Fintech challenges at DNB

Evert Fekkes, Erus Schuurman
Market developments

Innovation and fragmentation
Game Changers: rules, schemes, technology

- PSD2 Open Banking
- Instant Payments
- Tokenization, Biometrics, Mobile
- GDPR Privacy
- Data
- CBDC
- Identity
PSD2 – Access to the Account introduces two new roles

- **Payment Service User**
  - Internet / mobile banking
  - Accounts

- **ASPSP**
  - Account Servicing Payment Service Provider

- **AISP**
  - Account Information Service Provider

- **PISP**
  - Payment Initiation Service Provider

**APIs**

- **November '19**
  - Evert Fekkes & Erus Schuurman
Instant payments: the new normal

1. Always Open
2. Instant processing
3. Acknowledged
Prudential supervision payment & e-money institutions
Approach and experiences
November 2019
1.1 Retail payments sector: fragmentation and highly competitive
1.2 Supervisory process

- Banks (T3 – T5)
- Electronic money institutions (T2) #3
- Payment institutions (T2-T3) #40
- Payment infrastructures (T1-T5)
- Prudential supervision (Wft)

EC: Electronic Money Directive (EMD2)
EC: Payment Services Directive (PSD2)

Oversight

EC: Electronic Money Directive (EMD2)
EC: Payment Services Directive (PSD2)
1.3 Retail payments sector: Licensing and notification process (Payment Services Directive 2)

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<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td>General information</td>
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<td>Business case</td>
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<td>3</td>
<td>Sound business operations</td>
</tr>
<tr>
<td>4</td>
<td>Ethical business operations</td>
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<td>5</td>
<td>Fit and proper assessment of policymakers and co-policymakers</td>
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<td>Two day-to-day policymakers working from the Netherlands</td>
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<td>7</td>
<td>Transparent governance structure</td>
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<td>8</td>
<td>Qualifying holdings</td>
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<td>9</td>
<td>Securing the funds of payment service users</td>
</tr>
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<td>10</td>
<td>Minimum own funds and solvency</td>
</tr>
<tr>
<td>11</td>
<td>Indemnity insurance</td>
</tr>
<tr>
<td></td>
<td>Annex: Overview of required annexes</td>
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</tbody>
</table>

**DNB good practice:**
- Fit and proper assessment
- Recovery and exit plan

**DNB challenges:**
- Governance
- Safeguarding
- Outsourcing (global)
- Qualifying holdings
- Many applications (PSD2, Brexit, and new BigTechs)
1.4 Retail payments sector: Typology PIs and EMIs and authorisation process

Business models of Payment institutions (based on eight payment services as defined in PSD2):

- Collecting payment service providers (merchant oriented)
- Terminal focused service providers (merchant oriented)
- FX payment service providers (merchant and/or consumer oriented)
- Consumer finance service providers (consumer oriented)
- New PSD2 services providers (merchant and/or consumer oriented):
  - Payment initiation service providers
  - Account information service providers
- Cash money transfer service providers (merchant and/or consumer oriented)

- In total 48 licensed payment institutions (in total > EUR 200 billion payment volume in 2018)
2.1 Supervisory process: RAS

Five risk categories:

- Business model (risk)
- Financial risk (capital focused)
- Governance (risk)
- Operational risk
- Financial economic crime risk
2.2 Supervisory process (RAS)

RAS - process overview

1. Automatic scores based on prudential reporting and common knowledge

2. Evaluation of automatic scores

3. Challenge sessions with peer group institutions

4. Final RAS- and ID-card

5. Prudential supervisory plan (both sector wide thematic reviews as institution specific actions)
## 2.3 Supervisory process: RAS

### Table: Risk categories

<table>
<thead>
<tr>
<th>Risk categories</th>
<th>AS (t0)</th>
<th>ES (t0)</th>
<th>RC</th>
<th>AS (t-1)</th>
<th>ES (t-1)</th>
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<tbody>
<tr>
<td>Business model</td>
<td>3</td>
<td>4</td>
<td>n/a</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Financial risk</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Governance</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Operational risk</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Integrity risk</td>
<td>2</td>
<td>n/a</td>
<td>3</td>
<td>3</td>
<td>n/a</td>
</tr>
<tr>
<td>Overall risk score (AVG)</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Narrative:** Please explain why you decided to (not) adjust the score in a maximum of 4 sentences. Examples: consideration of additional institution risks (e.g., FX / Liquidity / Chargetback risk), outcomes of on-site investigations / Risk Control Framework / thematic reviews / PDR's, governance issues around allocating deringeld. 

![Graphical representation of risk categories](image-url)
2.4 Supervisory process

Thematic reviews (partly based on RAS):
- Safeguarding of funds (2015/2016)
- Business model evaluation (2016, desk research)
- Recovery and exit plans (2017)
- Operational and security risk management under PSD2 (2018)

Prudential reporting
- Finrep/Corep twice a year
- Annual accounts

Signals and incidents
- Major incident guidelines under PSD2, see ➔
- Customer complaints
- Suggestions competitors

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Lower impact level</th>
<th>Higher impact level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions affected</td>
<td>&gt; 10% of the payment service provider’s regular level of transactions (in terms of number of transactions) and &gt; EUR 100,000</td>
<td>&gt; 25% of the payment service provider’s regular level of transactions (in terms of number of transactions) or &gt; EUR 5 million</td>
</tr>
<tr>
<td>Payment service users affected</td>
<td>&gt; 5,000 and &gt; 10% of the payment service provider’s payment service users</td>
<td>&gt; 50,000 or &gt; 25% of the payment service provider’s payment service users</td>
</tr>
<tr>
<td>Service downtime</td>
<td>&gt; 2 hours</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Economic impact</td>
<td>Not applicable</td>
<td>&gt; Max. (0.1% Tier 1 capital, * EUR 200,000) or &gt; EUR 5 million</td>
</tr>
<tr>
<td>High level of internal escalation</td>
<td>Yes</td>
<td>Yes, and a crisis mode (or equivalent) is likely to be called upon</td>
</tr>
<tr>
<td>Other payment service providers or relevant infrastructures potentially affected</td>
<td>Yes</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Reputational impact</td>
<td>Yes</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
3.1 Historical issues

A few examples:

1. Operational failure which results in safeguarding and capital issues
2. Non-compliant attitude and culture (AML and TF) driven by director and major shareholder
3. Continuous loss making resulting in capital deficiency
4. Lack of risk and compliance awareness within the board of directors
5. Exit (wind down) of payment activities
3.2 Typology PIs and EMIs and authorisation process

Not (yet) in scope of prudential supervision:

- Crypto currency issuers
- Commercial agents
- Crowdfunding platforms
- Physical gift cards
- Closed network gift cards
3.3 Recent/current developments

PSD2:
- More focus on operational and security risks
- Prevent cybercrime
- New types of licenses (Open Banking)
- Strong customer authentication
- New reporting

- Brexit
- Credit risk exposures (including counterparty credit risk)
- Financial economic crime
- Data quality
- Sustainability
3.4 succesfull life cycle

From start-up, payment institution, licensed bank and succesfull initial public offering:
4.1 Developments – future scenarios
4.2 Developments – future scenarios

- Technological developments
- Changing consumer behaviour
- Law and regulation
4.3 Open Banking – access beyond PSD2
4.5 Developments – future scenarios

Outsourcing

Partner ships

Platforms
4.6 Developments - Traditional prudential supervision on banks and payment institutions

- Banks
- Outsourcing
- Technology
4.7 Developments - How are we going to supervise bigtech companies in retail payments?

Big tech

Outsourcing

Banks and payment institutions
4.8 Developments - UBER in Payments

Characteristics:

- Disruptive
- Platform economy, highly scalable
- Focus on growth
- Technology oriented, Not primary focused on attracting deposits or credit activities
- Culture, no financial background
- User oriented
4.9 Developments – Bigtech companies entering the retail payments market

- Amazon
- Google
- Facebook
- Apple
- Alibaba, Alipay
- Tencent (WeChat Pay)
4.10 Challenges from a supervisory perspective

- Proportionality
- Compliance to GDPR (European Privacy Law)
- CDD and transaction monitoring
- Differences between bank account, payment account and online wallets
- Regulatory / supervisory arbitrage
- Boots on the ground, no empty shells
- Direct access to clearing and settlement
5. Developments – smart supervisor