



EUROPEAN CENTRAL BANK

EUROSYSTEM

Innovations in Cash Management

European Central Bank

Update

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2-3 June 2014

1. The CIT sector study

2. Roadmap for more convergence

3. Update on IBNS study

Over the past decade, the CIT industry has often been in a difficult position.

- **Competition** in the sector has remained an issue in many countries, either because it is intense and destabilising, or lacking.
- In several euro area countries, CITs have increasingly been confronted with **security issues**, seeing an increase in the number and aggressiveness of attacks.
- Labour relations at CIT companies are often strained and their **financial position** is often fragile. A few insolvencies were reported in the last few years...



Background

The Banknote Committee requested to

“undertake at Eurosystem level a thorough analysis of the functioning of the CIT sector with a view to analyse the nature of its weakness and the policy options available to the Eurosystem.”

- The Eurosystem wants to better understand the CIT sector

Objective

To better understand the issues in the CIT sector


- The CIT and cash processing sector play a key role in the cash cycle
- The Eurosystem defined as desirable situation having a CIT and cash processing sector that is
 - resilient,
 - reliable and
 - efficient

Scope

What is the subject?

- **CITs** (Cash in transit companies)
- **CMCs** (Cash management companies)

What do we want to know?

- Characteristics
 - Strengths
 - Weaknesses
 - Threats
 - Risks
 - Opportunities
- 
- Assessing the functioning
 - Identifying policy options

Scope

Stakeholder Interviews

CITs		CITs' clients	
Big 4	Other CITs at national and/or regional/local level	Credit institutions	Retailers
Euro area level	National and/or regional/local level		
Brinks, G4S, Loomis and Prosegur	incl. national subsidiaries of „Big 4“		
ECB/CIT TF	NCBs	NCBs	NCBs

Important notice

- Outcome will be made available only to the participants
- Aggregated data
- Focus of the final report: trends and major developments in the CIT sector

Content

Set of questions for the interviews

- To be asked during a face-to-face interview
- Aspects to be tackled:
 - Security and legal aspects
 - Competition, fee/price policy and financial information (officially published or available information only)
 - Risks, resilience, business continuity management
 - Envisaged/future developments
 - Additional optional questions for CITs (not directly related to the CIT study but related to the new euro series)

Current Activities/Status

- Interviews with the “Big 4” CITs at European level
→ ongoing
- Interviews at the national level of the other CITs, credit institutions, retailers (sample taken at discretion of NCBs) → ongoing

And finally....

**We count on your support and
constructive feedback!**

Roadmap for more convergence of NCB cash services (2007)

- is a Eurosystem medium-term commitment towards convergence in areas where this is useful
- reacts on the “wish lists” from the European Payments Council
- complements the future EU regulation on the professional cross-border transportation of euro cash

Roadmap elements:

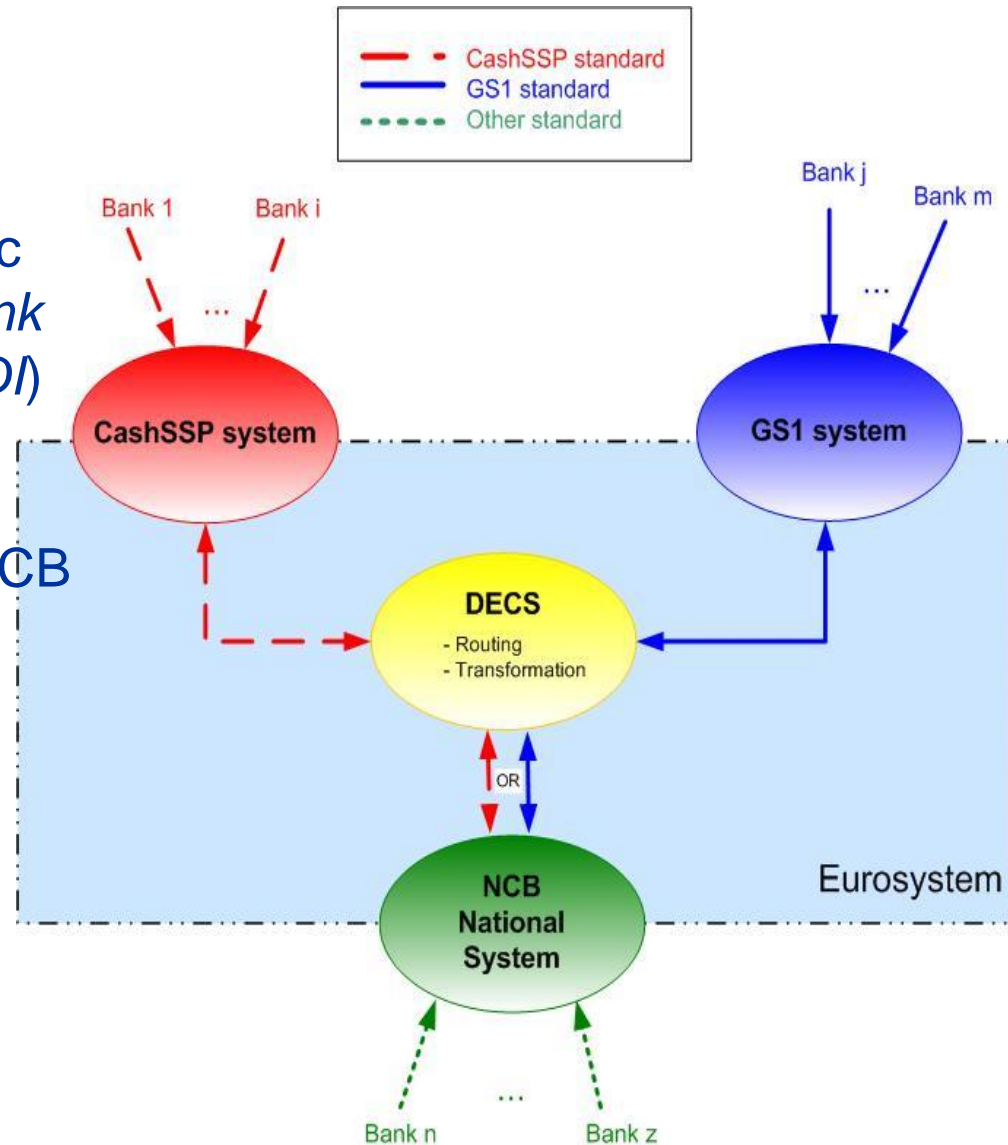
- Dropping the requirement of facing and orientating banknote lodgements/withdrawals **(done)**
- Minimum opening time (6 hours) in at least one NCB branch per country **(done)**
- Acceptance of coin lodgements in at least one NCB branch per country **(done)**
- Remote access to non-domestic NCBs **(done)**
- Electronic communication on cash transactions with domestic and non-domestic NCBs *(being implemented)*
- Convergence of banknote packaging *(being implemented)*

Electronic data communication

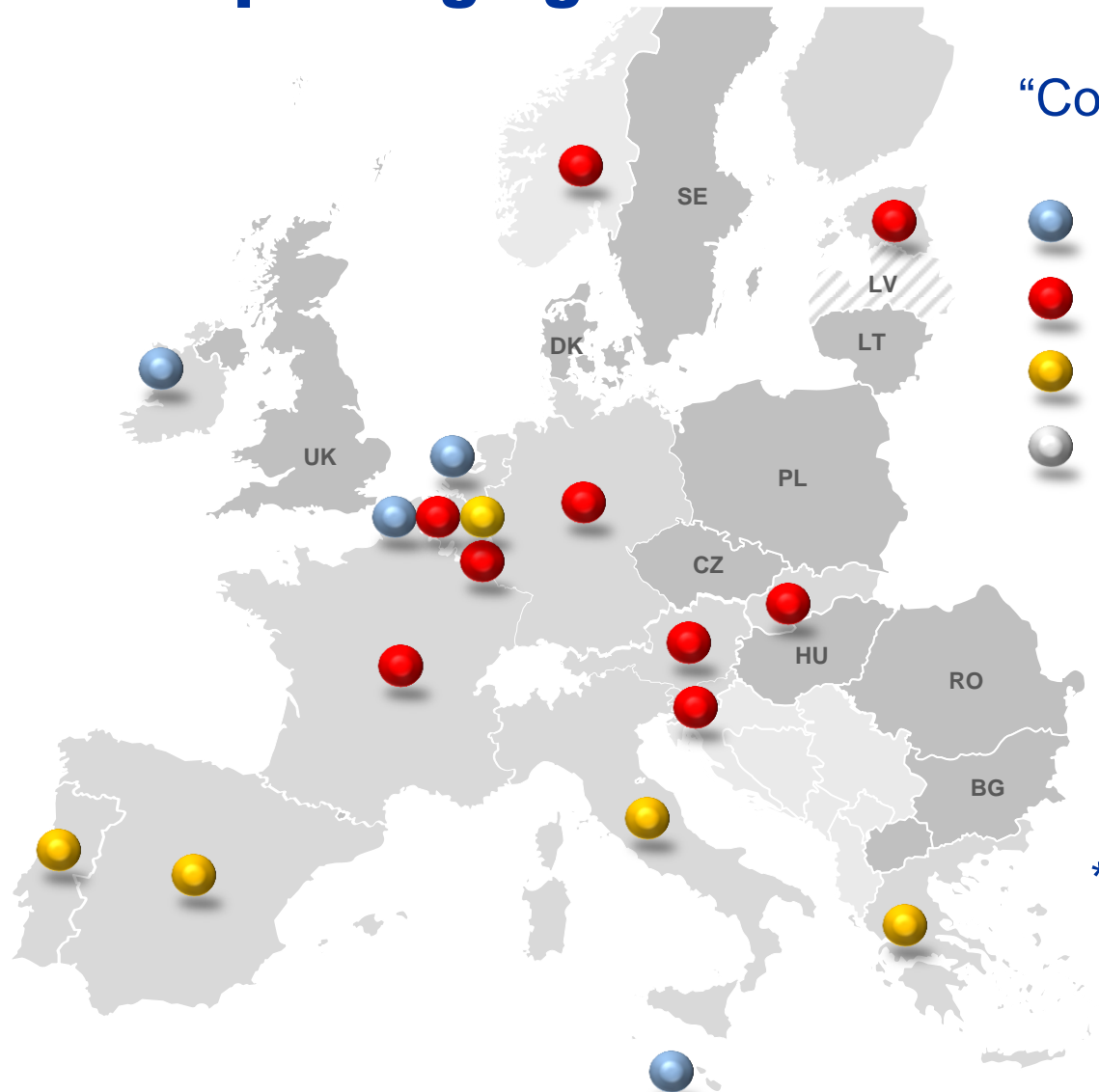
Banks/CITs keep using the domestic NCB's application (e.g. German bank always sends message via CashEDI)

“Front office” verification of the message always by the domestic NCB

The DECS interface only translates between **CashSSP** and **GS1**; **third formats** are possible if NCBs using it map it to either CashSSP or GS1



Status on packaging



“Common“ packaging formats

- Re-usable plastic box
- Safebag
- Sealbag
- Cardboard box
(used by all NCBs except NL; only for withdrawals)

* To be used upon an NCB client's request

Scope of the study

Objective:

- To address the detection issue of IBNS stained banknotes by BEMs and NCBs

Intended development:

- Common detection criteria for IBNS stained banknotes to be used by the Eurosystem

Contributors:

- One major Ink supplier, four major BEMs and three Eurosystem central banks

Common detection criteria defining:

- Ink (containing InfraRed absorption characteristics)

- Location



- Contrast



- Coverage



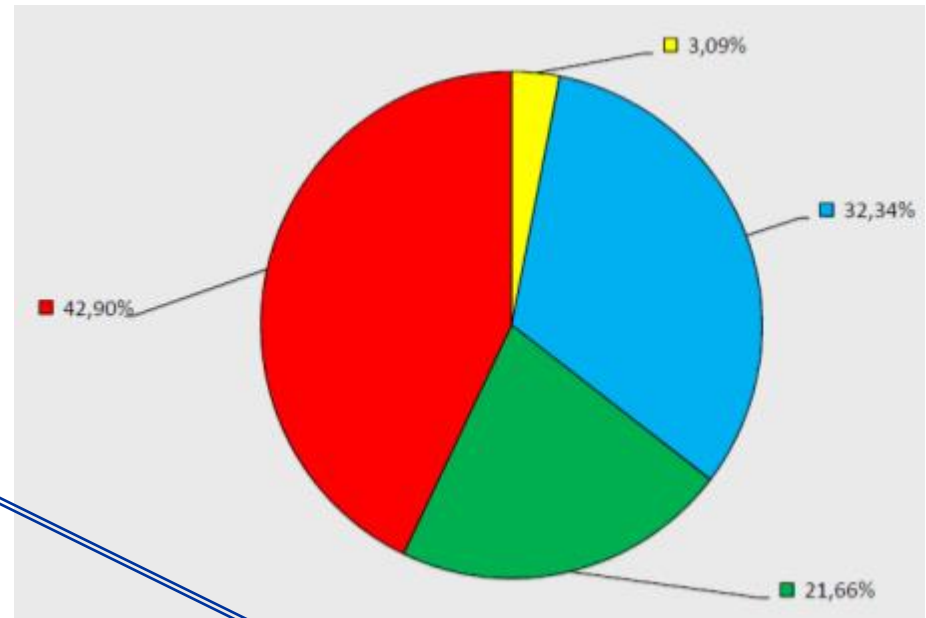
Schematic representations

With respect to
machine readability

Current Issues

- Ink stained notes undetected by CRMs:

- 3%: retained as suspects
 - 32%: rejected
 - 43%: unfit
 - 22%: fit
- [As reported by BNB]



- IBNS stained notes are mostly shredded as unfit notes
- **The project is targeting to reduce/ avoid unfit and fit**

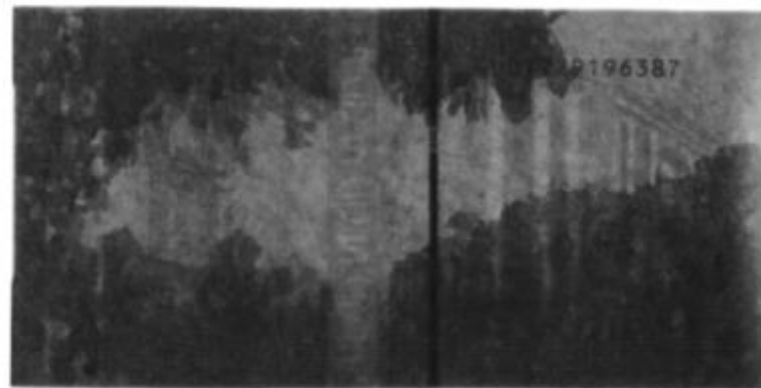
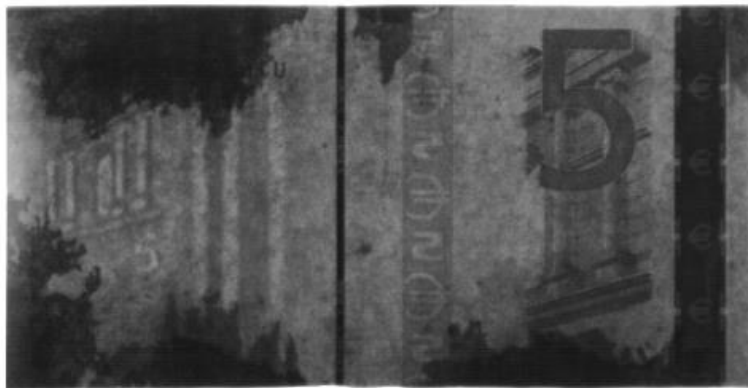
Phases

PHASES	PHASE CONTENT (short description of each phase)	Status
1	1 st iteration of explosion test with IBNS inks, preparation of test decks	Finished
2	1 st iteration of sorting test with test decks	Finished
3	2 nd iteration of preparation of test decks	Finished
4	2 nd iteration of sorting tests with test decks from phase 3	Q2- 2014
5	Sorting test on high speed sorting machines	Q2- 2014

Way Forward

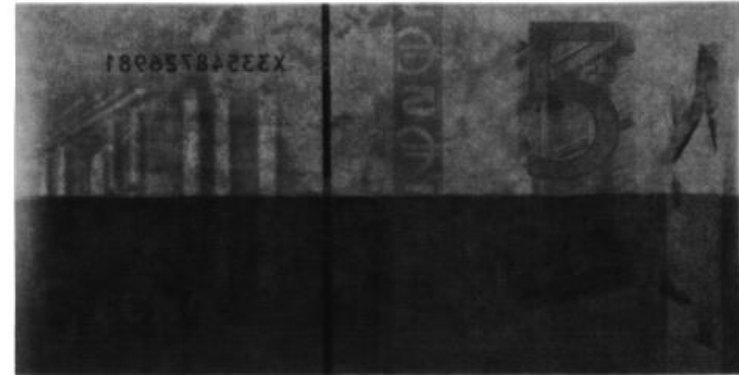
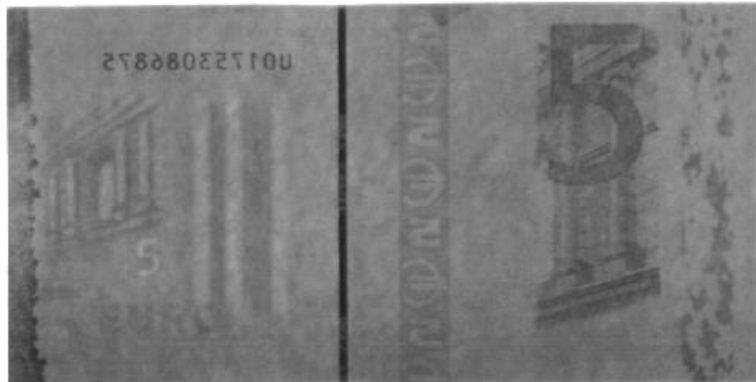
- 1st iteration sorting showed high reject rate (>90%) of test banknotes
- Not suitable for R&D, aim is machine readability and adaptation
- 2nd iteration: adapt test banknotes in a structural manner, create them artificially using IBNS stains that have a defined range in:
 - Size
 - Location
 - Contrast
- 2nd BEM and NCB sorting test
- Outcome of study: Set of requirements on common IBNS detection principles, set up in liaison with third parties
- Presentation of the results to relevant stakeholders (ECUG, EURICPA, ATMIA, ESTA...)

Examples: Explosion test deck



Green ink maybe removed,
IR absorbing characteristic remain

Examples: Artificial test deck



Examples: Stained/ soiled notes test deck



Thank you for your attention

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And <http://www.new-euro-banknotes.eu/>