Agenda

- Countries / Background
- Control Metrics
- Operational Overview
- Challenges
- Future Outlook
- Key Conclusions
11 Countries

- Australia
- Austria
- Belgium
- Malaysia
- The Netherlands
- New Zealand
- Norway
- South Africa
- Sweden
- Thailand
- United Kingdom
Selection Criteria

- Experience of decentralisation of sorting operations
- Outsourced organisation
- Variety of models selected
- Wide range of economic and socio economic features
- Regional Coverage
Cash Cycle roles and Key Players

- Print Works and Mint
- Central Bank
- Commercial Banks and CIT
- Public and Retailers

Policy and Control

- Design and Production
- Issue and Distribute
- Recycle

Public Services
Banknote Inventory Analysis

BANKNOTES ON ORDER

- Contingency Stocks
- Being Processed and Pending Processing
- Commercial Bank Branches
- ATMs
- Retailers

Banknotes being recirculated away from cash processing operations
Research Background

- Commercial Rationale
- Controls
- Economics
- Supervisory
- Performance
- Project Management
- Benefits
- Currency Flows
Research Methodology

- Review of published information
- Presentations made by Central Bank staff
- Specifically drafted questionnaire
- Follow up discussions
Published Information Sources

- Annual Reports
- Central Bank Publications
- Third party Research Data
Presentation Sources

- Central Bank Presentations at:
- Currency Conference
- Regional ICCOS Conferences
- Banknote Conference
- EFMA

- And similar public events and conferences
Questionnaire Details

- Catalyst for making the changes
- Who was involved in the decision making process
- Core objectives
- Financial controls implemented
- Supervisory and audit functions imposed
- Metrics used
- Responsibilities of partners in the new model
- Associated costs
- Challenges faced and future plans
**Key Drivers for change**

- Focus on core activities of Central Bank
- Costs associated with cash processing at Central Bank
- Requirement to replace/upgrade processing equipment
- Societal costs of national cash cycle
- Security of cash distribution
- Optimisations of cash circulation
- Enhanced services available from CIT companies
Research Findings

• Who was involved in the decisions making process
  ○ Currency Department
  ○ Audit
  ○ Security
  ○ IT
  ○ Legal
  ○ Governor
## Operational Models

### Classic or Centralized Model

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### Partially Decentralized Model

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Legend:
- Blue: primary responsibility
- Gray: secondary responsibility
Research Findings

- **Key benefits targeted**
  - Reduce Central Bank involvement in circulation process
  - Improve the cash cycle process
  - One stop note processing
  - Reduce level of cash movements nationally
  - Improve national note quality standards
Research Findings

- Controls implemented
  - Performance agreements
    - Relating to note volumes and distribution
    - Efficiencies
    - Note quality
  - Fees and penalty schemes for non compliance
  - Sampling of note stocks
  - Sample packs
  - Regular auditing of operations
  - Machine tests
  - Inspectorate team
  - Performance appraisals
Research Findings

- Examples of metrics implemented
  - Number of notes processed
  - Fit/unfit ratio
  - Counterfeit rates
  - Note durability
  - Denominational breakdown
  - Times notes seen by Central Bank

- All assessed before and after the re-engineering of the process
Research Findings

- Economic measures taken by Central Bank to assist re-engineering
  - Transfer of processing equipment to commercial sector
  - Financial schemes to indemnify commercial banks
    - Notes Held to Order (NHTO) schemes
    - Balance Sheet relief
    - Note quality rewards
    - Penalties for non compliance.
Research Findings - Cost Impact

Central Bank Involvement vs. Costs and Inefficiencies
Research Findings - Compliance Impact

Diagram:
- X-axis: Compliance Risks
- Y-axis: Central Bank Involvement
- Trend line showing decreasing involvement with increasing risks.
Challenges

- Ability of commercial sector to take on responsibility
- Cost management for the transference of operations
- Clear and consistent communication and evaluation
- Establishing common goals and objectives
- Performance evaluation and management
Benefits Achieved

- Fewer Central Bank Cash Centres and lower operational costs
- Reduced societal costs
- Improved cash circulation cycle
- Reduced cash movements
Future Outlook

- Continuing trend to evolve the model
- Review costs and operational processes
- Identify additional service partners
- Assess rewards/penalty arrangements and fee structures
Key Conclusions - 1

- There is no single unique solution every country and model has to be different
- The process of re-engineering is an iterative one which needs to be managed on a constant and continuing basis
- The financial objectives of the commercial sector are different from those of Central Banks and this has to be recognised in any agreements
Central Banks will see lower costs, fewer cash centres less headcount etc from the re-engineering but this will be at the expense of control and visibility over the national cash cycle.

The emergence of new note re-circulation technologies will distance note processing and distribution away from traditional cash centre models.

Central Banks have continued to retail the responsibility for note destruction with only limited outsourcing of this function to date.
Some questions for discussion

- What are the core responsibilities of the Central Bank?
- What functions can the commercial sector assume?
- In your own country, is the commercial sector structured to assume these roles?
- What financial incentives can the Central Bank offer to support the transition to the commercial sector?
- What controls and metrics should be implemented to manage the whole process?
Thank you