# Case Study



## Currency Integrity

The Royal Mint's High Security Feature assists in operational efficiencies

Details at a glance	
Client	Her Majesty's Treasury (UK Ministry of Finance)
Project type	Coin security
Denomination	£1
Product specification	Nickel-brass outer, nickel-plated alloy inner
Date of issue	2017
Volume	1.5 billion pcs
Project duration	3 years plus planning



The act of counterfeiting coins can now be performed at such a sophisticated level that expert laboratory analysis is often needed to confirm whether coins are genuine or counterfeit.

Operationally, this presents a challenge to police and law enforcement. Counterfeit currency can often be associated with crime such as illegal drugs, robbery and smuggling. As such, during police operations to disrupt these activities and when suspects are arrested, currency is often seized. It is important to determine the authenticity of this currency to assess if it has been obtained as the proceeds of crime or if it is counterfeit.

In the UK, before the introduction of The Royal Mint's High Security Feature (HSF) in coinage, if a police force seized suspected counterfeit currency, the coins would be submitted to The Royal Mint for analysis and confirmation as to whether they were genuine or counterfeit. The logistics and time involved meant that any case or charges relating to counterfeit currency could have been made some time after the initial arrest. Law enforcement in the UK now has the ability to immediately check the authenticity of the HSF-enhanced coinage using a portable detector. This allows law enforcement to make sound decisions and pursue lines of enquiry without waiting for laboratory results.

## Risks from counterfeit coins and reasons for monitoring

For central banks and governments around the world, counterfeit currency presents a significant economic threat. According to INTERPOL, it is also used to finance organised crime such as the trafficking of people and drugs, and even finances terrorism.

Economically, counterfeit currency can contribute to inflation through an unauthorised increase in money supply. Commodity prices can also be affected as companies that are not reimbursed for counterfeits cover their losses.

Monitoring of the threat and counterfeit levels geographically is important in maintaining the integrity of the currency and the trust in it. Any level of counterfeit currency is unacceptable since, as a trust based system, its integrity is very susceptible to public perception. A dynamic approach to tackling counterfeiting therefore needs to be used, of which the monitoring of counterfeits in circulation is key.

# Case Study – Currency Integrity



#### The Royal Mint focuses on currency security

With over 1,100 years of minting experience, and as the creator of the world's most secure coin, The Royal Mint has recognised the need to establish a department to focus specifically on currency security.

The new team is headed by its Director of Currency Security, James Whitburn. He works closely with Scott Kuperus, the Currency Security Technical Expert, who has extensive experience regarding the integrity of currency and working with law enforcement agencies.

This team ensures that The Royal Mint can provide the best possible solutions to its customers in order to counteract illegal activity, and can advise on how currency security could be improved.



James Whitburn



Scott Kuperus

### Overt and covert features in the UK's new coin

Multiple security features make the new 12-sided £1 coin far more difficult to counterfeit, offering banknote-level security in a coin for the first time.



A latent images changes from a '£' symbol to the number '1' when seen from different angles.

Micro-lettering on the lower inside rims of both the obverse and the reverse, with matching year dates.

Milled edges - grooves on alternative sides around the edges of the shaped coin.

A high security feature is built into the coin to protect it from counterfeiting in the future.

Bimetallic - made of two metals in contrasting colours for easier identification, rather than one single colour.

A distinctive 12-sided shape means it stands out by sight and touch compared to round coins.

Electro-Magnetic Signature (EMS). Mono-ply nickel plate on the inner ensures a more consistent EMS over time than other types of plating.

The design on the reverse is struck across the inner and outer sections.

The Royal Mint's experts can guide you through the considerations. We deliver a guality product, to your specification, to an agreed timescale and at a competitive price. To find

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