Payments Engine

• Cross-government online payments
• Provides unauthenticated and authenticated support for online payments
• Handles debit cards, credit cards and direct debits
Payments Engine – Scenario 1

• A portal sends in a payment request to the Payments engine in a synchronous session.
• The Payments engine undertakes the appropriate checks (service, card type, etc).
• The Payments engine makes a payment request to DataCash who return an authentication code to the Payments engine for the transaction.
• The Payments engine returns that code to the open soap session with other relevant information.
• The Payments engine then sends a payment notification message to the department. This is sent via the Payments engine DIS to the Gateway which then uses hub and spoke to authenticate the message and route it to the appropriate destination department spoke.
Payments Engine – Scenario 2

• Using hub and spoke, a department submit their payment request via the Gateway to the Payments engine. The Gateway validates the message received from the originating spoke and routes it onto the appropriate destination spoke (the Payments engine)
• The Payments engine undertakes the necessary checks (service, card type etc)
• The Payments engine sends a payment request to DataCash who return an authentication code for the transaction
• The Payments engine returns that code as a response to the originating department. This is routed back via the Payments DIS, to the Gateway and back to the originating department spoke using the response end point supplied.
• The Payments engine then sends a payment notification message to the appropriate department via their DIS to the Gateway which then routes the message onto the appropriate departmental spoke
Payments – Portal Direct

1. Authenticated Session with end user
2. Portal gathers payment info from user
3. Portal calls ProcessPayment SOAP method synchronously
4-7. DoS, other attack and verification checks
8. Synchronous request to DataCash
9. Synchronous response from DataCash
10. Audit log written
11. Synchronous response from SOAP
12. GovTalk Payment Notification submitted to TxE
13. GovTalk Payment Notification routed to department
14. Department Systems
Payments – via Transaction Engine

1. Authenticated Session with end user
2. Portal gathers payment info from user into GovTalk <Body>
3. Portal submits GovTalk message to TxE (H&S or Polling)

4. TxE routes payment request
5. Optional business response before payment engine call, or as step
6. GovTalk message routed to department. Payment information is extracted from <Body>
7. TxE (Spoke)
8. DoS, other attack and verification checks
9. Synchronous request to DataCash
10. Synchronous response from DataCash

Department Portal or Web Site

DataCash

Payments Engine (Spoke)

Audit

Key to Steps Not Labelled
- 6. GovTalk Payment Request prepared and submitted to TxE as business submission
- 12. Response to payment request made in (6)
- 13. GovTalk Payment Notification submitted to TxE and routed to target department