

“Practical implications as result of the introduction of EUR Instant Payments”

Introduction

The developments of the payments industry in the last decades has brought more efficiency and speed in the way payments travel between banks and from payer to payee. Where in the past a number of days were needed, today we see in many jurisdictions that payments can be made within a day and sometimes even same day.

Most recent developments are around Instant Payments whereby this payment is booked (with finality for the client) on the payee’s account within seconds. The mechanism and principle of instant payments is breaking with the traditional approach whereby banks apply Cut Of Times (COT) for the processing of payments for a certain value day in order being able to manage their position (manage their balance sheet) and meet the PSD requirements. In today’s reality, payments initiated after a certain COT (and which have to be forwarded to another bank), will only be processed the next value day. This COT is ultimately driven by the latest time settlement of funds is possible between banks on the central bank platform T2 (currently 17.00 for commercial payments in EUR, and 18.00 for bank to bank payments).

In order to protect customers in the way banks apply book and value dates in relation to payments made, a number of rules were included in the Payments Services Directive (PSD). In the past banks had different ways to apply book and value dates to their payment processing which in many cases were unfavorable for their customers. The PSD (soon replaced by PSD2) is making sure banks have to follow the same rules for the same situation, making sure treatment is equal and fair for their customers.

It is likely however, that the concept of instant payments was not part of the debate at legislative level at the time the PSD-rules were written. This note will:

1. Explain the differences between today’s traditional payments and future EUR Instant Payments¹
2. Describe the practical consequences and why this could be a potential problem,
3. Comment on the PSD2 in light of Instant payments²

My conclusions are:

- **In instant payments, during closing hours of T2, the moment of finality of the payment to the beneficiary will be earlier than the moment at which the funds actually arrive at the central bank account bank of the beneficiary bank. This could result in value date differences which need to be carefully considered.**
- **Current PSD2 rules do not fully address the dynamics of instant payments. There is room for different interpretations and you can question whether these are all fair (to clients and to banks).**
- **It is crucial that banks apply the book and value dating aspects in a uniform way, avoiding arbitrage possibilities in payments.**
- **As such the recommendation is to explore the impact of IP at the EC level in order to address the above mentioned aspects, provide clarity on how the PSD2 should be applied in relation to IP in order to avoid issues created by interpretation issues.**

¹ Please note that only normal payment flows are addressed as we see in SEPA and not all kind of special cases whereby details might be different

² Please also refer to EPC note (LSG012-17) as provided by the EPC to the LSG, SEM WG and AMI-Pay.

1 - Traditional payment method vs. Instant Payment

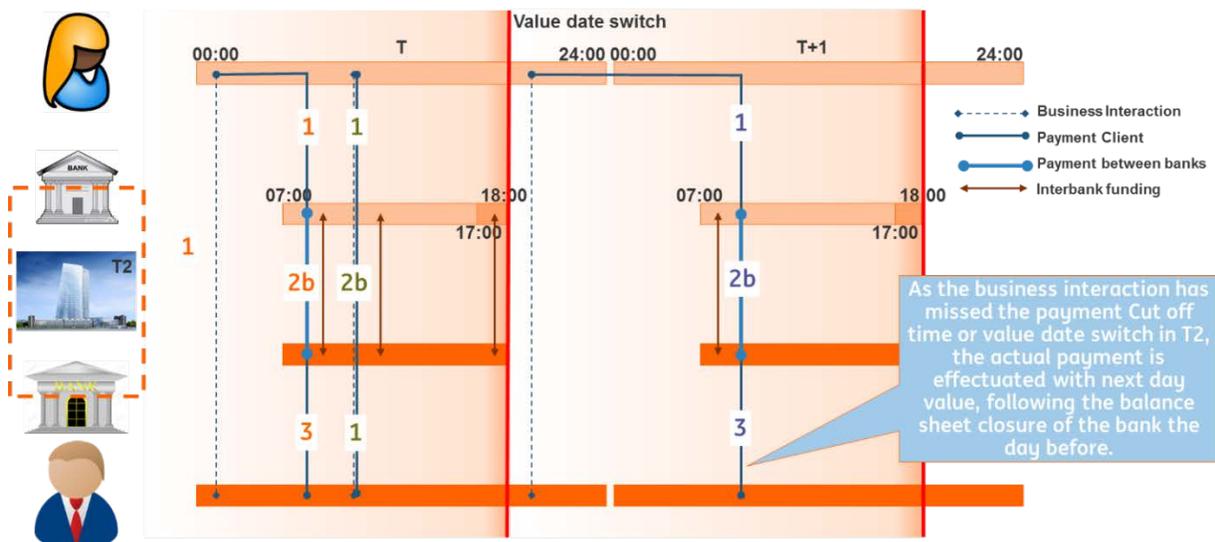
Conceptual overview of Traditional Payment.

In the figure below a conceptual overview is given of a traditional payment as we know it today. In this example we assume that 1 person buys goods from someone else (retailer e.g.) and that an electronic payment method is used to pay for the goods. The timing of exchange of the goods (4) can be (and usually is) different from the timing at which the funds are credited to the account of (3) the seller of the goods. The credit transfer is initiated by the buyer (1)



The payment order is received by the bank of the buyer and will be routed to the bank of the beneficiary (payee) for which in Europe a SEPA compliant clearing mechanism is used. An important principle of this flow is that the payment order is following the money, with other words: Step 2 (a,b), the exchange of funds between the banks at central bank level is completed before the payment order (2c) to credit the payee in step 3 is received by the bank of the beneficiary. Due to this principle, there is no settlement risk between the banks, because the settlement is final according to the Finality Directive.

The timing of Steps 1,2 and 3 is sequential and has to comply with the rules in the PSD. As such Step 3 always needs to happen on the same day as Step 2 from a book and value date perspective. Due to this, the COT of Step 2b (the T2 Commercial COT) will drive the latest time by which payments can be executed between banks. With other words, the closing of T2 determines the Value date switch point for EURO payments.

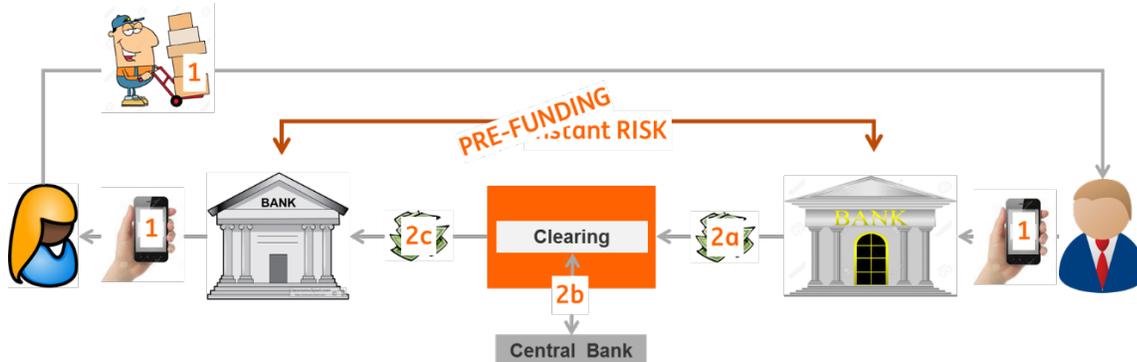


NOTE: for commercial payments which have to be send to other banks, usually a COT is applied somewhat earlier then the T2 switch over time. This in order to allow the bank some processing time. This commercial payment COT can differ per bank.

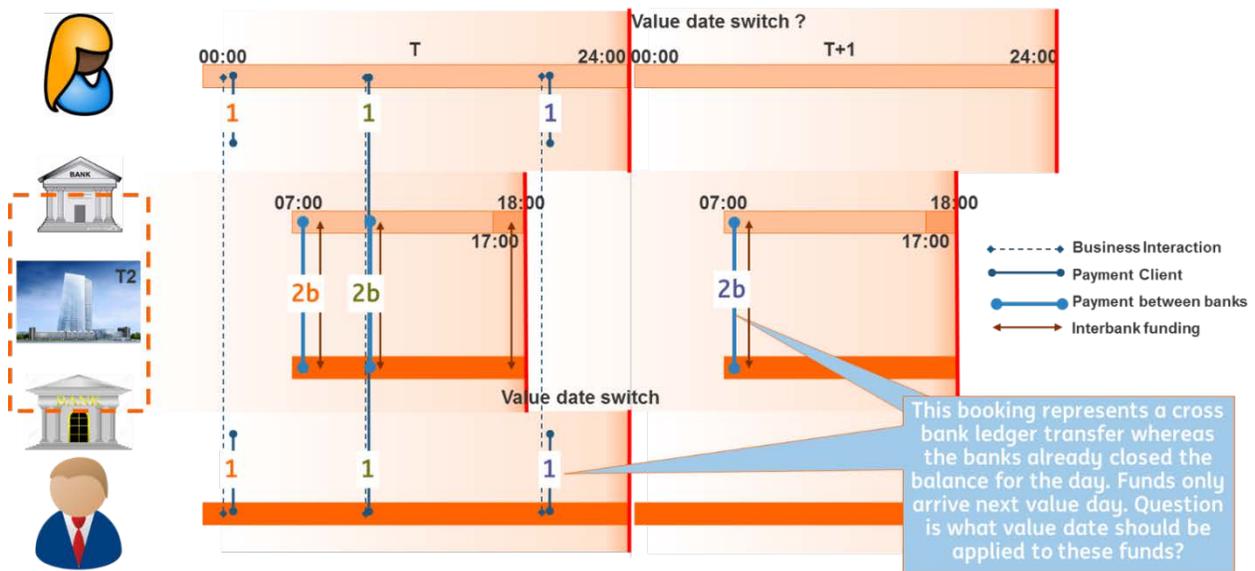
Contribution from an AMI-Pay member for item 4.4 – settlement date/value date

Conceptual overview of an Instant Payment

Also with instant payments, the timing of delivery of goods can again be independent from the timing of the payment (expectation is that these will align more and more as in the cash world). There is however a substantial difference in the way a payment is processed. The debit from the payer account and the credit to the payee account (both: 1 in the picture below) are fully linked and synchronized. As normally this would result in a risk between the banks, the finality is created by ensuring pre-funding at the level of the clearing in central bank money. On this basis the receiving bank does not run a settlement risk on the sending bank.



This finality aspect however only covers the settlement risk of the underlying transaction, but is timing wise not equal to the moment when the actual funding takes place. This funding aspect relates to the moment when the actual exchange of funds between the banks takes place at RTGS level³. It is clear that step 2b can only take place during opening hours of the central bank platform T2 and that processing (book and value dating) follows the logic of the central bank as per monetary policy. As a result, the timing (and value date) at which the actual exchange of funds can take place at central bank level (2b) is always later then when the payment is executed (1). Outside opening hours of the T2 platform this difference can be substantial (evenings, weekends, target holidays) as the monetary switch of value date takes place at 18.00 on T2 business days only (not in weekends and public holidays).



³ This determines when the funds can be used in the financial markets. The way settlement at central bank level (2b) is done, depends on the model used (Ancillary system Interface - ASI or Target Instant Payment system – TIPS).

Comparison

With the traditional payment method, the receiving bank is always ensured that the underlying value of the payments credited to the payees is funded at central bank level on the same value date before the client account is credited. Any funds applied to the client account can as such be used as part of the bank balance sheet in the funding and liquidity management process.

For Instant payments however, despite the finality of the underlying payment, the payments (1) can be executed and credited to the clients account before the funding (2b) arrives at central banks level, especially in case the payment is initiated outside T2 opening hours. For CSM/ACH solutions making use of the ancillary system interface (ASIGrt) in T2, this is a real timing difference as the mechanism depends on the opening of T2, and in TIPS the difference is not so much in timing, but in the business day/value day applied in TIPS (T2 is switching to business day/value date a few minutes after 18.00 on T2 opening days). In both cases however, the actual use of the funds can only take place after the T2 RTGS service opens the next business day.

2 – Practical Consequences

Interest rate risk

If the value date in relation to the credit to the beneficiary account and the actual movement of funds between the banks at central bank level are different, this will result in an interest rate risk for the bank of the beneficiary. At the same time the sending bank would in such a case debit the payer earlier compared to the actual value date of the debit applied to the bank on T2 level (creating float).

It is impossible to say how large this interest rate risk will be. This very much depends on the volume and value of the instant payments market and whether a maximum amount is applied to service or not. It is a risk at the beneficiary bank side which can not be controlled as it is driven by the sending bank (in normal positive interest rate conditions) whilst the receiving bank can not avoid the incoming payment. Please consider the following scenario's in this respect:

- Tax payments on the ultimo of the month when this is in a weekend, could trigger the transfer of several billion EUR on that day with a severe impact for the receiving bank.
- Corporate treasury making use of IP for cash management purposes, triggering substantial flows outside T2 opening hours.
- Banks could schedule current (non-Inst) SEPA payments in the weekend or at evenings as service for their clients whilst the impact (funding wise) is for the receiving bank.

For the bank there will be, to a certain extent, a netting effect for all payments send and received. With other words: although received funds after the COT of T2 can not be used in the funding process for the same day, these funds can be re-used⁴ for outgoing payments. The net difference between in and outflow represents the funding gap.

⁴ The re-use or netting effect will be negatively impacted by the application of various Instant payments models. Liquidity can not freely float between 2 instant payment providers outside T2 opening hours and as such liquidity for a payment received via e.g. Equens can not be re-used in TIPS.

Contribution from an AMI-Pay member for item 4.4 – settlement date/value date

Difference in application of value dates between banks

If banks apply a different interpretation of the PSD2 rules and as such apply a different 'value day logic' to Instant payments, we create 2 problems.

- An arbitrage possibility on payment flows.
- Confusion for our clients, unfair application of rules which we can not explain.

This situation is not unlikely if we look at how different banks currently apply this logic in weekends and how value date switch over moments differ per bank, depending all kind of processes and (legacy) system logic.

Payment 'arbitrage'

If the application of value date with the sending bank is different from the receiving bank, this will create an opportunity for customers to arbitrage on their payment behavior. If your payment send to another bank is debited with next value date, but credited with same value date, the same amount will receive potentially interest twice.

We also have to consider the time-zone aspect cross Europe. If on value T a payment is made from Finland at 00.15 hours local time to Germany, the funds arrive at T-1 at 23.15. If the same payment is forwarded to Portugal at 00.15 local time in Germany (again on T), the funds will arrive again at T-1 at 23.15. If the logic of calendar day=book day=value day logic is applied, the same funds have passed a value date change 3 times, potentially generating 3 times interest without any risk.

Again the size of this problem would very much depend on the definition of an IP and whether use is somehow restricted to retail, or would also entail wholesale. But consider the possibilities we would create (if it's possible it will be used):

- Third parties could make use of the PSD2 access to account rules to offer services to retail clients to help them making use of this 'value date surfing'.
- Corporate treasury making use of the value date differences in their cash management process.

As such it is essential to align on the way value-dates are applied, to align on the rules and the correct & uniform interpretation.

Confusion for our clients

If clients see a difference in how value dates are applied between banks, they will have questions certainly in relation to a situation where you could conclude that the bank is creating float. Consumer organization will have no problem pointing this out to the public. Furthermore it might impact business of our clients as lack of clarity on when funds (book or value wise) will be applied to accounts can have an impact on business processes.

3 - PSD2 in light of Instant payments

Executions Times:

According to Article 83 PSD2, the Originator Bank (payer's PSP) has to ensure that the amount of the relevant payment transaction is credited to the account of the Beneficiary Bank (payee's PSP) by the end of the following "business day".

Observations:

- The timing aspect ('by the end of the following business day) of this article does not reflect in anyway the immediate/instant nature of an Instant payment, highlighting that the rules were not written with the reality of Instant payments in mind.
- The definition of the Business day from a PSD2 perspective says: "a day on which the relevant payment service provider of the payer or the payment service provider of the payee involved in the execution of a payment transaction is open for business as required for the execution of a payment transaction". You could argue that position management as result of the underlying payments should be part of the payment service provider activity in relation to executing payments. This function is not possible during the weekends when the RTGS system T2 is closed. As such the definition of a business day in the T2 context is excluding weekends and target holidays.
- You could argue that participation in the PSP scheme would commit to a 24-7-365 availability to execute payments. Question is however how this relates to obligation of banks to manage and control their balance actively and effectively whereas these activities can not be executed during closing hours of the central bank. Should we not differentiate between the technical ability to execute a payment order (with finality) and the business day in context of monetary policy?
- The RTGS system is switching business days at the moment the reserve balance calculations are completed. TIPS will automatically follow this logic. What definition of Business day should be applied when an Instant payment is processed on Friday evening 2nd of June at 22.00? On TIPS this payment is executed on business day Monday 5th of June, whereas the calendar date obviously is still 2nd of June.

Value-dating implications

According to Article 87 (1) PSD2, the credit value date for the payee's (the Beneficiary's) payment account is no later than the business day on which the amount of the payment transaction is credited to the payee's payment service provider's account.

Observations

- A payment received on Saturday in TIPS, actually arrives on business day Monday (TIPS did switch business day on Friday around 18.00). In light of this reality you could also conclude that credit value date should equal the business day as applied on the payee's payment service provider's account, thus: Monday.
- For payments processed in a CSM solution you can question whether the balance reflection (commercial bank money) at the CSM equals the definition of a Payee's payment service provider's account. Only when balances are transferred within the RTGS from the CSM's ASI6 pre-funding account to the T2 account of the payee's payment service provider account, the funds actually arrive at the bank of the beneficiary (in central bank money).
- These rules are written in the current reality that a payment orders only arrives after the settlement process at central bank level and distribution of the underlying funds was completed. The instant payment logic breaks with this principle and hence the rule can not be applied without further clarification or modification