2016: a major milestone in the transformation of the currency management activity

In issue N°5 of *The Fiduciary Letter* (June 2013), we presented a plan to modernise the Banque de France's cash centres by 2020 and announced the timetable for the closure of the first fifteen centres between 2013 and 2015.

In this issue, we unveil the next series of closures earmarked for 2016 and 2017 and present the modernisation plan for the centres that will continue to operate.

This plan is part of a broader one to transform the cash cycle, notably with the increasing automation of cash handling and the development of a shared system of banknote recycling involving the Banque de France and retail banks. It paves the way for progress in how the cash cycle functions: optimising logistics, cutting down on handling and reinforcing the traceability of operations. 2016 marks a key milestone in the plan, with the modernisation of the first cash centres (including the Avignon centre in February 2016) and the opening of a new currency management centre near Lille in the second half of the year.

A GRADUAL TRANSFORMATION IN WHICH A NUMBER OF OPERATING METHODS WILL MOMENTARILY CO-EXIST, COUPLED WITH A DESIRE TO TAKE CUSTOMER FEEDBACK ON BOARD

The modernisation of the Banque de France's cash centres requires extensive remodelling to adapt counters, reinforce the security of operations, prepare sorting facilities for the deployment of a new generation of equipment and optimise the storage and transportation of cash. This programme is already well underway (in Caen, Amiens, Brest, Corsica, etc.) but will need to be spread out over time. It will continue to be rolled out gradually until 2020 and beyond.

The various milestones involved in the modernisation of the cash centres hinge on the remodelling timetable, which will entail a number of changes for customers. **These milestones are as follows:**

- Switching to cardboard boxes for banknote operations, involving a change in lodgement standards (lodgements must now be made in complete bundles of 5,000 banknotes in denominations of €5 to €50).
- Using a new management system for cash and inventory movements, i.e. Reflex, which will enable the Interop labels placed on boxes to be scanned throughout the entire handling chain, thus ensuring A to Z traceability of operations. This switch makes the systematic use of Interop absolutely necessary for all customer operations (including

- "unusual" ones), and requires additional data exchanges with the vaults of cash-in-transit companies (via a logistics code).
- Certain modernised centres will no longer engage in coinbased operations, whereas those that continue to do so will only accept coins that cash-in-transit companies have grouped together in wooden chests transported on pallets with pre-determined volumes for each denomination.

This means that different procedures for customer operations will co-exist for a number of years:

- Centres in the process of being modernised. Depending
 on the centre, the necessary remodelling work may require
 shorter opening times (e.g. mornings only) or, if genuinely
 unavoidable, temporary closures ranging anywhere from a
 few days to several months.
- Modernised centres. Once their premises have been remodelled, these centres will switch to the new banknote lodgement standards and then the new information system (which will involve the introduction of a "logistics code" for cash-in-transit companies and the grouping together of coinbased operations in wooden chests). Notices regarding all operations (both standard and "unusual") will need to be posted on the Interop portal, and all boxes correctly labelled.

- Some modernised cash centres will cease coin management activities. In such cases, the cash-in-transit companies using these centres will be authorised to open additional coin storage centres on the condition that they comply with the criteria set by the Banque de France.
- New cash management centres. Two such centres are being built from scratch. They will operate on an industrial scale and will be fully automated: the Cefinof centre (cash management centre for the north of France), located near Lille in Sainghin-en-Mélantois, will commence operations in the second half of 2016; the Paris-La Courneuve centre will open in 2018. Such centres will only accept standardised lodgements that have been correctly labelled and notified via the Interop portal.
- The **cash centre closure programme** announced in 2013 will continue alongside these openings.

Centres earmarked for closure in 2016 and 2017

Arras: 14 March 2016 Beauvais: 1 June 2016 Roubaix: Q4 2016,

depending on the ramp-up of Cefinof

Mâcon: 1 June 2017

Angoulême and La Rochelle: 1 September 2017



The cash management centre for the north of France(Cefinof), under construction close to Lille

• In the run-up to their closure, all non-modernised centres will continue to operate in accordance with the previous standards (banknote safebags, coin-bags). Depending on local arrangements, they may switch to modernised procedures (e.g. grouping together multi-customer coin withdrawals so that cash-in-transit companies can collect the coins in wooden chests). Like standard operations, any "unusual" operation must be notified via the Interop portal.

First milestones in the cash centre modernisation programme

Modernised cash centre	Closure of counters serving business customers for the duration of the work	Cessation of coin management activities	Switch to banknote boxes	Switch to coin chests	Interop V2: logistics code + mandatory notice for "unusual" lodgements
Avignon	A few days closure	no	October 2014	8 February 2016	8 February 2016
Caen	or shorter opening times		November 2015	Q3 2016	October 2016
Amiens			January 2016	Q4 2016	November 2016
Cefinof	I	ot cable	March 2016 June to October	June 2016	
Brest	8 weeks (March – mid-May 2016)	no	May 2016	December 2016 Possibly earlier if local agreement	December 2016

The customers of a cash centre that has been earmarked for modernisation will be informed as soon as the decision to launch the modernisation work has been confirmed. Industry authorities shall monitor overall completion rates at a centralised level.

Additional coin storage centres

As part of the modernisation process, all coin-based operations with cash-in-transit companies will need to be carried out, from one end of the chain to the other, using chests transported and stored on pallets. However, some of the Banque de France's cash centres are not configured to handle these pallets and, once they have been remodelled, may halt all coin reception and delivery activities. In order to minimise the repercussions of this on the operations of cash-in-transit companies positioned in such segments, the Banque de France shall authorise them to open local additional coin storage centres. For this, the Banque de France shall make a stock of coins available at one of its vaults, on a contractual basis, to each cash-in-transit company that so wishes. These coins shall remain the property of the Banque de France and be stocked, cleared and controlled by it.

Two pilot centres were set up in July 2014 at Prosegur's premises in Valence and at Loomis' premises in Bourg-en-Bresse. They are overseen by the Banque de France's Lyon unit. A positive assessment of the centres was submitted to the cash management monitoring committee in December 2015. A third coin storage centre was opened in February 2016 at Brink's Saint-Laurent-du-Var centre and is overseen by the Banque de France's Nice unit. Customers of these three centres now place their orders and post lodgement notices on Interop for direct coin lodgements at the corresponding coin storage centres. In Interop, these centres are signalled as receiving and shipping outlets, similar to the Banque de France's centres.

It has been agreed with the cash-in-transit companies involved in the scheme that these three coin storage centres will continue to function. This is despite the fact that the Banque de France's Lyon-based cash centre is not planning to cease coin-based operations, and the Nice centre intends to pursue its coin-related activities until it is modernised. All future coin storage centres will only be opened in locations in which the cash centres that the Banque de France has decided to continue to operate will no longer handle coins. Any cash-in-transit company affected by this decision will be entitled to open a coin storage centre, as long as they meet eligibility criteria in terms of vault security, storage capacity and accessibility.

Naturally, should a cash-in-transit company not wish or be unable to open a coin storage centre in one of these areas, it may make withdrawals or deposits at another centre.

MODERNISATION CALLS FOR NEW BANKNOTE AND COIN PACKAGING SOLUTIONS

The new packaging solutions, which have already been introduced at the Avignon centre and are in the process of being deployed in Caen, Amiens and Lille, will be extended to every Banque de France cash centre over the coming years. They are the result of discussions with and feedback from the representatives of banks and

cash-in-transit companies as part of a process that began in 2012. To facilitate and automate the handling, traceability and storage of boxes, and in conjunction with the modernisation of the Banque de France's cash centres, the decision was made to gradually switch from soft forms of packaging (plastic safebags, coin-bags) to more rigid forms: cardboard boxes for banknotes and wooden chests for coins. The switch to these new containers will also involve a change in the standards for banknote lodgements and those applicable to coin lodgements and withdrawals.

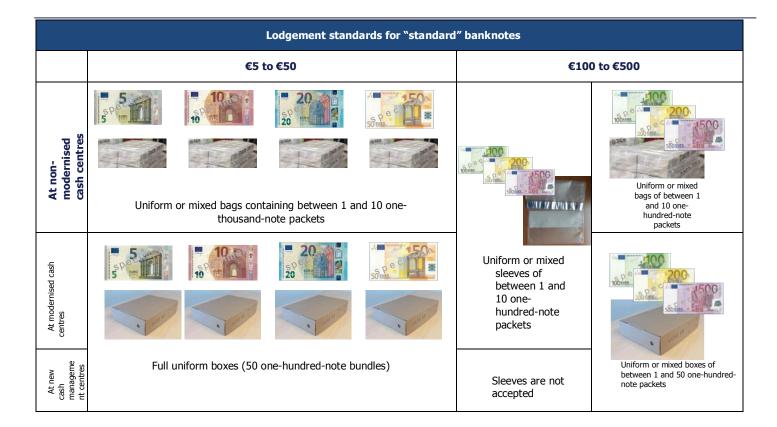
The new lodgement standard for banknotes necessitates the use of a secure box that can hold 50 one-hundred-note bundles, whatever the denomination. All lodgements of denominations ranging between €5 and €50 will only be accepted if they are packaged in complete uniform boxes, i.e. in 50 one-hundred-note bundles of a given denomination. However, for the three largest denominations, the centres will accept incomplete boxes that contain one-hundred-note bundles of different denominations, in keeping with the minimum lodgement quantity for these highdenomination banknotes. In the case of low volume lodgements, and with the exception of the new currency management centres, the centres may accept sleeves containing anywhere between one and ten one-hundred-note bundles of the highest denominations or from customers accredited by the Banque de France. However, the new cash management centres will only ever accept banknotes packaged in boxes.



Box measuring 70 x 40 x 9cm

Extensive discussions were held with the companies and institutions affected by the changes, notably cash-in-transit firms, to help set the specifications for the box that will be gradually introduced for all banknote lodgements at Banque de France centres. The box has been developed with the help of Smurfit Kappa. It presents cutting-edge security features (it cannot be opened without leaving a trace) and is easy to handle.

Banknote withdrawals will continue to be made in one-thousand-note bundles for denominations of between €5 and €50 and in one-hundred or one-thousand-note bundles for higher denominations. The banknotes may be supplied to cash-in-transit companies using the type of box currently used for new banknotes, which can contain up to 10 packets. Bundles intended for several customers will be grouped together by denomination to ensure that the maximum number of complete uniform boxes is delivered. Remaining banknotes will be packaged in complete or incomplete mixed boxes. The smallest volumes (one-hundred-note bundles of high denominations) may be delivered in sleeves, as is currently the case, except at the new cash management centres, where automation considerations require all banknotes to be delivered in boxes.





Mutilated banknotes or ones suspected as being counterfeit, in denominations of €5 to €500





Mixed denomination sleeves of between 1 and 35 notes (the sleeves are boxed at the new cash management centres)

Soiled banknotes of between €5 and €500



At all centres





Mixed denomination sleeves of between 1 and 35 notes (boxed at the new cash management centres)

Mixed denomination bags for anything larger (boxed at the new cash management centres)



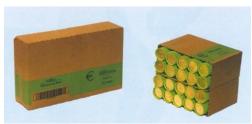
The modernised centres will deliver fit banknotes in boxes similar to those already used for new banknotes

Coins: coin-bags will be replaced by reusable "multi-customer" wooden chests. The new standard for both lodgements and withdrawals is applicable on two levels:

- with respect to credit institutions that are customers of the Banque de France, the pack of 10 rolls of coins of a given denomination, already contained in the old coin-bag form, shall be the new lodgement and withdrawal unit;
- cash-in-transit companies must deposit their packs in sealed single-denomination chests, as shown in the picture opposite, which can contain anywhere between 50,000 and 180,000 coins depending on the denomination.

The Banque de France will only accept and deliver full chests, which will need to be transported on pallets between the vaults and the counters and for loading on trucks. This means that cash-in-transit companies will need to arrange operations with their customers to ensure that the sum of lodgements or withdrawals in pack form corresponds to the contents of one chest.

The streamlining process for the coin logistics chain is already underway. To facilitate the transition, the number of coins contained in each chest has been defined as a multiple of coinbags, making it possible to group together in a new container packs already present in the inventory (contained in coin-bags) and new coins that have been minted at the Monnaie de Paris' Pessac facility. These new coins are still packaged in 10-roll packs, placed in "wraps" (equivalent to a third of the contents of a coin-bag). However, in January 2016, Monnaie de Paris started supplying new coins to the Banque de France in wooden chests that can be delivered to cash-in-transit firms without any need for repackaging.



Wraps of new coins, as supplied by Monnaie de Paris

In the same vein, the Banque de France has decided to group together its existing inventory of coin-bags in chests of the same model so that this new container can be used to supply its own network and those of cash-in-transit companies.

In this way, although cash-in-transit companies will only be required to group their customers' operations together in full single-denomination chests when using the Banque de France's modernised cash centres (Avignon is currently the only such centre, but will be followed by Caen in September 2016) and new cash management centres (Cefinof starting in June 2016), they can already request to withdraw coins in full chests, on the condition that their customers' combined withdrawals in a given denomination correspond to the volume of a chest.

This means that cash-in-transit companies should only need to purchase very few chests themselves. In principle, any necessary purchases should simply be intended to offset local input/output imbalances.

However, they will need to acquire the plastic seals and plugs to close the chests securely for deposit with the Banque de France. These seals will prevent tampering and ensure that operations can be traced. The names of the suppliers of such seals can be obtained from the Banque de France.



The Banque de France will gradually introduce collapsible, reusable wooden chests measuring L80 x I60 x H40cm for all coin-based operations





The chests must be closed using plastic seals and plugs, positioned on each side of the lid

The standards applicable to cash operations carried out at the Banque de France's counters are described in a document available on the Banque de France's website (Banque de France/Banknotes and coins/Cash services at the BDF counters (business clients)/Operational standards for cash movements at the Banque de France counters), which will soon be updated to incorporate all the changes currently underway (publication planned for the end of Q2 2016).

Content of a multi-customer, single-denomination coin chest											
	€0.01	€0.02	€0.05	€0.10	€0.20	€0.50	€1	€2			
Identification code	А	В	С	D	E	F	G	H*			
No. of coins per roll	50	50	50	40	40	40	25	25			
No. of rolls per pack	10	10	10	10	10	10	10	10			
No. of coins per chest	180,000	126,000	99,000	100,800	79,200	60,000	54,000	54,000			
Equivalent in coin-bags	30	28	33	28	33	25	24	36			
Value per chest	€1,800	€2,520	€4,950	€10,080	€15,840	€30,000	€54,000	€108,000			
Pallet weight (kg)	435	407	409	434	476	489	426	480			

^{*} or "K" for new commemorative coins.

Lodgement standards for "unusual" coins, applicable at all centres

Mutilated coins or coins suspected of being counterfeit ranging between €0.01 and €0.20













Single multi-denomination coin-bags, with no minimum or maximum amount

Mutilated coins or coins suspected of being counterfeit ranging between €0.50 and €2









Single multi-denomination coin-bags, with no minimum or maximum amount $\ensuremath{\mathsf{Single}}$

Collectible coins





















Uniform coin-bags (a single face value and a single type of metal per bag) containing no more than 50 coins

THE MODERNISATION OF THE CASH CYCLE AT THE BANQUE DE FRANCE REQUIRES CASH TO BE MANAGED FROM A LOGISTICS ANGLE

The modernisation of cash operations at the Banque de France's counters began in November 2011 with the launch of the Interop portal. Interop first made it possible to issue order slips and remittance statements in electronic format and improve traceability via barcodes on boxes. As it already took on board the GS1 Standard International Logistics Label, Interop was able to pave the way for even deeper optimisation of the cash logistics chain, something to which Banque de France is firmly committed for operations at its counters and for internal management of cash movements.

The switch to boxes, which are easy to use and suited to automated processing systems, marks another step towards the simplification of operations and a decrease in handling. Alongside this, the Banque de France is introducing permanent video surveillance-based checks at every step in the cash movement chain. These cash movements are managed using an information system specifically developed for logistics operations (Reflex software).

Lastly, the conditions under which operations are carried out with cash-in-transit companies have been modified to ensure optimal preparation and reception of the bundles that they come to the centres to withdraw or remit. In this way, a fewer number of centres will be able to process a greater volume of operations, potentially in higher amounts. A logistics code has been introduced to this end.

A "logistics code" to speed up operations at counters

The logistics code is a logical set of banknote or coin orders or lodgements that corresponds to the load of a truck. It makes it possible to:

- speed up operations at the counters via quick registration of the receipt of lodgements and the delivery of orders,
- group together bundles on pallets ahead of time to cut down on loading and unloading times and reduce parking times,
- optimise truck loads by grouping boxes together based on criteria other than the order to which they correspond, so that, for instance, boxes belonging to a single substantial order can be spread over several trucks.

The logistics code has no technical repercussions on credit institutions or on companies that process cash. However, with the inclusion in the processing chain for counter operations of an additional data exchange phase between cash-in-transit companies and the Banque de France, the deadline for placing orders needs to be brought forward by 30 minutes:

- same-day withdrawals: orders must be placed before 10.30am for withdrawal after noon;

- next-day withdrawals: orders must be placed before 4pm for withdrawal the next day.

In accordance with the timetable for the modernisation programme, every cash centre will start to use the logistics code seven to eight months after their switch to the boxed lodgement standard, coinciding with the implementation of the new Reflex information system.

Interop, a portal for every operation

The use of Interop, an electronic data exchange portal to carry out and follow up operations at Banque de France counters, is the first stone in the formation of an automated logistics approach to these operations. Version 2 of Interop extends the digitisation of data exchanges to all types of operations, notably "unusual" lodgements:

- banknotes deemed counterfeit, or that have been mutilated or soiled,
- coins that have been mutilated or are deemed counterfeit,
- collectible coins.

Interop also incorporates elements specific to the logistical management of such operations, which have been in place since 8 February 2016 in Avignon and are set for roll-out at other cash centres as the modernisation programme progresses:

- plans to group operations per truck using the logistics code,
- grouping multi-customer coin operations in wooden chests.

Version 2 also contains additional features that it had not been possible to incorporate in V1 or had been requested by users after V1 was released:

- traceability of notifications relating to lodgement differences,
- grouped order validations.

Discussions relating to these functionalities commenced in 2012 with the representatives of the banks and cash-in-transit companies and the ensuing specifications were approved at an Interop meeting held in November 2014. Their implementation ran from April 2013 to the beginning of 2016. In the transitional phase, the Banque de France indicated that it would allow certain stakeholders, notably those interfacing their own management applications with Interop, to wait until the entire process was complete before using the new functionalities, to enable them to group together their developments. This transitional period is now over: prior to lodgement or withdrawal, a notice must be posted on the Interop portal, even for operations involving "unusual" banknotes or coins. This is the case whatever Banque de France cash centre is used.

Some users requested improvements when Interop services were first deployed for "unusual" banknotes and coins in March 2014. The Banque de France has since taken these improvements into consideration. The adjustments that have been requested will be made in two stages, in autumn 2016 and during the second half of 2017.

Modernising the cash cycle at the Banque de France, in close cooperation with the industry

The Banque de France is working closely with representatives of banks and cash-in-transit companies to coordinate the modernisation process at its cash centres.

Special-purpose groups meet to examine specific issues. For instance, between 2012 and 2014 a "Packaging" working group worked on the standards that are gradually being applied at counters at the Banque de France's cash centres. The Interop working group is continuing to look at developments around the application.

Our partners were able to express their needs via a **series of workshops**. This gave us insight into their time and budget constraints and enabled us to explain, in detail, the technical specifications of the new packaging and the changes in the information system, as well as their implementation.

All regulatory and organisational changes in the cash cycle are discussed in **CFONB** (French banking organisation and standardisation committee) working group meetings co-led by the Banque de France and a representative of the banking industry.

Lastly, an umbrella body – the *Comité de Pilotage de la Filière fiduciaire* (steering committee for the cash management cycle), or CP2F – was set up in 2014. It is chaired by the director general of cash management and branch network activities at the Banque de France and includes the *Fédération Bancaire Française,* Fedesfi and USP Valeurs (representing cash management companies), the French Treasury, persons overseeing payment methods at the main retail banks and the heads of cash-in-transit companies.

The CP2F meets twice a year. The missions of both the CP2F and a follow-up committee, the *Comité de Suivi de la Filière Fiduciaire* (CS2F), are intended to share a common forward-looking vision and examine the key directions in which current developments are headed.

An industry-wide survey was carried out on the industry's own initiative in 2015 to form a forward-looking vision of recycling strategies and flows in the cash cycle in 2020 and beyond. Like the other participants in this survey, the Banque de France is assessing the impact of the findings of this survey on the modernisation plan for its cash centres.

DIRECT AND INDIRECT REPERCUSSIONS OF THE MODERNISATION PROCESS ON THE CASH CYCLE

The reform of the manner in which the Banque de France's counters operate has benefits for the entire cash cycle. It will help optimise the cash logistics chain and generally bring down costs. It will also enhance operation traceability and improve steering tools. However, as the modernisation process moves forward, the operators using the affected cash centres will need to adapt to certain adjustments, notably:

- the deadlines for placing orders are being brought forward from 11am to 10.30am and from 4.30pm to 4pm,
- all operators will be required to post a notice on Interop for "unusual" lodgements (damaged banknotes or notes suspected of being counterfeit, collectible coins, etc.), as is already the case for standard lodgements,
- the minimum quantities for the lodgement of denominations ranging between €5 and €50 have been increased from 1,000 to 5,000 notes,
- cash-in-transit companies will need to group their customers' coin lodgements and withdrawals in order to operate with full chests each containing a single denomination.

Naturally, these measures will alter the way cash-in-transit companies and banks do business. Notably regarding the manner in which the identification of branch and customer needs is organised and the way in which inventories remaining in the vaults are managed. They will also have repercussions on direct remitters (bank customers that are supplied directly by cash-in-transit companies). Some adjustments will likely be needed regarding the supply of coins to supermarkets/hypermarkets or to best manage the revenue of coin machine operators. Incidentally, it will be necessary to examine whether certain operators should continue to package their revenue themselves for immediate lodgement with the Banque de France.

The gradual pace at which the modernised procedures will be deployed across the Banque de France's cash centres should facilitate these adjustments. However, the process will be made even simpler if operators understand the full extent of the changes underway and the repercussions on their own organisation.