$$
 Where:
Final Price Early means as set out in OET Certificate Conditions.
Capitalised Exercise Price means as set out in OET Certificate Conditions.
Parity means as set out in "Specific Provisions for each Series" above;
Conversion Rate Early means the Conversion Rate on the relevant Automatic Early Redemption Valuation Date;
 - (ii) **Automatic Early Redemption Date:** The fifth Business Days following the Valuation Date.
 - (iii) **Observation Price:** Last price.
 - (iv) **Observation Price Source:** Exchange.
 - (v) **Observation Time(s):** At any time during the opening hours of the Exchange.

- (vi) **Security Threshold:** As per OET Certificate Conditions.
The Security Threshold in respect of a Relevant Business Day will be published as soon as practicable after its determination on the OET Website(s), as set out in § 31(d)
- (vii) **Security Threshold Rounding Rule:** See the "Specific Provisions for each Series" above.
- (viii) **Security Percentage:** See the "Specific Provisions for each Series" above.
- (ix) **Minimum Security Percentage:** See the "Specific Provisions for each Series" above.
- (x) **Maximum Security Percentage:** See the "Specific Provisions for each Series" above.
- (xi) **Reset Date:** The first calendar day in each month, any calendar day or the calendar day following each Futures Rollover Date.
- (i) **Commencement Date:** As per OET Certificate Conditions.
- (j) **Other provisions:** Not applicable.
- 32. **Constant Leverage Securities:** Not applicable.
- 33. **Additional Disruption Events:** Applicable.
- 34. **Optional Additional Disruption Events:** (a) The following Optional Additional Disruption Events apply to the Securities:
Administrator/Benchmark Event
(b) Delayed Redemption on Occurrence of an Additional Disruption Event and/or Optional Additional Disruption Event: Not applicable.
- 35. **Knock-in Event:** Not applicable.
- 36. **Knock-out Event:** Not applicable.

PROVISIONS RELATING TO WARRANTS

- 37. **Provisions relating to Warrants:** Not applicable.

PROVISIONS RELATING TO CERTIFICATES

- 38. **Provisions relating to Certificates:** Applicable.
 - (a) **Notional Amount of each Certificate:** Not applicable.
 - (b) **Partly Paid Certificates:** The Certificates are not Partly Paid Certificates.
 - (c) **Interest:** Not applicable.
 - (d) **Accrual to Redemption:** Not applicable.
 - (e) **Fixed Rate Provisions:** Not applicable.
 - (f) **Floating Rate Provisions:** Not applicable.
 - (g) **Linked Interest Certificates:** Not applicable.
 - (h) **Index Linked Interest Certificates:** Not applicable.
 - (i) **Share Linked/ETI Share Linked Interest Certificates:** Not applicable.

- (j) **ETI Linked Interest Certificates:** Not applicable.
- (k) **Debt Linked Interest Certificates:** Not applicable.
- (l) **Commodity Linked Interest Certificates:** Not applicable.
- (m) **Inflation Index Linked Interest Certificates:** Not applicable.
- (n) **Currency Linked Interest Certificates:** Not applicable.
- (o) **Fund Linked Interest Certificates:** Not applicable.
- (p) **Futures Linked Interest Certificates:** Not applicable.
- (q) **Instalment Certificates:** The Certificates are not Instalment Certificates.
- (r) **Issuer Call Option:** Not applicable.
- (s) **Holder Put Option:** Applicable provided that (i) no Automatic Early Redemption Event has occurred and (ii) the Issuer has not already designated the Valuation Date in accordance with the OET Certificate Conditions.
- (i) **Optional Redemption Date(s):** The day falling ten (10) Business Days immediately following the relevant Optional Redemption Valuation Date.
- (ii) **Optional Redemption Valuation Date:** The last Relevant Business Day in March in each year commencing in March of the calendar year after the Commencement Date, subject to adjustment in the event that such day is a Disrupted Day as provided in the definition of Valuation Date in Condition 27.
- (iii) **Optional Redemption Amount(s) and method, if any, of calculation of such amount(s):** -in respect of *Call* Certificates:
- $$\text{Max} \left(0; \left(\frac{\text{Final Price} - \text{Capitalised Exercise Price}}{\text{Parity} \times \text{Conversion Rate Early}} \right) \right);$$
- Where:
- Final Price** means as set out in OET Certificate Conditions.
- Capitalised Exercise Price** means as set out in OET Certificate Conditions.
- Parity** means as set out in "Specific Provisions for each Series" above;
- Conversion Rate Early** means the Conversion Rate on the relevant Optional Redemption Valuation Date;
- (iv) **Notice Period (if different from those set out in the Conditions):** Not less than 30 days prior to the next occurring Optional Redemption Valuation Date.
- (t) **Automatic Early Redemption:** Not applicable.
- (u) **Cash Settlement Amount:** The Cash Settlement Amount in respect of each Certificate will be calculated as follows:
-in respect of *Call* Certificates:

$$\text{Max} \left(0; \left(\frac{\text{Final Price} - \text{Capitalised Exercise Price}}{\text{Parity} \times \text{Conversion Rate Final}} \right) \right);$$

Where:

Final Price means as set out in OET Certificate Conditions.

Capitalised Exercise Price means as set out in OET Certificate Conditions.

Parity means as set out in "Specific Provisions for each Series" above;

Conversion Rate Final means the Conversion Rate on the relevant Valuation Date;

- (v) **Strike Date:** Not applicable.
- (w) **Redemption Valuation Date:** Not applicable.
- (x) **Averaging:** Averaging does not apply to the Securities.
- (y) **Observation Dates:** Not applicable.
- (z) **Observation Period:** Not applicable.
- (aa) **Settlement Business Day:** Not applicable.
- (bb) **Cut-off Date:** Not applicable.

39. **Identification information of Holders:** Not applicable.

DISTRIBUTION AND US SALES ELIGIBILITY (ALL SECURITIES)

40. **Selling Restrictions:**

- (a) **Eligibility for sale of Securities in the United States:** The Securities are not eligible for sale in the United States.
Reg. S Compliance Category 2; TEFRA Not applicable
- (b) **Other Selling Restrictions:** Not applicable.

41. **Additional U.S. Federal income tax considerations:** The Securities are not Specified Securities for purposes of Section 871(m) of the U.S. Internal Revenue Code of 1986.

42. **Prohibition of Sales to EEA and UK Retail Investors:**

- (a) **Selling Restriction:** Applicable.
- (b) **Legend:** Applicable.

Responsibility

The Issuer accepts responsibility for the information contained in these Final Terms. To the best of the knowledge of the Issuer (who has taken all reasonable care to ensure that such is the case), the information contained herein is in accordance with the facts and does not omit anything likely to affect the import of such information.

Signed on behalf of BNP Paribas Issuance B.V.

As Issuer:

A handwritten signature in black ink, consisting of a stylized 'D' shape followed by a horizontal line extending to the right.

By:
Duly authorised

PART B - OTHER INFORMATION

1. Listing and Admission to trading

The Securities are unlisted.

2. Governing Law and Jurisdiction

As provided in the Conditions, the Securities are governed by French Law and the Paris Court of Appeal shall have exclusive jurisdiction to settle all disputes that may, directly or indirectly, arise out of or in connection with the Securities.

3. Ratings

The Securities have not been rated.

4. Interests of Natural and Legal Persons Involved in the Issue

Save as discussed in the "*Potential Conflicts of Interest*" paragraph in the "*Risks*" section in the Base Prospectus, so far as the Issuer is aware, no person involved in the issue of the Securities has an interest material to the issue.

5. Performance of Underlying/Formula/Other Variable, Explanation of Effect on Value of Investment and Associated Risks and Other Information concerning the Underlying

The Commodity Mini Future Call Certificate is an Open End Turbo ("OET") Certificate being a leveraged security with no fixed term, which gives investors a level of exposure from moderate to high to the price and performance of the relevant Commodity as described in Part A "Specific Provisions for each Series" (the "Underlying Commodity") that is greater than the capital invested. The leveraged nature of the Certificates means that any movement in the value of the Underlying Commodity will have a magnified effect on the value of the Certificates, both positively and negatively.

The Certificates will increase in value when the Underlying Commodity increases in value and decrease in value when the Underlying Commodity decreases in value.

The Certificates are "OET Call" Certificates. The Certificates feature a Capitalised Exercise Price and a Security Threshold (which is higher than the Capitalised Exercise Price in respect of Call Certificates and lower than the Capitalised Exercise Price in respect of Put Certificates). Both the Capitalised Exercise Price and the Security Threshold are adjusted by the Calculation Agent on a daily basis according to the cost of financing (the "Financing Rate").

The closer the value of Security Threshold to the level of the Underlying Commodity from time to time, the higher the leverage effect will be and the higher the risk that the Security Threshold will be reached. The Certificates will be automatically early redeemed at a price between zero and their residual value if the level of the Underlying Commodity reaches the Capitalised Exercise Price. Otherwise they have no fixed redemption date and the Issuer may choose to redeem them at any time upon giving notice to Holders.

The underlying is a futures contract with a fixed expiration date. Before expiration, the expiring contracts are sold and new futures contracts with a later maturity date are bought. The price of the new futures contracts may be more, or less, than the price of the expiring futures contracts. This means that after the Futures Rollover Date, the OET Call Certificates will have a higher Financing Level and Leverage or lower Financing Level and Leverage, respectively.

On redemption, Holders will receive an amount, which may be zero, determined by reference to the performance of the Underlying Commodity, the Capitalised Exercise Price, the Financing Rate and, if applicable, the performance of the Conversion Rate between the Commodity Currency and the Settlement Currency.

Information on each Commodity shall be available on the relevant Underlying website as set out in "Specific Provisions for each Series" in Part A.

Past and further performances of each Commodity are available on the relevant Underlying website as set out in "Specific Provisions for each Series" in Part A and the volatility of each Commodity may be obtained from the Calculation Agent : markets.ch@bnpparibas.com

The Issuer does not intend to provide post-issuance information.

6. Operational Information

- i. **Relevant Clearing System(s):** SIX SIS Ltd., Olten, Switzerland
- ii. **Intermediary:** SIX SIS Ltd., Olten, Switzerland

SUMMARY OF FINAL TERMS

This shall constitute a summary of the Final Terms (the "**Summary**") pursuant to Art. 56 para. 2 FinSO.

Part A – Introduction				
A.1	Introduction and Warnings	<p>The Securities may only be offered, sold or advertised, directly or indirectly, in Switzerland in accordance with the requirements of the FinSA, as further set out in the Base Prospectus approved by the SIX Exchange Regulation AG in its capacity as Swiss Prospectus Office as of 23 September 2022 and the Final Terms. Terms used in this Summary shall have the same meaning as set forth in the Base Prospectus and the Final Terms.</p> <p>The Securities may be considered structured products in Switzerland pursuant to article 70 FinSA and are neither subject to authorisation nor supervision by FINMA. Investors bear the credit risk of the Issuer and/or the Guarantor. Investors should read the section "Risks" of the Base Prospectus.</p> <p>Investing in the Securities may put Investor's capital at risk. Investors may lose some or all of their investment.</p>		
A.2	Investment Decision	Any decision to invest in any Securities should be based on a consideration of the Base Prospectus and the Final Terms as a whole, including any documents incorporated by reference.		
A.3	Liability	The Issuer or the Guarantor may be liable for the content of this Summary solely when read together with the other parts of the Base Prospectus and the Final Terms or where it does not provide, when read together with the other parts of the Base Prospectus and the Final Terms, key information in order to aid investors when considering whether to invest in the Securities.		
Part B – Securities				
B.1	Issuer/Guarantor	<p>Issuer</p> <p>The legal company name of the Issuer is BNP Paribas Issuance B.V. (the "Issuer"). The domicile of the Issuer is Amsterdam, Netherland. The registered office of the Issuer is Herengracht 595, 1017 CE Amsterdam, the Netherlands.</p> <p>Guarantor</p> <p>The legal company name of the Guarantor is BNP Paribas (the "Guarantor"). The domicile of the Guarantor is Paris, France. The head office of the Guarantor is 16, boulevard des Italiens – 75009 Paris, France.</p>		
B.2	ISIN	As set out in table below.		
B.3	Nature of Securities	Certificates.		
B.4	Product Name	"Mini Future" Certificates relating to a Commodity		
B.5	Issue Date	30 June 2023		
B.6	Redemption Date	As set out in table below.		
B.7	Issue Price	As set out in table below.		
B.8	Underlyings	As set out in table below.		
B.9	Settlement	Settlement type: cash settlement. Settlement currency: As set out in table below.		
Part C – Offer and Admission to Trading				
C.1	Public Offer	The Securities may be offered, sold or advertised, directly or indirectly, in Switzerland to retail clients (<i>Privatkundinnen und -kunden</i>) within the meaning of FinSA (" Retail Clients ") in accordance with FinSA starting from the Issue Date.		
C.2	Admission to Trading/listing	Not applicable. The Securities will be provisionally admitted to trading on the Issue Date.		
C.3	Clearing System	SIX SIS Ltd., Olten, Switzerland		
C.4	Intermediary	SIX SIS Ltd., Olten, Switzerland		
C.5	Selling restrictions	As per the Base Prospectus.		
Series Number / ISIN Code	Commodity	Issue Price per Security	Settlement Currency	Redemption Date
CH1275981376	ICE Brent Crude Oil Future Contract	CHF 4.43	CHF	Open End
CH1275981384	ICE Brent Crude Oil Future Contract	CHF 4	CHF	Open End