Payment systems in Russia: Development of the payment system of the Bank of Russia

Nikolay Geronin
Bank of Russia
BESP system of the Bank of Russia

**BESP system (Banking Electronic Speed Payments)** is a RTGS of the Bank of Russia with «hybrid» system elements for time-critical payments in the currency of the Russian Federation.
BESP regulatory framework:


- [www.cbr.ru/analytics/standartActs/p_system/](http://www.cbr.ru/analytics/standartActs/p_system/) (in Russian only at the moment)
BESP key characteristics:

- Centralized system architecture
- Gradual and smooth integration into the existing Bank of Russia payment system
- Parallel operating with other Bank of Russia settlement services («urgent» payments in addition to «electronic», «post» and «telegraph»)
Payment system of the Bank of Russia (before BESP implementation)

Intraregional electronic settlements

Interregional electronic settlements

Window Up to 2 days

Payment System of the Bank of Russia - 78 regional segments

Settlement participants:
Bank of Russia subdivisions, credit institutions, Federal treasury, customers
Central bank of the Russian Federation

BESP in the payment system of the Bank of Russia

- Assured time for making payments
- Almost round-the-clock operations for DSP
- Absence of time zone dependency
- Complete electronic document flow

Centralized System (single Center for Processing and Settlements of BESP - CPS BESP)

Settlement participants:
- special settlement participants (SSP),
- direct settlement participant (DSP),
- associate settlement participant (ASP)
BESP key characteristics:

• Two-tier structure of participation - direct (for DSP, SSP) and associate (for ASP):
  – direct participation - direct access to all services (advanced service)
  – associate participation - access to services via local Bank of Russia subdivisions (minimal service)

• Voluntary participation in the system - customers of the Bank of Russia determine on their own necessity and form of their participation (DSP /ASP)
BESP access and participation

Central bank of the Russian Federation

BESP system of the Bank of Russia

External systems

Regional segment

SSP

ASP

DSP

Territorial branch (TB) of the Bank of Russia
Key features of BESP (continued):

- Complete electronic document flow by means of electronic messages
- Usage the Bank of Russia transportation system and formats (in future - SWIFT via mapping formats)
Conditions for BESP implementation:

- 97% of BR subdivision are “electronic”
- 97% of credit institutions support an electronic exchange with Bank of Russia
- 97.7% of payment documents are delivered to the Bank of Russia electronically via communication channels
- 96% of the Bank of Russia territorial branches use unified banking messages format
Key features of BESP (continued):

- **Settlements take place:**
  - Continuously and immediately during the day
  - On gross base with “hybrid” elements (mutual limits, offset)
  - Using payments orders (with priorities)
  - For full value (no partial payments)
  - Providing real-time payment irrevocability and finality

  In case payment does not comply with conditions for immediate settlement – it is placed in to centralized queue
Key features of BESP (continued):

- Direct participant manages its liquidity in real time:
  - Within correspondent account balance value + intraday «overdraft» limit
  - Allocating liquidity at the start of day
  - Optimizing liquidity distribution during the day
  - Setting limits (common, bilateral, multilateral)
DSP allocating/ changing amount of liquid founds

- Allocating amount of liquid funds (ALF), planned for BESP use by DSP
- DSP changing the amount of liquid funds (ALF), planned for BESP use by DSP during the settlement period
Key features of BESP (continued):

Queue management (for direct participants only)

- monitoring and management
- revoking
- changing payment sequence
- changing priority
- canceling limits
Central bank of the Russian Federation

Key features of BESP (continued):

Bank of Russia liquidity management facilities

- multilateral offset and optimization (gridlock resolution)

- cancellation of limits
Key features of BESP (continued):

- Real time information services available to direct participant regardless of its territorial location and time zone
- Broad information services, available to direct participant for control over settlements, query-based, non query-based or scheduled (payment status, debit/credit confirmation, system liquidity with credits issued etc.), and also for system participation level management
Key features of BESP (continued):

- Almost round-the-clock system operation in the existing 11 time zones of Russia (from 01-00 to 21-30 hours Moscow time)
BESP operational schedule

System operational day

- Preliminary
  - Updating regulatory and reference information
  - Registration / exclusion / temporary deactivation of BESP participants
  - DSP setting amount of funds for making payments in BESP
  - Setting mutual limits

- Regular
  - Ancillary session (optimization session)
    - Payment acceptance and processing
    - Queue maintenance and management
    - Information exchange with BESP participants
    - Liquidity management by DSP
    - Temporary suspension/release of DSP participation

- Final
  - Shift schedule resulting from optimization session
    - Daily completion of BESP settlements
    - Generation and transmission to BESP participants reports
    - Generation and transmission to the GL output reports
    - Information archiving

Moscow Time

1.00 2.00 21.00 21.30
Thank you for your attention!