XFS4IoT SP-Dev Workgroup

5th December 2023

Confidential

- Recap of the previous meeting and the 2023 year

- Update on the 2023-2 version of the specification

- IBNS Update with guest speaker
  Thierry Lamotte, *Oberthur Cash Protection*

- What's next?

XFS4IoT SP-Dev Workgroup recap for 2023

- "Keep SP-Dev framework up-to-date with the CEN XFS specification"
  - ☑ Done

- "Continue monthly meetings"
  - ☑ Done

- "Demos, guest speakers"
  - ☑ Done

2023 XFS4IoT SP-Dev Workgroup Highlights

Monthly meetings

- ☑ Regular updates of the SP-Dev Framework with support for full Cash-out, Cash-In and Recycler ATMs… Up-to-date with latest XFS4IoT specification release

- ☑ Presentations on major XFS4 topics of interest like End-to-End security.

- ☑ Development of supporting materials including XFS4IoT videos, SP framework code samples and documentation available for all devices on GitHub and SP-Dev NuGet packages on nuget.org for each framework release

- ☑ Regular updates on the CEN XFS committee and the specification including the Roadmap for 2024 and the plans to support 2023/2 in the SP-Dev framework

Demos

- ☑ **February**: Demo on upgrading existing project with new release version. Ross, KAL

- ☑ **April**: Demo XFS4IoT Printer SP using KAL SP-Dev framework. Mirko Feliziani, Sigma:

- ☑ **June**: KAL Demo of a deconstructed ATM. Apps running in an Azure VM, Biometric SP, ATM, and a tablet showing the UI… Vision of what an ATM can do and look like!

- ☑ **December**: Today's demo

Update on the 2023-2 version of the specification

Update on the 2023-2 version of the specification

- JSON Schema

- Check Deposit

- Enhancements to Camera

- Lots of small changes and fixes

The final review is scheduled for the 12th of December

IBNS Update with guest speaker Thierry Lamotte,
Oberthur Cash Protection

ATM Cash Protection for Today and the Next Generation of ATMs

AGENDA

- "IBNS"? What is it about?

- Our first steps in the XFS Standard

- What's next?

Intelligent Banknote Neutralization System

Decades of evolution and innovation including:
- Mechanic
- Electronic
- Software
- Chemistry

no motivation to attack

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
- 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
- State-Approved, Homologated in some countries

IBNS Certification Requirements

- **Reliability**:
  - Environmental (temperature, humidity, etc.)
  - ESD, EMC
  - Vibrations, shocks
  - Radio and Electric regulation conformity

- **Attacks**:
  - Mechanical attacks on the safe, illegal opening.
  - Tilting
  - Gas attack
  - Solid explosive attack from inside/outside the safe.

- **Staining**:
  - 100% of banknotes stained on at least 20% of its surface

+

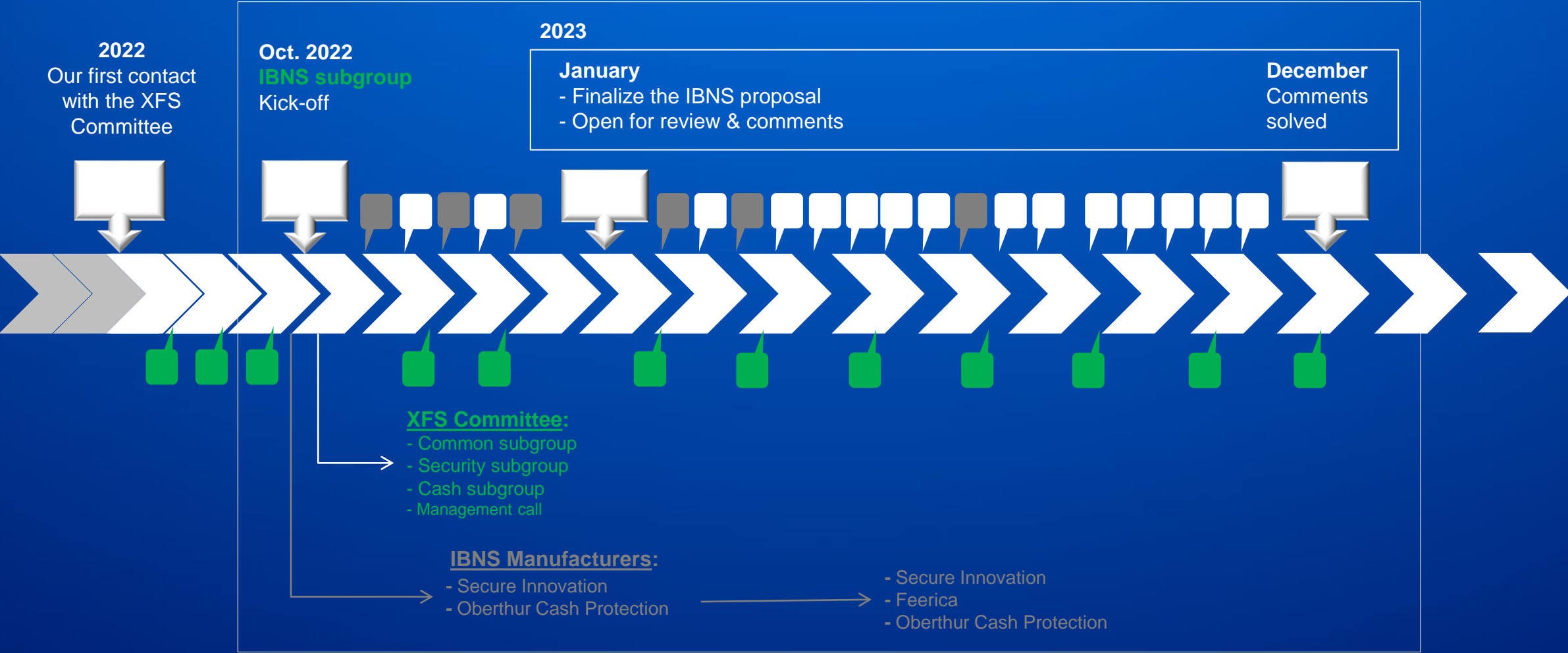IBNS and their ecosystems have become mature

-

Except the distribution stop, no link between IBNS and ATM

- No way to drive IBNS
- No way to know status from IBNS

AGENDA

- Our first steps in the XFS Standard

2022
Our first contact with the XFS Committee

Oct. 2022
IBNS subgroup
Kick-off

2023

January
- Finalize the IBNS proposal
- Open for review & comments

December
Comments solved

XFS Committee:
- Common subgroup
- Security subgroup
- Cash subgroup
- Management call

IBNS Manufacturers:
- Secure Innovation
- Oberthur Cash Protection

- Secure Innovation
- Feerica
- Oberthur Cash Protection

AGENDA

- What's next?

- **XFS4IoT**:
  - Finalize the Standardization
  - IBNS part of the next XFS4IoT Release process
  - First implementations, demos.

- **XFS3.x**:
  - Import IBNS in the XFS 3.x Standard

Thank you for your attention!

What's next?

Demos, POCs and guest speakers

- New Framework release

- Framework roadmap

- POCs and demos
  (Cheque deposit, how to update your existing SPs…)

- More guest speakers

Zoom

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

Next call: 6th February 2024
        1300 UK, 0800 US EST, 2200 Tokyo time
        No meeting in January

Calls are 30 mins long

We will continue to use Zoom
(Interpretation in Japanese, Chinese and Spanish is available using Zoom's interpretation feature)