



ATM Software

# XFS4IoT SP-Dev Workgroup

6 Dec 2022

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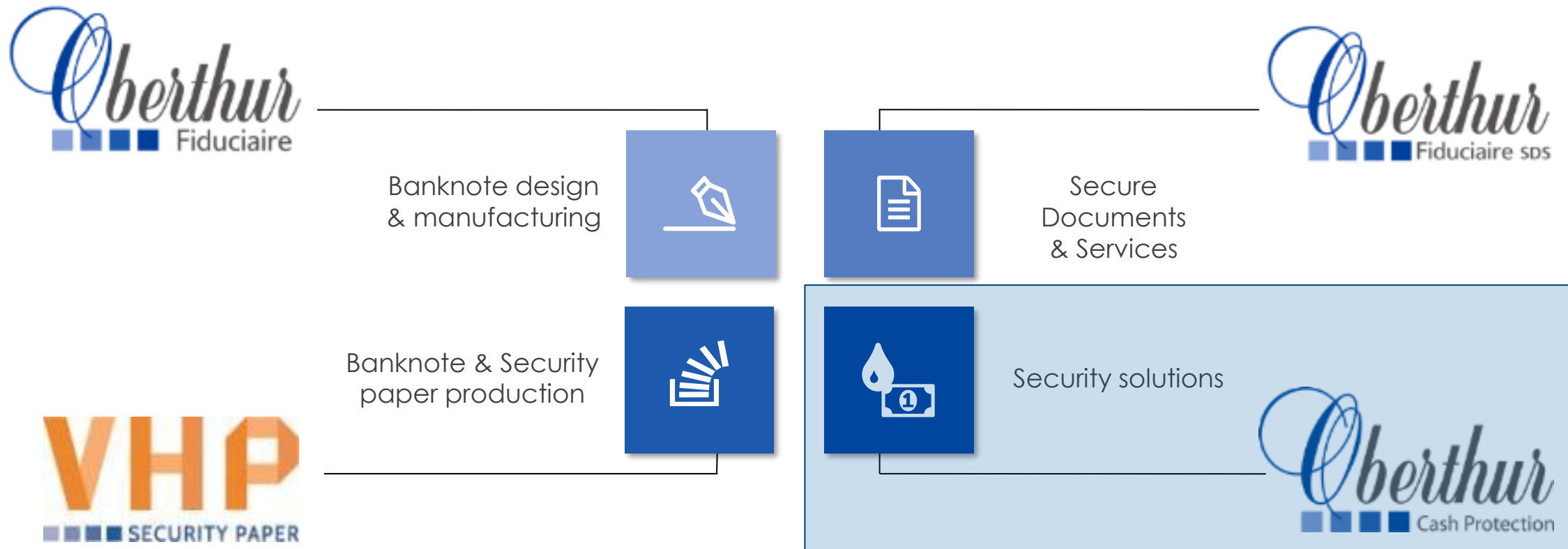
- IBNS – Guest speaker: Oberthur Cash Protection
- Latest SP-Dev Framework changes – Release v1.4.0
- What's next?
- Last few words of 2022

# IBNS – Guest speaker: Oberthur Cash Protection

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## XFS4IoT SP Dev Workgroup

*"Secure technologies preventing crime"*



*"Expertise, Trust, Innovation, Respect and Integrity are our key drivers.  
The in-depth knowledge of banknote design brings major benefits to all divisions in the Oberthur Group."*

## Head office: Paris



## Factory, R&D and Export: Dijon





“ Technology preventing crime  
by removing the anticipated reward ”







# Intelligent Banknote Neutralization System

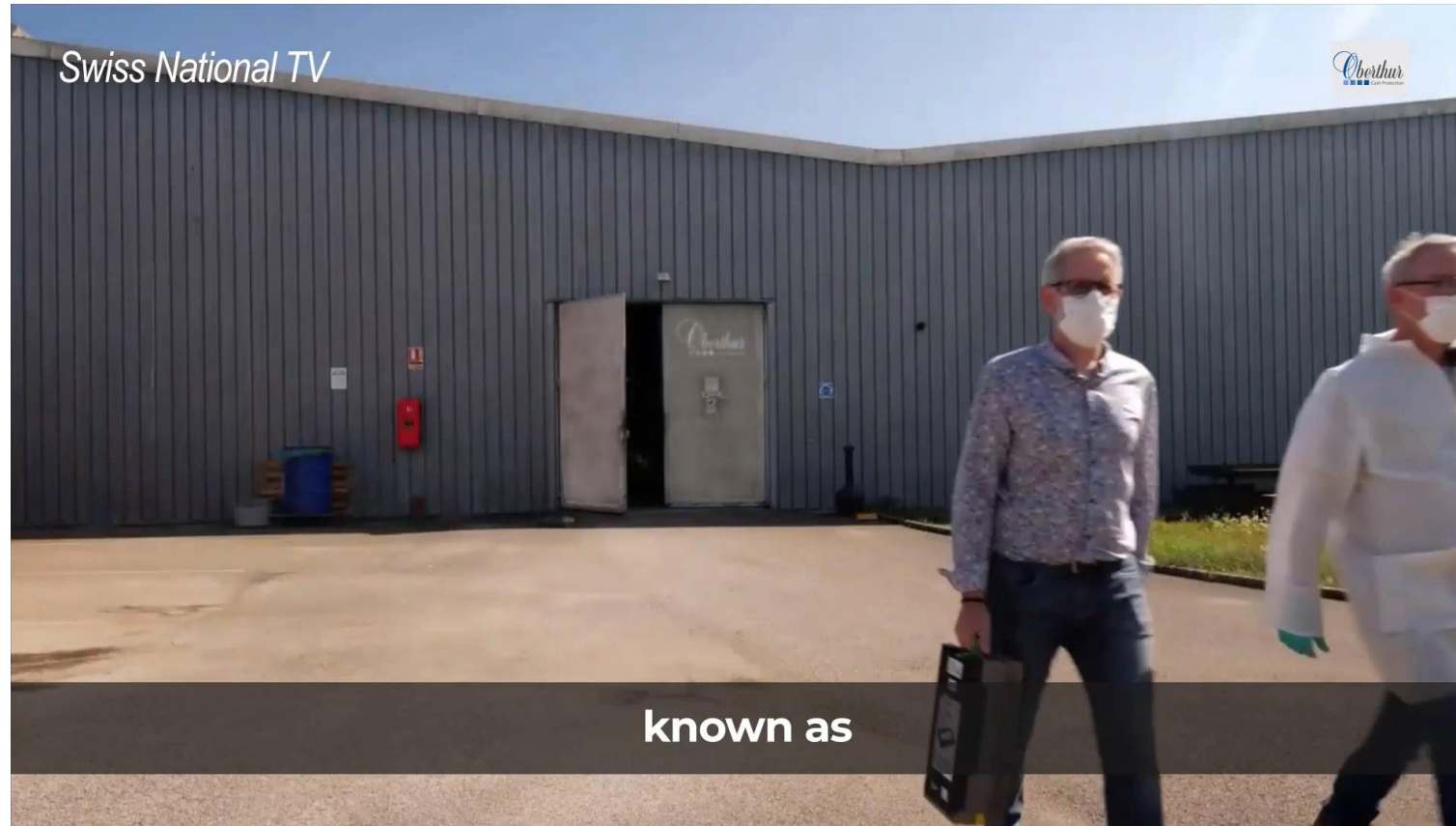
“As there is NO anticipated reward, crime is deterred and prevented”



# Intelligent Banknote Neutralization System

“As there is NO anticipated reward, crime is deterred and prevented”

Demonstration video:







## Minimal impact on CiT operatives

### Protection against

- Physical : Forced entry, Rip-out, Ram-raid, Explosive, etc.
- Cyber : Embedded security algorithms restrict the access

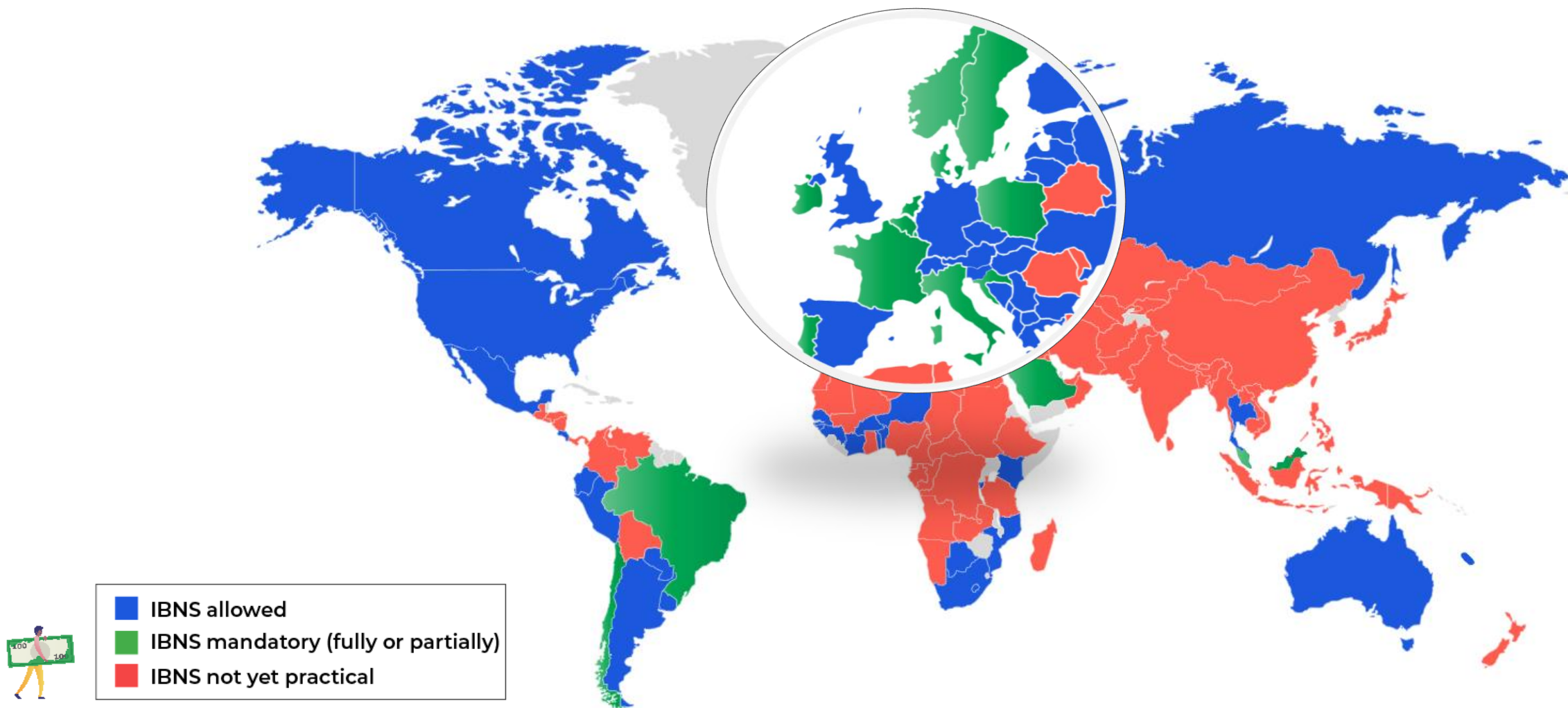
### High Security Ink

- Specifically developed for IBNS use case
- Indelible. Polymer and paper banknotes.
- 20% note coverage, rejected by Cash Acceptors/Recyclers
- Traceable

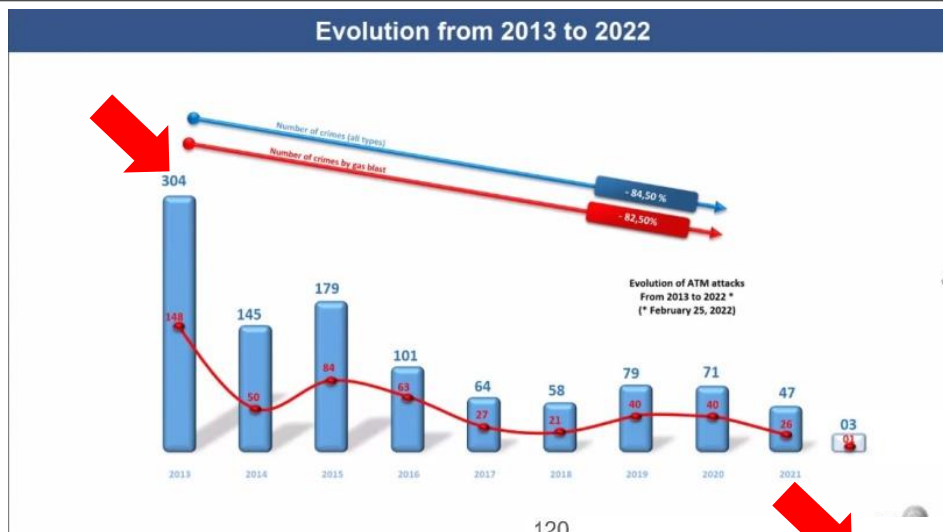
### Certification, Regulation

- Certified by official laboratories facilities
- Central Bank regulation / approval and protocol for IBNS
- State-Approved and Homologated in some countries (France, Germany,...)

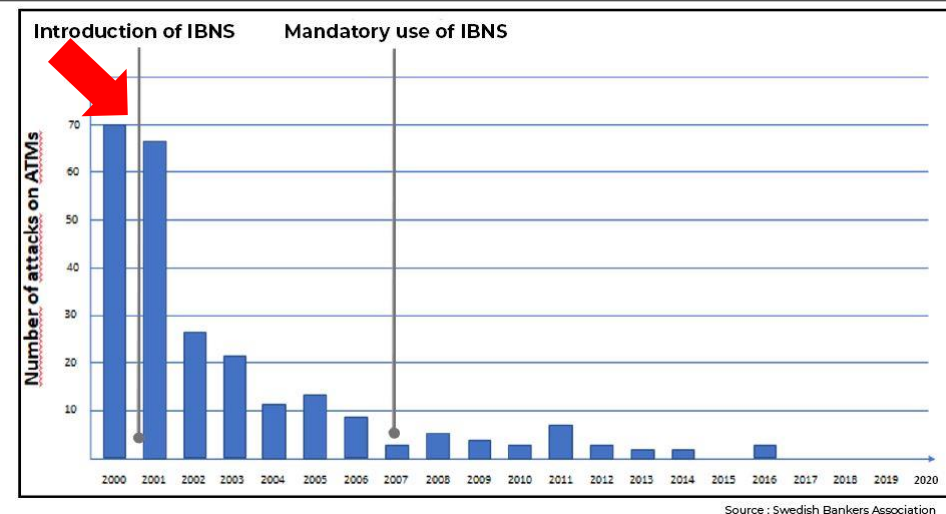
# IBNS Implementation worldwide



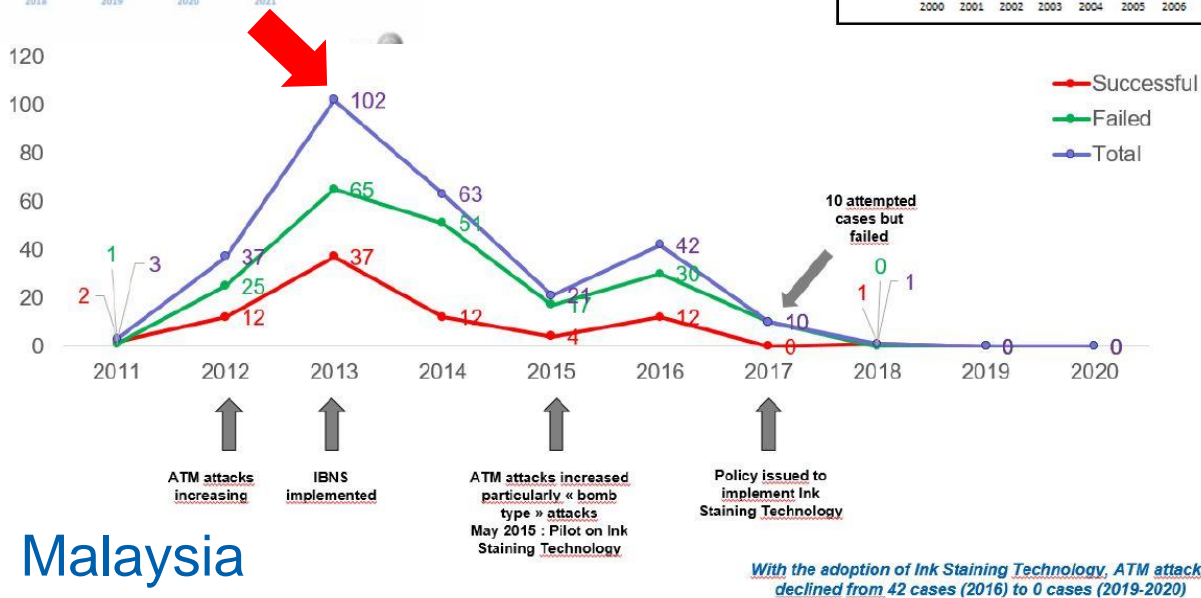




France



Sweden



Malaysia

Germany



Netherlands



France



# Intelligent Banknote Neutralization System

## Certification Requirements: Example of the French Certification at the CNPP

*Video: "Solid explosive attack from inside the safe"*



- **Reliability tests:**
  - Environmental (temperature, humidity, etc.)
  - ESD, EMC
  - Vibrations, shocks
  - Radio and Electric regulation conformity
- **100% of banknotes stained on at least 20% of its surface**
- **Triggered against these attacks:**
  - Mechanical attacks on the safe including illegal opening of the safe
  - Tilting (test performed on all cassette sides)
  - Gas attack
  - Solid explosive attack from inside the safe.
  - Solid explosive attack from outside the safe.

# Intelligent Banknote Neutralization System

“Scientific evidence” has become an essential part of criminal investigation”



- The inks are enhanced with **coded marking products**.
- Each banknote cassette has a **unique code within the ink**.
- A **recovered stained note** or even a stained item of clothing **may be linked to the crime scene** by this code.
- This analysis of the stained items will become determining factors in any criminal investigation.



*Thank you for your attention!*



To find out more:

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# Q&A with Oberthur Cash Protection

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# Latest SP-Dev Framework changes – Release v1.4.0

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- TextTerminal.Beep command parameters now public
- TextTerminalServiceProvider added to XFS4IoTServer namespace
- Add null check when updating CashDispenser cash unit counters
- Fixed issue verifying payload cash unit id with internal cash units
- Fixed exception starting VendorApplication
- Fixed null reference copying internal Storage CashUnits properties



- Allow LANGUAGE tag in printer forms
- Ensure CommandQueue stops running when requested
- Ensure Cancel completion is always sent first
- CardReader.Reset will use storage id returned by the device when none is specified
- Set Present to always be false in Dispense handler

- Added CommandHandlerAsync to multiple commands
  - Allows the command to be completed while another command is in progress
  - Useful for monitoring applications
- KeyManagement.GetKeyDetail
  - PinPad.GetQueryPCIPTSDeviceId
  - Keyboard.GetLayout
  - Storage.GetStorage



# What's next?

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- Collaborating with the CEN XFS Committee to finalise the next specification release
- Keeping the SP-Dev framework up to date with the CEN XFS specification and working on the upcoming changes
- Continuing to fine-tune the SP-Dev framework through experience/feedback from the development of XFS4 SPs and workgroup members



## Zoom

- First Tuesday of each month at 1300 UK time for 30 mins

***No call in January***

**Next call: 7<sup>th</sup> February 2022**

**1300 UK, 0800 US EST, 2200 Tokyo time**

**Calls are 30 mins long**

**We will continue to use Zoom**

(Interpretation in Japanese, Chinese and Spanish is available using Zoom's interpretation feature)



# Last few words of 2022!

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