

Initialisation-
parameter setting

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graph TD; A[Initialisation-parameter setting] --> B["• Forward transmission (Bob to Alice)  
• First eavesdropping detection P1"]; B --> C["• Message encoding operation  
• Backward transmission (Alice to Bob)  
• Second eavesdropping detection P2"]; C --> D["Quantum bit error ratio (QBER)  
calculation"];
```

- Forward transmission (Bob to Alice)
- First eavesdropping detection P1

- Message encoding operation
- Backward transmission (Alice to Bob)
- Second eavesdropping detection P2

Quantum bit error ratio (QBER)
calculation