Recommendations for a "ZARONIA First" initiative in the derivatives market

prepared by

The Market Practitioners Group's Derivatives Workstream

South African Reserve Bank

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1. Background

The highly publicised irregularities relating to the production of interbank offered rates (IBORs) in 2012 — see, for example, [Hou and Skeie, 2014] — initiated a global regulatory response to reform major interest rate benchmarks. The use of IBORs in financial markets has subsequently reduced substantially in favour of more robust alternative reference rates (ARRs), namely overnight reference rates (ONRRs) which are *near risk-free*.

Derivatives are an integral part of financial markets and are critical to reference rate transition plans in major jurisdictions. The latest Bank for International Settlements (BIS) Report, [BIS, 2023], shows that the gross notional of over-the-counter (OTC) derivatives totalled US$715 trillion globally. Interest rate derivatives account for approximately 80% of the outstanding global derivatives notional and the proportion of interest rate derivatives that are centrally cleared remains stable above 75%. Non-linear interest rate derivatives comprise 8% of the overall interest rate derivatives market with gross notional outstanding last estimated at US$45 trillion.

Given the significant role of interest rate derivatives in financial markets, it is essential that a derivative market transition process is managed transparently and consultatively whilst considering the requirements of clearing houses and other relevant market infrastructure. The above will ensure market depth is preserved and potentially enhanced.

2. Derivatives workstream mandate

South Africa has embarked on the transition journey with the release of the consultative paper [SARB, 2018], prepared by the South African Reserve Bank (SARB), which detailed its initial proposal to reform domestic benchmark and reference rates. The SARB subsequently formed the Market Practitioners Group (MPG) in 2019 to manage the process of adoption and transition to the new interest rate dispensation. The SARB's MPG is a joint public and private sector body, comprising representatives from the SARB, the Financial Sector Conduct Authority (FSCA), and senior professionals from a variety of institutions from different market interest groups active in the domestic capital market.

The MPG relies on dedicated workstreams and technical subgroups to accomplish its objectives. The workstreams and subgroups have a responsibility of providing technical input and recommendations to the MPG on specific issues that are relevant to the transition from the Johannesburg Interbank Average Rate (Jibar) to the South African Rand Overnight Index Average (ZARONIA). Members of these workstreams are drawn from a diverse set of market practitioners whose insights and expertise are required to give effect to the mandate of the MPG as well as shape industry opinions to reform domestic benchmark and reference rates[1].

The Derivatives Workstream (DWS), constituted in 2021, is mandated to make recommendations on the development of derivative markets and contracts that reference the successor rate. More specifically and as set in its terms of reference, the roles and responsibilities of the DWS are as follows:

- *The DWS shall construct an action plan aligned to the objectives set out by the MPG.*
- *In line with the stated functions of the MPG, the DWS will be responsible for:*
  - *consulting widely and making recommendations on the development of derivative markets and contracts that reference the successor rate;*
  - *formulating and implementing strategies to facilitate the market adoption of derivatives that reference the successor rate;*
  - *formulating and recommending strategies to derive term risk free rates from underlying derivatives activity;*

[1] For more information, please refer to: SARB Market Practitioners Group.

- *providing input to the finalisation and refinement of the transition plan and monitor the progress made in the derivative markets; and*
- *aligning with progress and recommendations of all workstreams of the MPG.*

The DWS has made steady progress since its constitution in 2021. In July 2023, the DWS published a paper that documents market conventions for ZARONIA-based linear derivatives, see [SARB-DWS, 2023]. This paper specifies the technical conventions that need to be considered when transacting *overnight indexed swaps* (OISs) and *cross-currency basis swaps* (CCBSs) that reference ZARONIA. This was followed by a publication for market conventions for ZARONIA-based non-linear derivatives, see [SARB-DWS, 2024]. This paper specifies conventions for caps, floors and swaptions.

3. Problem statement

Post the formulation of derivative conventions, the DWS prioritised infrastructure readiness for inter-dealer trading in ZARONIA-based derivatives. The DWS has over the preceding year, partnered with the Data Collection and Infrastructure Workstream (DCIWS) to ensure that infrastructure requirements for inter-dealer trading in ZARONIA-based derivatives are in place — this includes availability of booking and confirmation platforms as well as activation of clearing for ZARONIA-based derivatives. This culminated in a series of bilateral test trades between dealers to ensure that platforms were appropriately configured.

The DWS has subsequently been tasked with enhancing market liquidity in ZARONIA-based derivatives. The DWS is of the opinion that the completion of this task requires the formulation of a well-articulated and deliberate strategy. The enhancement of ZARONIA-based derivative liquidity is a key to the formulation of forward-looking term reference rates as well as providing input into a ZARONIA-based swap curve.

In assessing strategies to enhance market liquidity, the DWS has undertaken a number of studies of IBOR transition paths globally. This has culminated in a decision to recommend to the MPG an implementation of a “ZARONIA First” initiative for derivatives.

It is envisaged that a “ZARONIA First” initiative would be modelled similar to the corresponding “SOFR First” and “SONIA First” initiatives[2], see for instance [BoE, 2021c] and [CFTC, 2021b]. The “ZARONIA First” initiative for derivatives would be a phased initiative for switching trading conventions from Jibar to ZARONIA — this phased initiative will facilitate a shift in market liquidity towards ZARONIA, bringing benefits for a range of market participants as they move from Jibar to ZARONIA.

This document provides a detailed recommendation to the MPG with respect to a “ZARONIA First” initiative. The recommendation considers global learnings as well as nuances specific to the South African market, with the ultimate objective to migrate liquidity in Jibar- to ZARONIA-based derivatives.

4. Case studies and notable observations

The proposed “ZARONIA First” initiative is conceptualised on similar initiatives in the United States (US) and United Kingdom (UK) — “SOFR First” and “SONIA First” respectively. The following is a summary of the major benchmark reform events that occurred prior and post these Initiatives in the US and UK. The purpose of the construction of the timeline is to attempt to align South Africa’s own “ZARONIA First” initiative appropriately.

[2] SOFR and SONIA are the acronyms for the Secured Overnight Financing Rate and the Sterling Overnight Index Average, respectively.

4.1. Learnings from the US and UK "ONRR First" initiatives

In Table 1 below, the symbol $T_{1^{\text{st}}}$ is used to denote the announcement date associated with the respective "ONRR First" initiative — all other dates or time period are reflected relative to this date.

Table 1: Summarised US and UK "ONRR First" initiative timelines

Timeline	Events	US	UK
12M to 24M before $T_{1^{\text{st}}}$	ONRR cash instrument trading	✓, [ARRC, 2021]	✓
	Swap clearing in place	✓	✓
	Dear CEO letter	N/A	✓
6M to 12M before $T_{1^{\text{st}}}$	ISDA fallback protocol & method published	✓, [ISDA, 2020a]	$T_{1^{\text{st}}}$, [ISDA, 2020a]
	CCP PAI & discounting switch	✓, [LCH, 2020]	
3M to 6M before $T_{1^{\text{st}}}$	IBOR future cessation date announcement	✓, [FCA, 2021]	$T_{1^{\text{st}}} + 4\text{M}$
0M to 3M before $T_{1^{\text{st}}}$	Dealer derivative liquidity survey results	N/A	✓, [BoE, 2020]
	Announcement of "ONRR First" initiative	N/A	✓, [BoE, 2020]
$T_{1^{\text{st}}}$	"ONRR First" initiative for linear derivatives	✓, [CFTC, 2021b]	✓, [BoE, 2020]
	ISDA fallback protocol & method published	$T_{1^{\text{st}}} - 10\text{M}$	✓, [ISDA, 2020a]
3M to 6M after $T_{1^{\text{st}}}$	IBOR future cessation date announcement	$T_{1^{\text{st}}} - 5\text{M}$	✓, [FCA, 2021]
	Tough legacy legislation in place	✓, [Congress, 2022]	✓, [Weston, 2022]
	First sequencing: non-linear derivatives	✓, [CFTC, 2021d]	$T_{1^{\text{st}}} + 6\text{M}$
	First sequencing: exchange-traded derivatives	✓, [CFTC, 2021a]	$T_{1^{\text{st}}} + 8\text{M}$
	First sequencing: cross-currency derivatives	✓, [CFTC, 2021c]	$T_{1^{\text{st}}} + 11\text{M}$
	No new contracts referencing IBORs	✓, [FDIC, 2021]	✓, [BoE, 2021d]
	First sequencing: broker screens off for IBORs	✓	✓
6M to 12M after $T_{1^{\text{st}}}$	First sequencing: non-linear derivatives	$T_{1^{\text{st}}} + 3\text{M}$	✓, [BoE, 2021c]
	First sequencing: exchange-traded derivatives	$T_{1^{\text{st}}} + 4\text{M}$	✓, [BoE, 2021b]
	First sequencing: cross-currency derivatives	$T_{1^{\text{st}}} + 4\text{M}$	✓, [BoE, 2021a]
12M to 24M after $T_{1^{\text{st}}}$	IBOR cessation date	✓	✓

4.2. Notable observations

- **Cash market:** Trading in cash market instruments referencing the SOFR and SONIA rates were well in place at least 24 months prior to “ONRR First” initiatives in the US and UK.
- **Clearing:** Swap clearing for SOFR and SONIA derivatives was well in place at least 24 months prior to “ONRR First” initiatives in the US and UK.
- **Regulator engagement:** Official engagement from the UK regulator via a “Dear CEO” letter to regulated institutions occurred at least 24 months prior to “ONRR First” initiatives. Equivalent letters within the US have not been made public.
- **COVID:** It must be cautioned that the significant lead time for cash market trading on ONRRs, swap clearing availability as well as engagement via “Dear CEO” letters were possibly a consequence of the benchmark reform timelines being delayed by the COVID episode.
- **ISDA fallback protocol**[3]**:** Importantly, the availability of an ISDA protocol on or before the “ONRR First” initiative was noteworthy — in the US, the protocol was available 6 to 12 months prior. In the UK, the commencement of the “SONIA First” initiative coincided with the protocol availability date. A visible ISDA fallback protocol methodology allows derivative market makers to hedge originated ZARONIA flow using Jibar derivatives with reasonable certainty of the transition price of the respective Jibar derivatives.
- **Cessation announcement:** A future cessation announcement date also occurred in close proximity to the “ONRR First” initiative commencement — within the US, this occurred 3 to 6 months prior and within the UK, this occurred 3 to 6 months post the announcement.
- **No new IBORs:** The announcement of a prohibition on new IBOR contracts occurred 3 to 6 months post the announcement of “ONRR First” initiatives for derivatives.
- **Phasing:** In both jurisdictions, the “ONRR First” initiatives were phased in, starting with linear derivatives followed by non-linear derivatives, exchange trade derivatives and finally cross-currency derivatives.
- **Inter-dealer brokers:** Both the US and UK initiatives made reference to inter-dealer broker screen change requirements.
- **Cessation:** IBOR cessation occurred between 12 to 24 months after the “ONRR First” initiative commencement.

5. Description of the South African derivatives market

The current South African interest rate derivatives market can be characterised as liquid, with flows emanating from multiple jurisdictions. Anecdotally, the main centres of users of ZAR-based interest rate derivatives reside in South Africa, the UK, US and Europe. Inter-dealer brokers of ZAR interest rate derivatives operate from South Africa, the UK, Switzerland and Dubai.

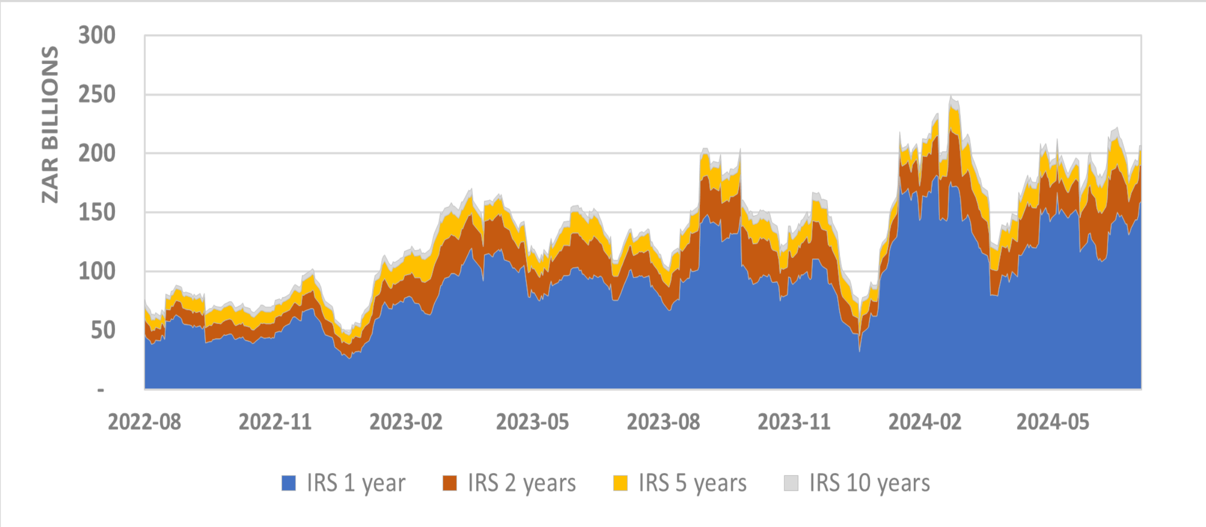
The DWS analysed trade statistics from various sources to understand the make-up of the South Africa interest rate derivatives market. The summarised data and notable observations are presented below.

5.1. Bloomberg swaps data repository

The Bloomberg swap data repository, which consolidates trade data involving (primarily) non-South African derivative users, shows that the bulk of this cohort of turnover (as measured by notional) has occurred in the 0- to 1-year space — see Figure 1 below. The average turnover has frequently exceeded ZAR150 billion per day — the data therefore indicates that a notable portion of the market turnover involving offshore participants.

[3] An ISDA fallback protocol refers to replacement rates that would apply to derivative trades referencing an IBOR benchmark. These would take effect if the relevant benchmark becomes unavailable — see [ISDA, 2020b].

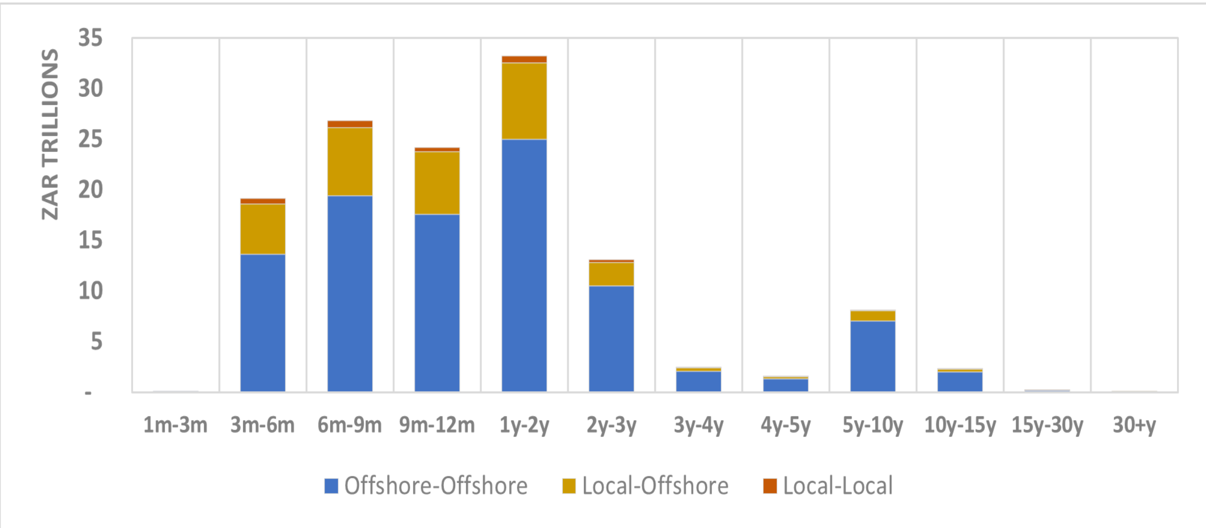
Figure 1: Bloomberg swaps repository data — daily Jibar derivatives turnover (ZAR notional)



5.2. SwapClear registered trades

Data from LCH's SwapClear service for the first half of 2024 reveals the volume of registered derivatives trades — see Figure 2 below. This data is segmented by trading flow between local and offshore participants, highlighting a notable portion of such trades having an offshore participant as counterparty.

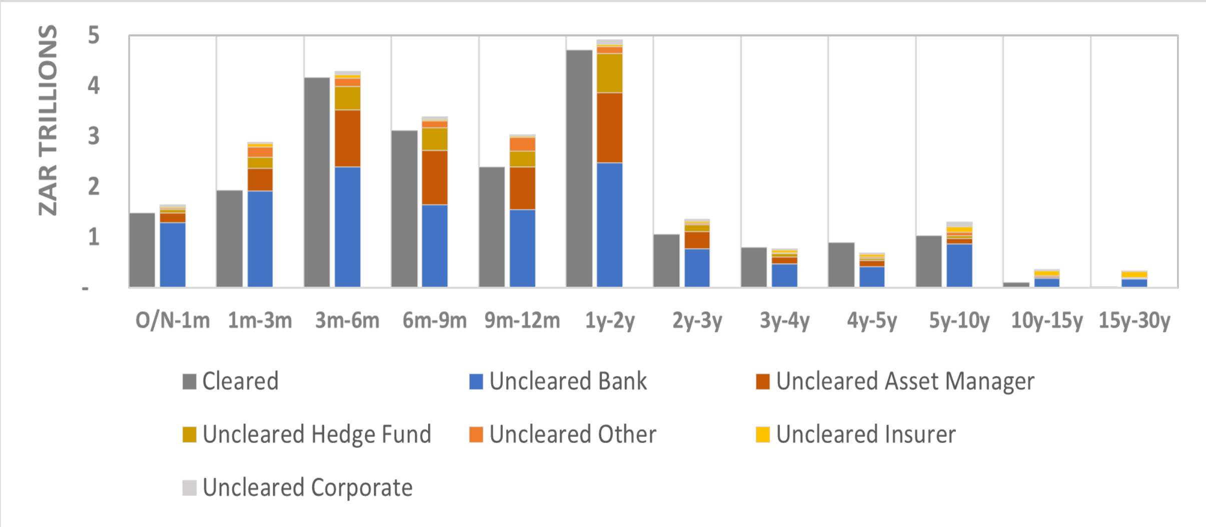
Figure 2: SwapClear registered trades by ZAR notional — 2024/H1



5.3. SARB Jibar survey

The SARB, as part its monitoring processes for benchmark reform, has conducted quarterly surveys of South African bank exposures to Jibar. The survey monitors gross notional exposure for the banking industry and provides an interesting flow of risk perspective with respect to Jibar derivatives — see Figure 3 below. The data indicates that local banks originate significant risk from asset managers, hedge funds, insurers, and corporates outside the clearing realm. These flows are subsequently hedged with derivatives inside the clearing realm. The survey therefore also highlights a notable dependence on offshore participants (cleared derivatives) for local bank derivative risk management. This survey is likely to be used as a continuous monitoring tool for ZARONIA derivative take-up.

Figure 3: SARB December 2023 Jibar derivatives ZAR gross notional outstanding



5.4. Conclusion: South African market nuances

ZAR interest rate derivative users and inter-dealer brokers reside in multiple jurisdictions. Furthermore, DWS data studies reveal that South African derivative users rely heavily on offshore counterparties. This suggests that implementing a "ZARONIA First" initiative will necessitate consideration and coordination with offshore stakeholders. To address this, it is recommended that South African regulators actively engage with global regulatory platforms to ensure that the "ZARONIA First" initiative is effectively communicated and supported.

6. Maximising awareness and the impact of a "ZARONIA First" initiative

As described in the previous section, maximising awareness of a "ZARONIA First" initiative for derivatives to the offshore community is a necessary requirement. The following actions are recommended in order to achieve this:

For the MPG:

- Public messaging through various mechanisms (speeches, newsletters) regarding the likely cessation date of Jibar and associated expectations.
- Use of international forums (e.g., Trade Association for Emerging Markets (EMTA)) to message the "ZARONIA First" initiative for derivatives.

For the regulators:

- Public messaging through various mechanisms (speeches, newsletters) regarding the likely cessation date of Jibar and associated expectations.
- Private messaging to (onshore and offshore) institutions including banks, insurers, asset managers, hedge funds, and inter-dealer brokers regarding the "ZARONIA First" initiative for derivatives, the overall benchmark reform timeline and associated expectations/recommendations.
- Use of international regulatory forums to message South Africa's timelines and the "ZARONIA First" initiative.
- Gradual increased scrutiny by regulators of the incremental build-up and/or wind-down of gross notional exposures of Jibar-based derivatives and ZARONIA-based derivatives by locally regulated institutions.

7. Detailed recommendations for the "ZARONIA First" initiative

7.1. Timeline

Taking the factors mentioned in the previous sections of the document into account, the DWS recommends the following timeline and actions relating to a "ZARONIA First" initiative for derivatives:

Table 2: Proposed timeline for the "ZARONIA First" initiative

Date	Month	Milestone	Dependency/Additional Actions
Complete	$T_{1\text{st}} - 14$M	Indicative quotes on ZARONIA derivatives reflected on pricing platforms (Bloomberg, Refinitiv, etc.)	
Complete	$T_{1\text{st}} - 9$M	ZARONIA clearing availability in line with the recommendations by the DWS.	
Sep-24	$T_{1\text{st}} - 7$M	Commitment from South African derivative market-makers to reflect prices in outright ZARONIA derivatives through inter-dealer brokers.	Key dependency: • Clearing broker readiness
Sep-24	$T_{1\text{st}} - 7$M	Commitment from South African derivative market-makers to reflect prices in Jibar-ZARONIA basis swaps on pricing platforms.	Key dependency: • Bloomberg • Refinitiv
Sep-24 until Nov-24	$T_{1\text{st}} - 7$M until $T_{1\text{st}} - 5$M	Keynote speeches, messaging to the public, messaging to international regulatory forums to reinforce Jibar timelines.	• Regulator • Communication Workstream
Oct-24	$T_{1\text{st}} - 6$M	Dear CEO letter disseminated to regulated institutions and published.	• Regulator
30-Nov-24	$T_{1\text{st}} - 5$M	Announcement of a "ZARONIA First" initiative for derivatives commencing in April 2025. MPG fallback recommendation document published for consultation.	• Dear CEO letter to regulated institutions sent prior — letter made public for effective messaging to broader stakeholders. • International regulatory forums informed. • Regulators to draft letters to inter-dealer brokers, offshore and local market-makers articulating the recommendations. • Press statements regarding the initiative.
31-Jan-25	$T_{1\text{st}} - 3$M	MPG publicly endorses fallback methodology.	
15-Feb-25	$T_{1\text{st}} - 2$M	Bloomberg commences publication of ISDA spread.	
31-Mar-25	$T_{1\text{st}} - 1$M	ISDA fallback protocol methodology published.	
30-Apr-25	$T_{1\text{st}}$	**First sequencing for linear derivatives:** Inter-dealer brokers are recommended to replace primary quoting of linear derivatives from Jibar to ZARONIA. The changes do not prohibit the trading of Jibar derivatives. Inter-dealer screens referencing Jibar are requested to be kept available. The "ZARONIA First" initiative is directed at the inter-dealer market — the recommendation should not impact availability of Jibar derivatives in dealer-to-client transactions.	• ISDA fallback protocol in place. • International regulatory forums informed. • Regulators' confirmation letters to inter-dealer brokers, offshore and local market-makers articulating the recommendations. • Press statements regarding the commencement of a "ZARONIA First" initiative for derivatives to enhance messaging.

Date	Month	Milestone	Dependency/Additional Actions
30-Apr-25	$T_{1^{\text{st}}}$	Enhanced regulator monitoring of Jibar/ZARONIA gross notional derivative exposure through the SARB quarterly survey — required explanations for increases in gross exposure referencing Jibar. Enhanced monitoring of inter-dealer market.	• Regulatory monitoring
30-Sep-25	$T_{1^{\text{st}}} + 5\text{M}$	**First sequencing for non-linear derivatives:** Inter-dealer brokers are recommended to replace primary quoting of non-linear derivatives from Jibar to ZARONIA. The changes do not prohibit the trading of Jibar derivatives. Inter-dealer screens referencing Jibar are requested to be kept available. The "ZARONIA First" initiative is directed at the inter-dealer market — the recommendation should not impact availability of Jibar derivatives in dealer-to-client transactions.	• International regulatory forums informed. • Confirmation letters from regulators to inter-dealer brokers, offshore and local market-makers articulating the recommendations. • Press statements regarding the commencement of a "ZARONIA First" initiative for derivatives to enhance messaging.
31-Oct-25	$T_{1^{\text{st}}} + 6\text{M}$	**First sequencing for cross-currency derivatives:** Inter-dealer brokers are recommended to replace primary quoting of cross-currency derivatives from Jibar to ZARONIA. The changes do not prohibit the trading of Jibar derivatives. Inter-dealer screens referencing Jibar are requested to be kept available. The "ZARONIA First" initiative is directed at the inter-dealer market — the recommendation should not impact availability of Jibar derivatives in dealer-to-client transactions.	• International regulatory forums informed. • Confirmation letters from regulators to inter-dealer brokers, offshore and local market-makers articulating the recommendations. • Press statements regarding the commencement of a "ZARONIA First" initiative for derivatives to enhance messaging.
Dec-25	$T_{1^{\text{st}}} + 8\text{M}$	Future Jibar cessation announcement.	
Mar-26	$T_{1^{\text{st}}} + 11\text{M}$	No new derivative contracts referencing Jibar.	

7.2. Summary comparison of "ONRR First" initiatives

Acknowledging the large dependence on the offshore market (users and inter-dealer brokers), the proposed "ZARONIA First" initiative has deliberately been phrased in a less onerous manner relative to the "SOFR First" and "SONIA First" initiatives. See Table 3 below.

Table 3: Specification comparison for the "ZARONIA First" initiative

Item	US	UK	ZA
Inter-dealer broker quoting requested to move primary basis quoting from IBOR/Jibar to alternative ONRR.	✓	✓	✓
Inter-dealer market only.	✓	✓	✓
IBOR/Jibar recommended to be *only* quoted through basis swaps.	✓	✓	Not explicit
Do not prohibit trading in IBOR/Jibar.	Not explicit	✓	✓
Change to be applicable for trading of swaps against bond futures.	Not explicit	✓	Not explicit
IBOR/Jibar screen switch-off date announced.	✓	Not explicit	Not explicit

Glossary

Abbreviations

ARR alternative reference rate. 4

BIS Bank for International Settlements. 4

CCBS cross-currency basis swap. 5

CCP Central Clearing Counterparty. 6

CEO Chief Executive Officer. 6, 10

DCIWS Data Collection and Infrastructure Workstream. 5

DWS Derivatives Workstream. 4, 5, 7, 9, 10

EMTA Trade Association for Emerging Markets. 9

FSCA Financial Sector Conduct Authority. 4

IBOR interbank offered rates. 4, 5, 6, 7, 11

ISDA International Swaps and Derivatives Association. 6, 7, 10

Jibar Johannesburg Interbank Average Rate. 2, 3, 4, 5, 7, 8, 9, 10, 11

MPG Market Practitioners Group. 4, 5, 9, 10

ONRR overnight reference rate. 2, 3, 4, 6, 7, 11

OIS overnight indexed swap. 5

OTC over-the-counter. 4

PAI price alignment interest. 6

SARB South African Reserve Bank. 2, 3, 4, 8, 9, 11

SOFR secured overnight financing rate. 5, 7, 11

SONIA Sterling Overnight Index Average. 5, 7, 11

UK United Kingdom. 2, 3, 5, 6, 7, 11

US United States of America. 2, 3, 4, 5, 6, 7, 11

ZA Republic of South Africa. 11

ZAR South African rand. 3, 7, 8, 9

ZARONIA South African Overnight Index Average. 2, 3, 4, 5, 7, 8, 9, 10, 11

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