



National Bank of Serbia

NBS INSTANT PAYMENT SYSTEM

Concept and implementation

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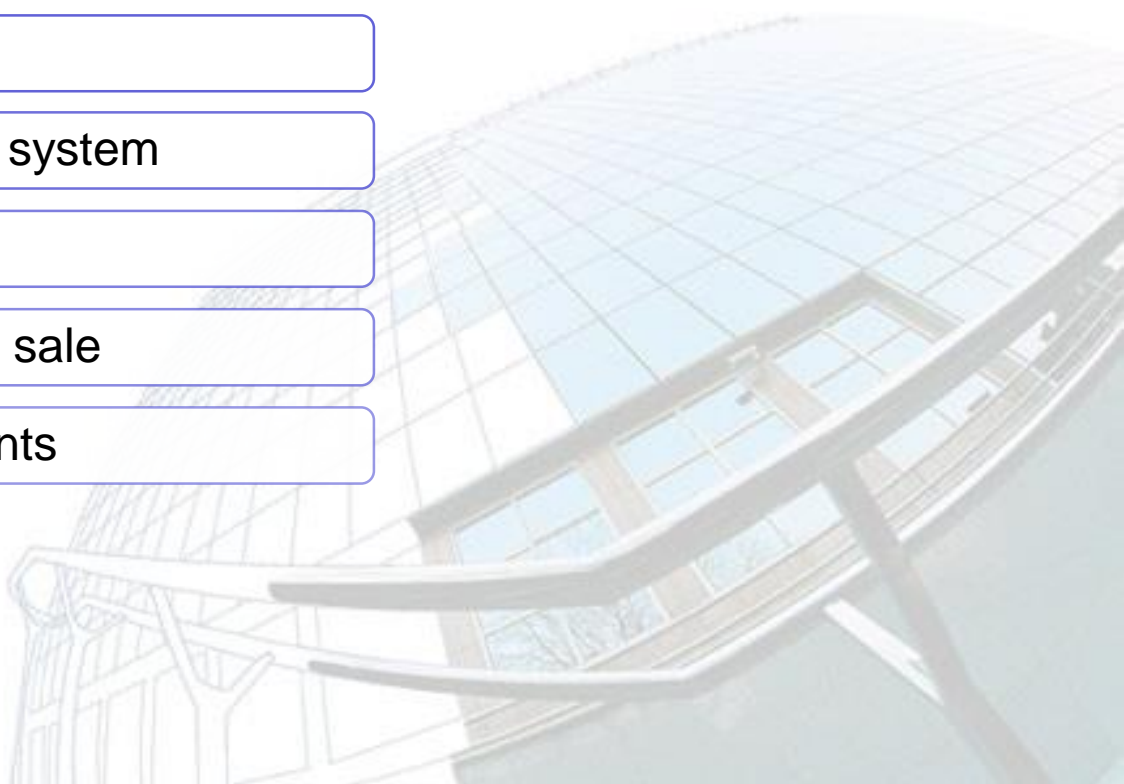
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Overview of payment system infrastructure at NBS

- NBS is operator of four payment systems:
 - RTGS system
 - Clearing system
 - System of interbank and international clearing of foreign exchange payments in euros (Regional payment system – Serbia, Bosnia and Hercegovina and Montenegro)
 - Clearing of DinaCard payments



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Key drivers for instant payments introduction

- Need for modernization of national payment system.
- Support to the process of digitalisation of country.
- Demand from the banks that offer innovative digital solutions to their clients and from payment service users who want to pay during weekends and evening hours.
- Setting up a cost efficient alternative to card payments in the country and reducing costs for merchants and whole economy.
- Widening acceptance network for cashless payments and decreasing cash usage.

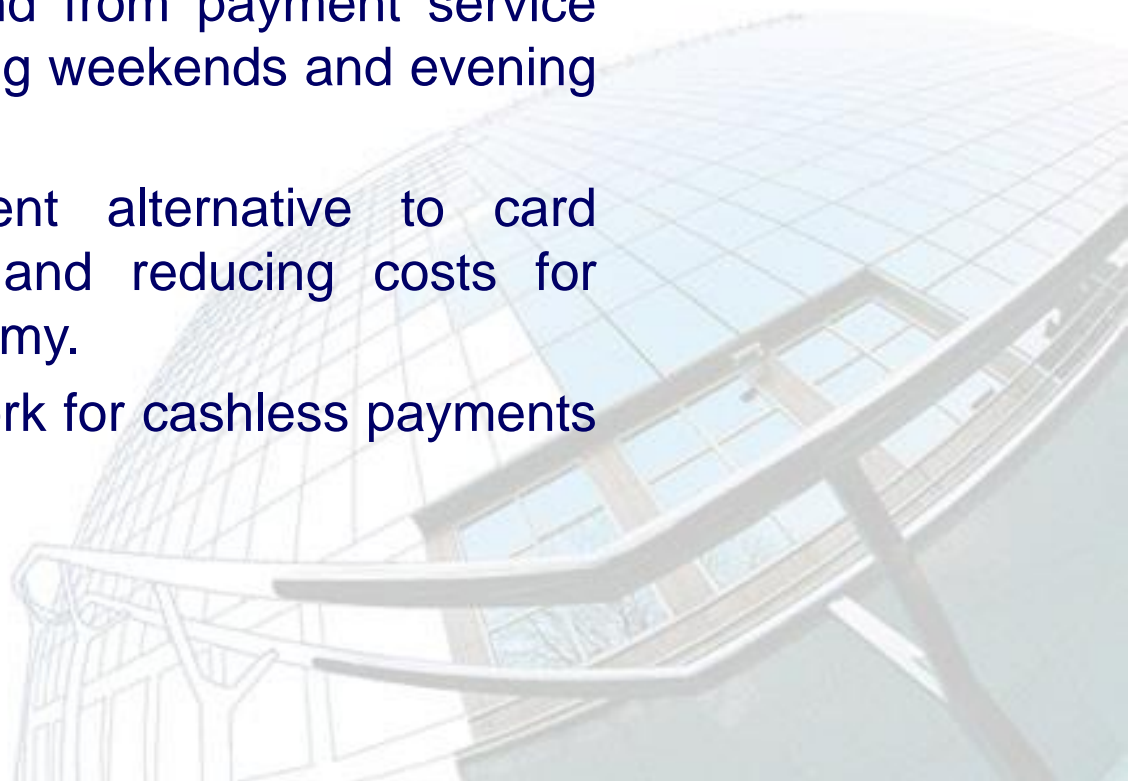


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Investigation phase (1)

- In January 2017 National Bank of Serbia started analysis of world best practices and market needs for instant payments.
- NBS set up a working group whose task was:
 - to prepare analysis of possible practical problems and comparative practices and experiences in the field of payment systems for instant payments, and
 - based on the results of the analysis :
 - to propose conceptual solution of the payment system for instant payments whose operator would be the National Bank of Serbia, with specifying the concrete activities for establishing this system and the deadlines for their implementation, or
 - an elaboration as to why it would not be necessary to establish such system.

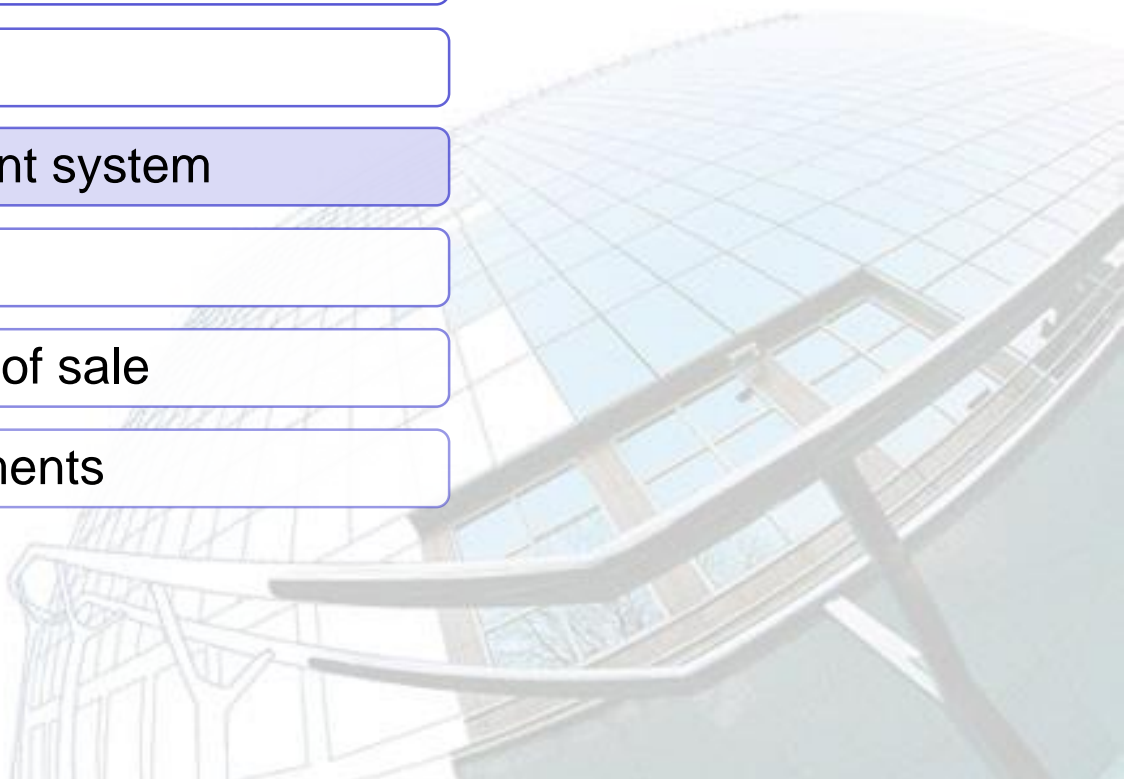


Investigation phase (2)

- Working group examined practices of countries that introduced instant payment systems and pan-European instant payment initiatives of European Payment Council and European Central Bank.
- In April 2017 National Bank of Serbia organized first meeting with banks - RTGS participants in order to hear their opinion about possible introduction of instant payment system in Republic of Serbia.
- After taking all relevant facts and results into account, the working group proposed NBS management introduction of instant payment system.



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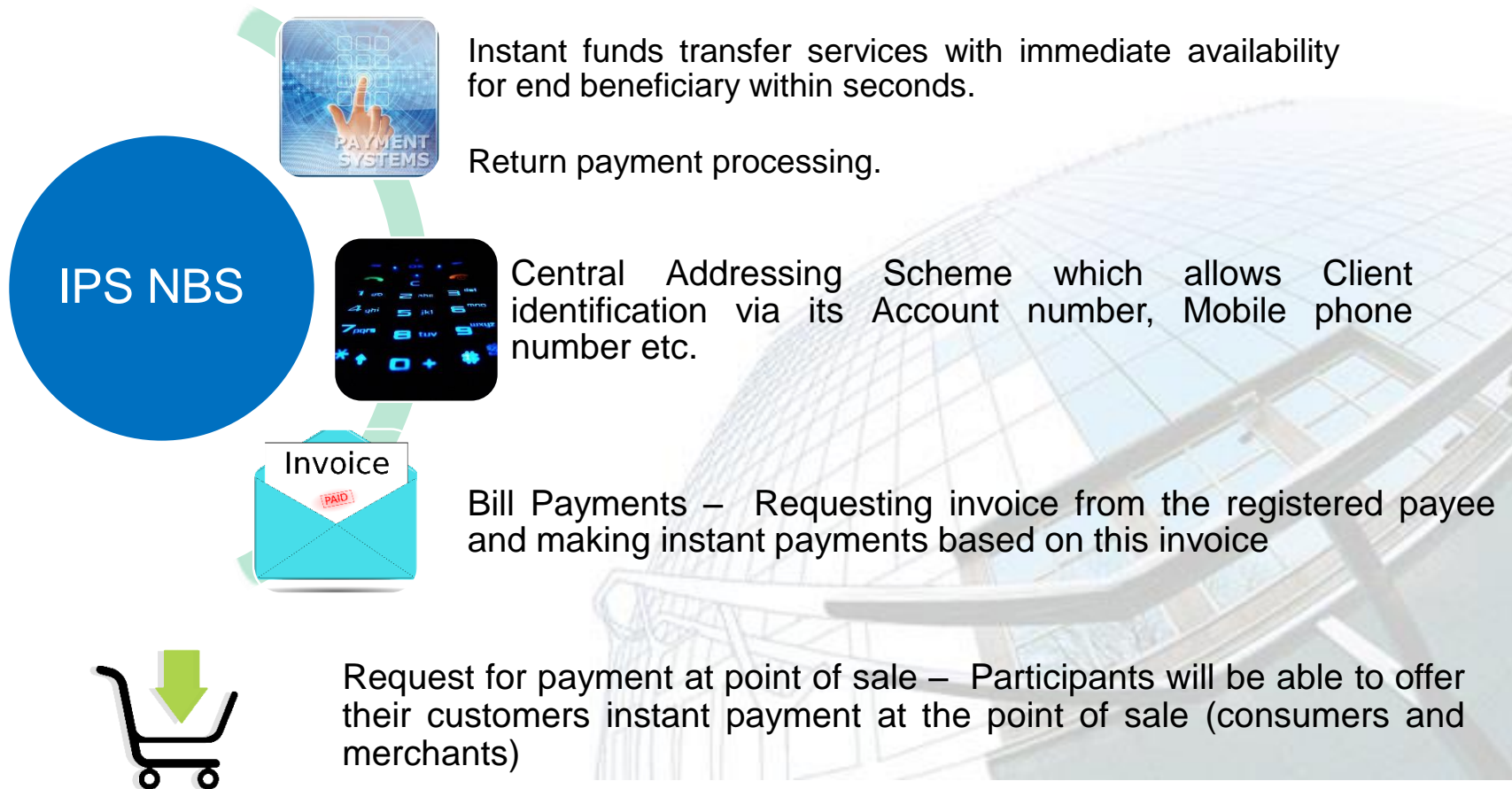
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Concept of instant payment system (1)

- **Basic principles for foundation of the system:**
 - NBS Instant payment system will be extension of existing payment infrastructure at NBS – separate module connected with RTGS system
 - Instant payments settlement will be in **Central Bank Money**
 - **24/7/365** operating hours of NBS IPS
 - Participation in NBS IPS will be mandatory for all participants in RTGS NBS system
 - Besides banks, other payment service providers will also be allowed to participate in instant payment system
 - ISO 20022 message format

Concept of instant payment system (2)

- IPS functions and services:



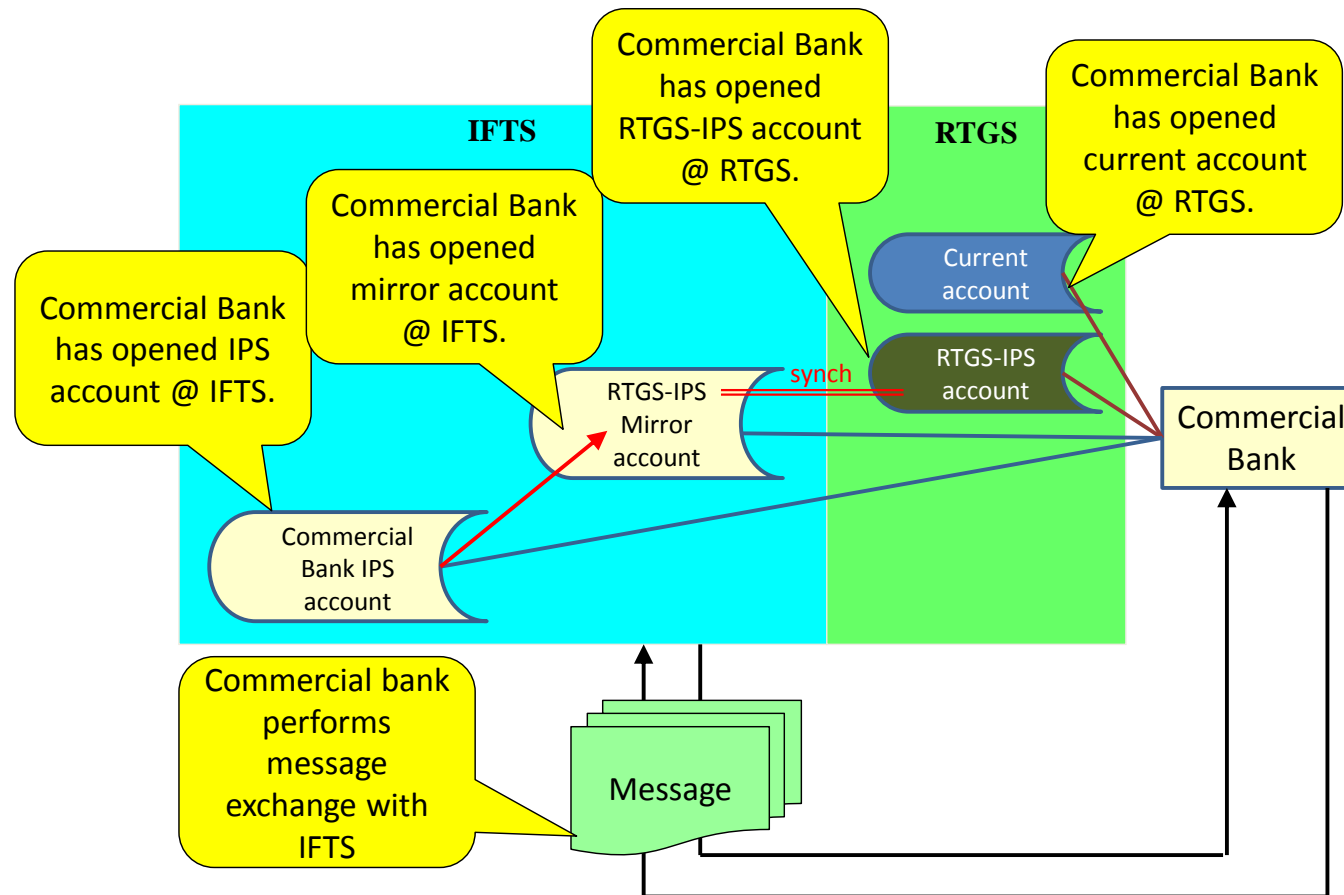
Concept of instant payment system (3)

- Participants in NBS IPS:

	Participant	Type of participation	Accounts
1	Commercial Bank	Direct	RTGS + IFTS accounts
2	Payment Institution	Indirect	IFTS account
3	E money Institution	Indirect	IFTS account
4	Ministry of Finance – Treasury Administration	Direct	RTGS + IFTS accounts

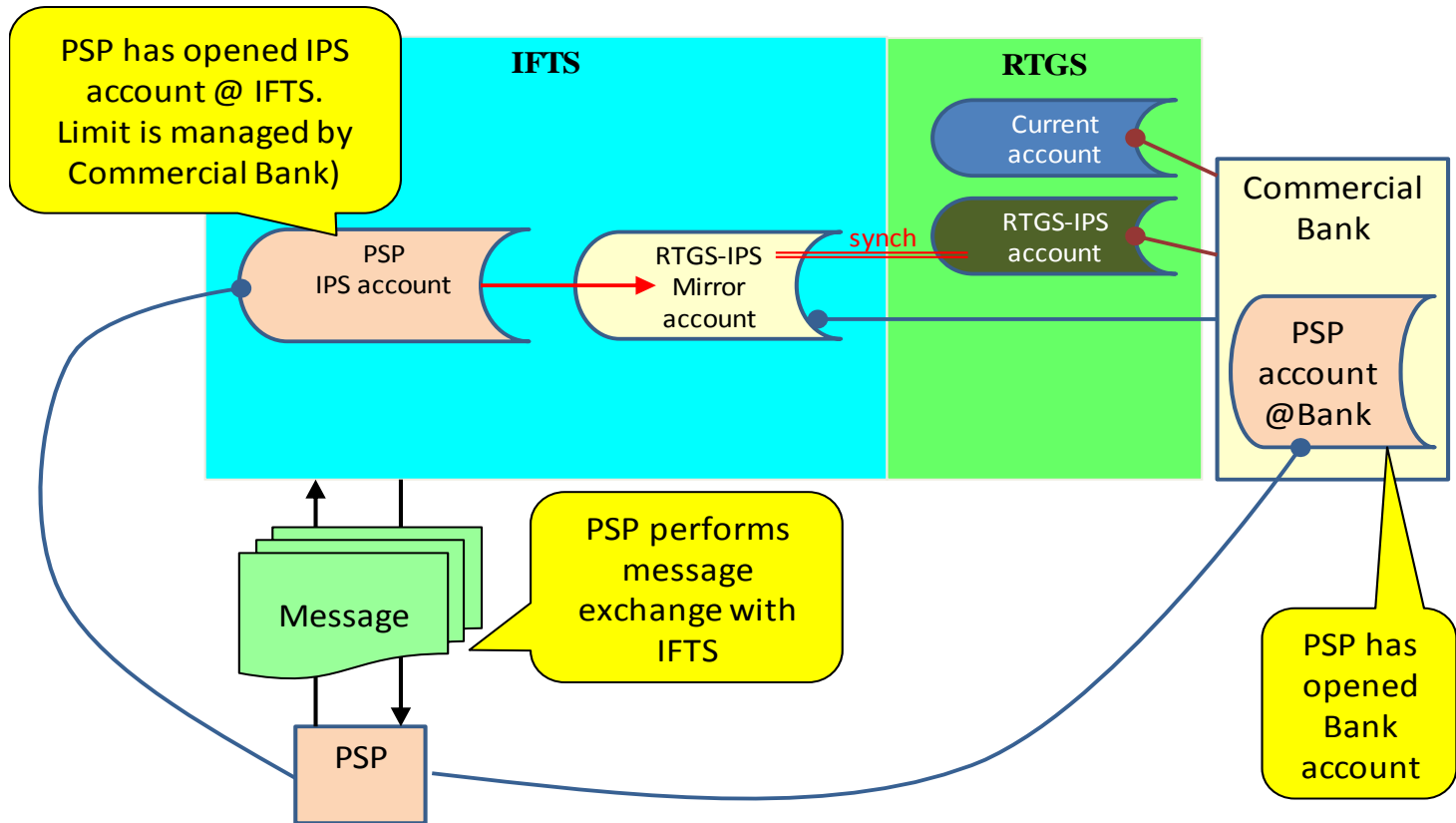
Concept of instant payment system (4)

- **Direct participation in IPS NBS :**



Concept of instant payment system (5)

- Indirect participation in IPS NBS :

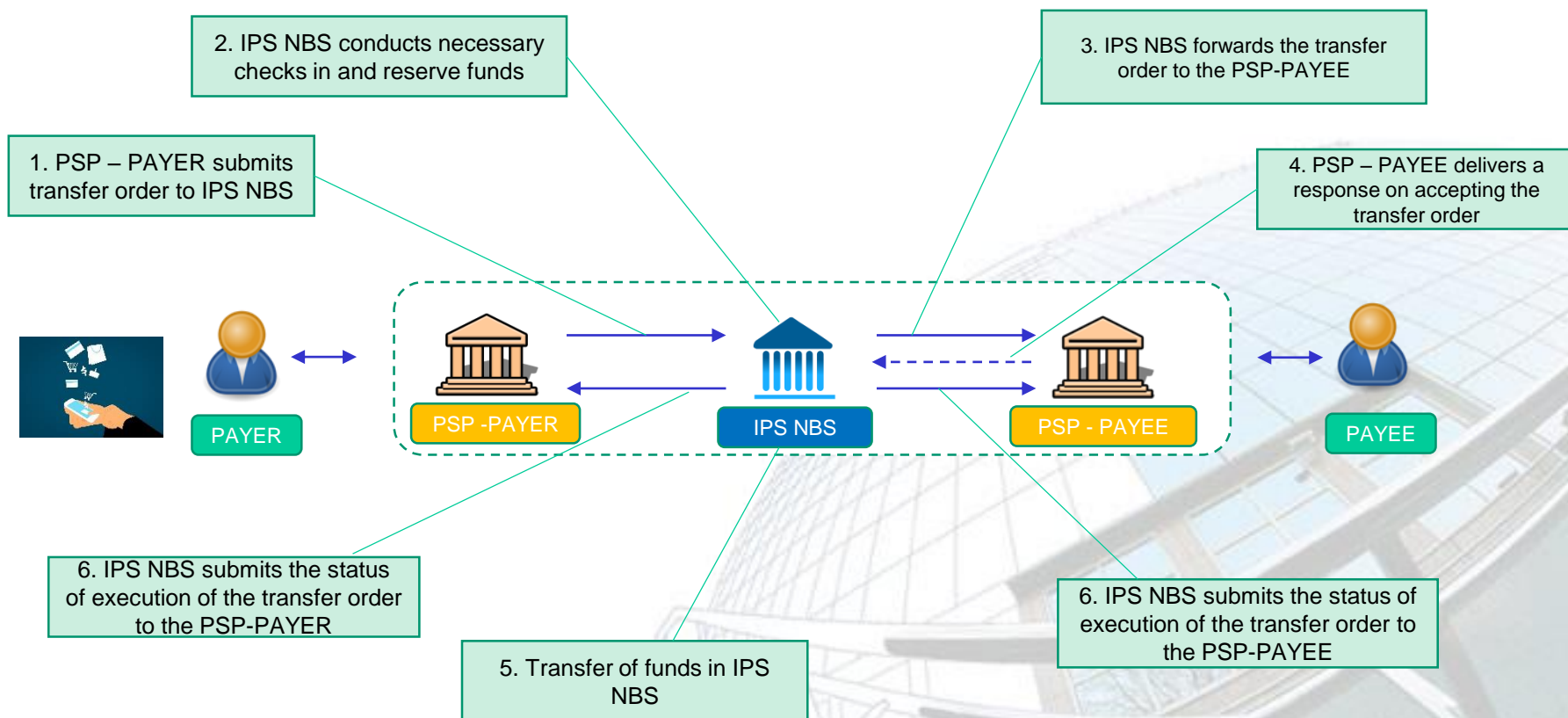


Concept of instant payment system (6)

- **Liquidity management in IPS NBS :**
 - Participants use RTGS liquidity for funding RTGS-IPS account.
 - Balance on RTGS-IPS account is a guarantee for final settlement in IPS NBS system.
 - According to available balance on RTGS-IPS account direct participants set up limit (Net Debit position limit) on their IPS account and IPS account of indirect participants on whose behalf they act as settlement agent.
 - Transfer of liquidity (funding and defunding) between RTGS current account and RTGS-IPS account is possible only during RTGS working hours.
 - Balances on RTGS-IPS accounts will be counted for minimum reserves requirement.

Concept of instant payment system (7)

- Instant payment transaction process



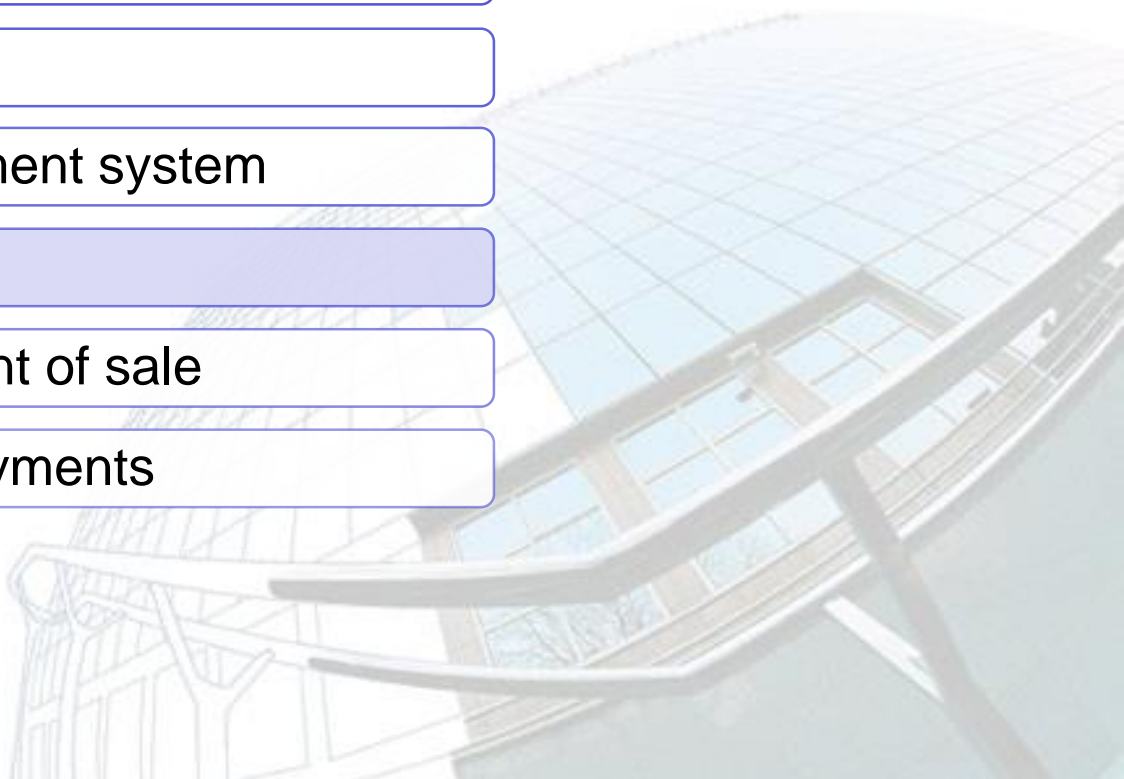
Concept of instant payment system (8)



- **IPS NBS pricing policy:**

- NBS set up low pricing policy to support usage of instant payments
- No entry and monthly fees for banks that already participate in RTGS NBS system
- Price per transfer order will be 4 dinars (0,03 euro cents)
- Special pricing policy for instant payments initiated at point of sale:
 - For transaction amounts less than 600 dinars (5 euros) price per transfer order will be 1 dinar (0,008 euro cents)
 - For transaction amounts of over 600 dinars (5 euros) price per transfer order will be 2 dinars (0,016 euro cents)

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Project timeline

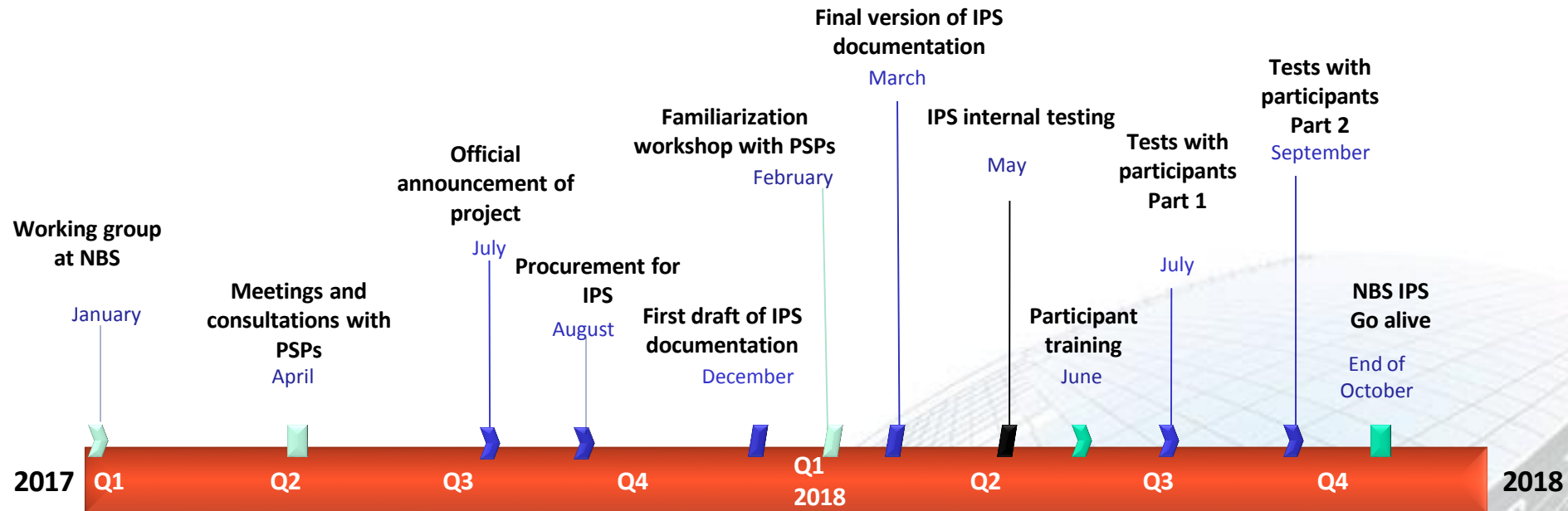


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Instant payments at point of sale (1)

- On the initiative of National bank of Serbia, Association of Serbian Banks (ASB) formed working group for defining use cases and technical standards for instant payments at point of sale.
- National Bank of Serbia took coordination role in this working group.
- Main goal was to define common technical specification for each use case.
- Two ways for initiation of instant payments at point of sale – NFC and QR code.
- Banks are free to decide what way of initiation of instant payments they will offer to payment service users.
- Because of low penetration of NFC devices banks will at first phase offer QR based instruments for initiation of instant payments.



Instant payments at point of sale (2)



- On the initiative of National Bank of Serbia, working group for defining recommendations for usage of QR code in credit transfer was formed.
- Representatives of banks, Association of Serbian Banks (ASB) and Serbian Chamber of Commerce took part in this working group.
- Result of the work were Draft guidelines for using QR code in payment transaction execution.
- QR code data depend on whether QR code is presented by consumer or merchant.
- Document was published for public consultation in May 2018.
- Final version will be adopted in June 2018.

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Promotion of instant payments

- NBS is actively promoting instant payment system by taking part at conferences where our representatives present new instant payment system.
- By publishing press realises we are trying to inform our public about benefits of instant payments for end users and economy.
- In cooperation with Serbian Chamber of Commerce we sent a letter to all merchants in the Republic of Serbia, informing them about benefits of instant payments, especially about low costs of accepting this instrument.





National Bank of Serbia

THANK YOU FOR THE ATTENTION!

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