GOLD BAR SECURITY FEATURES

Session 6: Vault Issues

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1. OVERVIEW OF GBI PROJECT

GOLD BAR INTEGRITY (GBI)

The aim is to increase transparency, accessibility and fungibility of gold across the industry.

This includes **gold supply integrity, provenance and chain of custody** throughout the entire value chain (from rock to ring), spanning **all products**.

The goal is to have a **standards-based open market model** that allows the industry to adopt different technology solutions for the security features, under LBMA guidance

GOLD BAR INTEGRITY SOLUTION

Security Features
The passport
Identity & Provenance of the bar

+

Database
Track and Trace
Movements of the bar

=

Combined Solution
Integrity
Provenance and lifecycle

CURRENT STATUS

Security Features

progress to date

- Standards launched
- Expert panel established
- Five security features accredited Dec 2022.
- New applications being received.
- Reviews ongoing

Database

progress to date

- Pilots successfully completed
- Next steps established as:
  - Industry taxonomy
  - Governance
  - Database RfP

FUTURE STATE

Digital Ecosystem

Gold Integrity Verification
Verify the integrity of the gold being traded

Gold Provenance Record
Record the origin (mine location/ name/ date) and transaction of the gold

Gold Chain of Custody
Immutable chain of custody records to increase accessibility to secondary market

Participant Integrity Verification
Verify participants against a set of qualification requirements to ensure ecosystem integrity

Interoperability
Interoperable system that can be scaled as required

Evolving, Global Ecosystem
A global integrity ledger with widescale acceptance and participation, including all key trading hubs

2. SECURITY FEATURES INTRODUCTION

SECURITY FEATURE

A Security Feature is a physical feature that will establish the identity and provenance of a bar.

The scope is for a feature that can be used with a 400 troy ounce London Good Delivery Bar (LGDB) and gold kilobars produced by LBMA Good Delivery refiners.

The introduction of this feature will establish a minimum level of security required for gold bars.

3. SECURITY FEATURES SPECIFICATIONS

LBMA SECURITY FEATURE SPECIFICATIONS

LBMA security standard features

Bar Integrity

The feature must not significantly affect the integrity or quality of the bar in terms of weight or purity.

Applicability

The feature must be applied during the production of the bar and prior to storage or dispatch.

Robustness

The feature must be robust and readable for the bar's lifecycle.

The feature must be destroyed when the bar is destroyed and mustn't be a contaminant or deleterious agent.

Readability

The feature must be readable under normal vault conditions.

The feature can be Covert, Overt or Forensic in nature.

Infrastructure

The feature should not require significant investment in additional reading or handling equipment.

Longevity & Cost

The feature should be adaptable to ensure future proofing.

The feature shouldn't significantly add to the production costs of the bar.

4. SECURITY FEATURES APPLICATION PROCESS

APPLICATION PROCESS

Application Process

Purpose and Scope

The Application and Recognition Process ensures impartiality and objectivity. Recognition is subject to periodic review. The adoption and application of any of these security features remains at the full discretion of the London Operating Vaults.

1 Application Form is submitted and application fee paid

2 Initial due diligence is conducted by LBMA

3 Application is cross checked against specification and submitted to the Review Panel for a technical review

4 Applicants recommended for recognition by the Review Panel are submitted to the LBMA Executive for consideration and subsequent consultation with the wider market*

5 Successful applications are listed on LBMA website as a recognised Security Feature

*including the Physical Committee, Refiners Committee and Vault Managers Group

https://www.lbma.org.uk/good-delivery/gold-bar-security-features#-

5. TECHNICAL REVIEW PANEL

TECHNICAL REVIEW PANEL

Neil Harby
LBMA Chief Technical Officer

Stewart Murray
GD Consultant

Mike Hinds
GD Consultant

Manfred Matzinger-Leopold
Executive Director Austrian Mint

Ruth Crowell
LBMA Chief Executive

6. BEAUTY PARADE TO VAULTS

SECURITY FEATURES LIVE DEMONSTRATION

Live Demo

In situ, practical demonstration of the solution in real time over Zoom.

Q&A

Opportunity for Vaults to interrogate the solution

Opportunity for Vendor to understand the specific application of their solution to the market.

Follow up

Vaults questions and feedback relayed to vendors.

Vaults feedback their assessment of suitability of the Security Feature to LBMA

# SCORING AND EVALUATION

SCORING AND EVALUATION
for consideration:

❑ Must not cause material damage to the bar

❑ Must be embedded in the bar

❑ Must not have an impact on quality

❑ Should be "readable" at high throughput rates (individual and bulk),

❑ Must be enduring and robust

❑ Should not inhibit handling (mechanical or human)

❑ Should not impact on movement by air land or sea

❑ Should not inhibit current storage practices

❑ Not be limited in numbers e.g. serial 1 to 1,000,000,000,000 without repetition.

❑ Should not incur any additional customs or regulatory involvement

WEBSITE, DEFINITIONS, APPLICABILITY

WEBSITE & DISCLAIMER

- Five Security Features Recognised

- Designated as "Retail" for kilobars and "Wholesale" for 400oz bars

- Main Technology Identified: High Resolution Image/Micro-attachment/Topical application

- Extensive Disclaimer
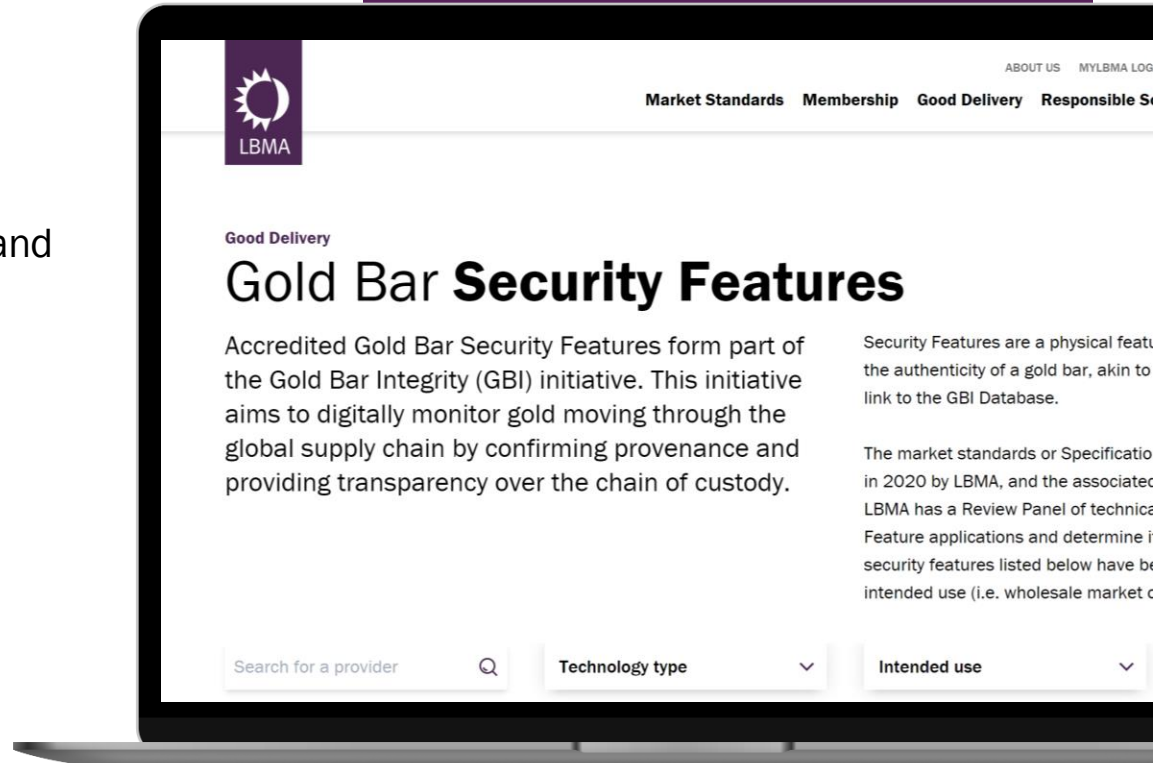
THANK YOU

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🐦 @lbmaexecutive   ▶ LBMA

TYPES OF SECURITY FEATURES

There can be overt, covert or forensic security features

OVERT	COVERT	FORENSIC
Size	Sound	DNA
Thickness	Electricity	Tune
Image	Magnetism	Polymer/Ceramic Features
Colour	Alloy	
Shape		