## !standard mode:off

Use Case: ProcessRegisteredVehicle

Scope: ETRSystem407

Level: SUMMARY

Intention: A registered vehicle owner intends to use the 407 ETR highway.

Multiplicity: Many registered vehicles can use the highway simultaneously.

Primary Actor: VEHICLE::RegisteredVehicle::1..\*

Secondary Actor:

GANTRY::EntryGantry::1..1

GANTRY::ExitGantry::1..1

SOFTWARE::AccountManagementSystem::1..1

Main Success Scenario:

"The RegisteredVehicle enters the highway and passes under the EntryGantry."

[IdentifyTransponder] "The EntryGantry identifies the transponder on the RegisteredVehicle."

[RecordEntryData] "The EntryGantry records the entry time, date, and location."

"The RegisteredVehicle exits the highway and passes under the ExitGantry."

[IdentifyTransponder] "The ExitGantry identifies the transponder on the RegisteredVehicle."

[RecordExitData] "The ExitGantry records the exit time, date, and location."

[CalculateToll] "The AccountManagementSystem calculates the toll based on distance and time of day."

[DebitAccount] "The AccountManagementSystem debits the associated account."

"The ExitGantry provides a green signal and four beeps to the RegisteredVehicle."

Use Case Ends in: SUCCESS

Extensions:

Alternative for 1:

1a. "The RegisteredVehicle does not have a transponder."

1a.1. [ProcessUnregisteredVehicle] "The system processes the vehicle as unregistered."

Use Case Ends in: SUCCESS

Alternative for 2:

- 2a. "The EntryGantry fails to identify the transponder."
- 2a.1. [HandleTransponderFailure] "The system attempts to identify the transponder again."
- 2a.2. "If the transponder is still not identified, the system records the vehicle as unregistered."

Use Case Ends in: SUCCESS

Alternative for 3:

- 3a. "The EntryGantry fails to record the entry data."
- 3a.1. [HandleDataRecordingFailure] "The system attempts to record the entry data again."
- 3a.2. "If the data cannot be recorded, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 4:

- 4a. "The RegisteredVehicle exits the highway without passing under the ExitGantry."
- 4a.1. [HandleExitWithoutGantry] "The system attempts to identify the vehicle using other means (e.g., cameras)."
- 4a.2. "If the vehicle cannot be identified, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 5:

- 5a. "The ExitGantry fails to identify the transponder."
- 5a.1. [HandleTransponderFailure] "The system attempts to identify the transponder again."
- 5a.2. "If the transponder is still not identified, the system records the vehicle as unregistered."

Use Case Ends in: SUCCESS

Alternative for 6:

- 6a. "The ExitGantry fails to record the exit data."
- 6a.1. [HandleDataRecordingFailure] "The system attempts to record the exit data again."
- 6a.2. "If the data cannot be recorded, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 7:

- 7a. "The AccountManagementSystem fails to calculate the toll."
- 7a.1. [HandleTollCalculationFailure] "The system attempts to calculate the toll again."
- 7a.2. "If the toll cannot be calculated, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 8:

8a. "The AccountManagementSystem fails to debit the account."

8a.1. [HandleAccountDebitFailure] "The system attempts to debit the account again."

8a.2. "If the account cannot be debited, the system logs the error and sends a notification to the account holder."

Use Case Ends in: DEGRADED

Exception for (1-9):

(1-9)a.^ timeout:30s "The system experiences a communication failure."

(1-9)a.1. {NETWORK\_EXCEPTION::CommunicationFailure} "The system attempts to reconnect."

Use Case Ends in: FAILURE

2. Process Unregistered Vehicles

Use Case: ProcessUnregisteredVehicle

Scope: ETRSystem407

Level: SUMMARY

Intention: "An unregistered vehicle owner intends to use the 407 ETR highway."

Multiplicity: "Many unregistered vehicles can use the highway simultaneously."

Primary Actor: VEHICLE::UnregisteredVehicle::1..\*

Secondary Actor:

GANTRY::EntryGantry::1..1

GANTRY::ExitGantry::1..1

SOFTWARE::AutomaticNumberPlateRecognitionSystem::1..1

SOFTWARE::GovernmentVehicleDatabase::1..1

Main Success Scenario:

"The UnregisteredVehicle enters the highway and passes under the EntryGantry."

[CaptureNumberPlateImage] "The EntryGantry captures images of the vehicle's number plate."

[ClassifyVehicle] "The EntryGantry classifies the vehicle using laser scanners."

[IdentifyVehicleOwner] "The AutomaticNumberPlateRecognitionSystem identifies the vehicle owner using the GovernmentVehicleDatabase."

[RecordEntryData] "The EntryGantry records the entry time, date, and location."

"The UnregisteredVehicle exits the highway and passes under the ExitGantry."

[RecordExitData] "The ExitGantry records the exit time, date, and location."

[CalculateToll] "The AutomaticNumberPlateRecognitionSystem calculates the toll based on distance and time of day."

[GenerateInvoice] "The AutomaticNumberPlateRecognitionSystem generates an invoice for the vehicle owner."

"The invoice is sent to the vehicle owner."

Use Case Ends in: SUCCESS

Extensions:

Alternative for 1:

1a. "The EntryGantry fails to capture the number plate image."

1a.1. [HandleImageCaptureFailure] "The system attempts to capture the image again."

1a.2. "If the image cannot be captured, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 2:

2a. "The EntryGantry fails to classify the vehicle."

2a.1. [HandleVehicleClassificationFailure] "The system attempts to classify the vehicle again."

2a.2. "If the vehicle cannot be classified, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 3:

3a. "The AutomaticNumberPlateRecognitionSystem fails to identify the vehicle owner."

3a.1. [HandleOwnerIdentificationFailure] "The system attempts to identify the owner again."

3a.2. "If the owner cannot be identified, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 4:

4a. "The EntryGantry fails to record the entry data."

4a.1. [HandleDataRecordingFailure] "The system attempts to record the entry data again."

4a.2. "If the data cannot be recorded, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 5:

5a. "The UnregisteredVehicle exits the highway without passing under the ExitGantry."

5a.1. [HandleExitWithoutGantry] "The system attempts to identify the vehicle using other means (e.g., cameras)."

5a.2. "If the vehicle cannot be identified, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 6:

6a. "The ExitGantry fails to record the exit data."

6a.1. [HandleDataRecordingFailure] "The system attempts to record the exit data again."

6a.2. "If the data cannot be recorded, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 7:

7a. "The AutomaticNumberPlateRecognitionSystem fails to calculate the toll."

7a.1. [HandleTollCalculationFailure] "The system attempts to calculate the toll again."

7a.2. "If the toll cannot be calculated, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 8:

8a. "The AutomaticNumberPlateRecognitionSystem fails to generate the invoice."

8a.1. [HandleInvoiceGenerationFailure] "The system attempts to generate the invoice again."

8a.2. "If the invoice cannot be generated, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 9:

9a. "The invoice cannot be sent to the vehicle owner."

9a.1. [HandleInvoiceDeliveryFailure] "The system attempts to send the invoice again."

9a.2. "If the invoice cannot be sent, the system logs the error and continues."

Use Case Ends in: DEGRADED

Exception for (1-10):

(1-10)a. \* timeout: 30s "The system experiences a communication failure."

(1-10)a.1. {NETWORK\_EXCEPTION::CommunicationFailure} "The system attempts to reconnect."

Use Case Ends in: FAILURE

Exception for (1-10):

(1-10)b. {SOFTWARE\_EXCEPTION::AutomaticNumberPlateRecognitionSystemFailure} "The AutomaticNumberPlateRecognitionSystem fails."

(1-10)b.1. [HandleAutomaticNumberPlateRecognitionSystemFailure] "The system attempts to use alternative methods for vehicle identification."

Use Case Ends in: DEGRADED

Exception for (1-10):

(1-10)c. {SOFTWARE\_EXCEPTION::GovernmentVehicleDatabaseFailure} "The GovernmentVehicleDatabase fails."

(1-10)c.1. [HandleGovernmentVehicleDatabaseFailure] "The system logs the error and continues."

Use Case Ends in: DEGRADED

3. Manage Payments

Use Case: ManagePayments

Scope: ETRSystem407

Level: SUMMARY

Intention: "The system intends to manage payments for tolls, fines, and other fees."

Multiplicity: "The system manages payments for many users."

Primary Actor: None

Secondary Actor:

SOFTWARE::AccountManagementSystem::1..1

SOFTWARE::PaymentGateway::1..1

HUMAN::CustomerServiceRepresentative::1..\*

Main Success Scenario:

"The AccountManagementSystem receives a payment request."

[ProcessPayment] "The PaymentGateway processes the payment."

"The AccountManagementSystem updates the account balance."

Use Case Ends in: SUCCESS

Extensions:

Alternative for 1:

1a. "The PaymentGateway fails to process the payment."

1a.1. [HandlePaymentProcessingFailure] "The system attempts to process the payment again."

1a.2. "If the payment cannot be processed, the system logs the error and sends a notification to the customer."

Use Case Ends in: DEGRADED

Alternative for 2:

2a. "The AccountManagementSystem fails to update the account balance."

2a.1. [HandleAccountBalanceUpdateFailure] "The system attempts to update the account balance again."

2a.2. "If the account balance cannot be updated, the system logs the error and sends a notification to the customer."

Use Case Ends in: DEGRADED

Exception for (1-3):

(1-3)a.^ timeout:30s "The system experiences a communication failure."

(1-3)a.1. {NETWORK EXCEPTION::CommunicationFailure} "The system attempts to reconnect."

Use Case Ends in: FAILURE

Exception for (1-3):

(1-3)b. {SOFTWARE\_EXCEPTION::PaymentGatewayFailure} "The PaymentGateway fails."

(1-3)b.1. [HandlePaymentGatewayFailure] "The system attempts to use an alternative payment gateway."

Use Case Ends in: DEGRADED

4. Enforce Compliance

Use Case: EnforceCompliance

Scope: ETRSystem407

Level: SUMMARY

Intention: "The system intends to enforce compliance with toll regulations and penalize violations."

Multiplicity: "The system enforces compliance for many users."

Primary Actor: None

Secondary Actor:

SOFTWARE::AccountManagementSystem::1..1

SOFTWARE::ViolationDetectionSystem::1..1

HUMAN::CustomerServiceRepresentative::1..\*

Main Success Scenario:

"The ViolationDetectionSystem detects a violation of toll regulations."

[GenerateFine] "The AccountManagementSystem generates a fine for the violation."

"The fine is sent to the violator."

Use Case Ends in: SUCCESS

Extensions:

Alternative for 1:

1a. "The ViolationDetectionSystem fails to detect a violation."

1a.1. [HandleViolationDetectionFailure] "The system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 2:

2a. "The AccountManagementSystem fails to generate a fine."

2a.1. [HandleFineGenerationFailure] "The system attempts to generate the fine again."

2a.2. "If the fine cannot be generated, the system logs the error and continues."

Use Case Ends in: DEGRADED

Alternative for 3:

3a. "The fine cannot be sent to the violator."

3a.1. [HandleFineDeliveryFailure] "The system attempts to send the fine again."

3a.2. "If the fine cannot be sent, the system logs the error and continues."

Use Case Ends in: DEGRADED

Exception for (1-3):

(1-3)a.^ timeout:30s "The system experiences a communication failure."

(1-3)a.1. {NETWORK EXCEPTION::CommunicationFailure} "The system attempts to reconnect."

Use Case Ends in: FAILURE

Exception for (1-3):

(1-3)b. {SOFTWARE\_EXCEPTION::ViolationDetectionSystemFailure} "The ViolationDetectionSystem fails."

(1-3)b.1. [HandleViolationDetectionSystemFailure] "The system logs the error and continues."

Use Case Ends in: DEGRADED

use case: IdentifyTransponder

Scope: GANTRY

Level: SUB\_FUNCTION

Intention: "The gantry identifies the transponder on a vehicle."

Multiplicity: "The gantry can identify many transponders."

Primary Actor: None

Main Success Scenario:

"The gantry reads the transponder ID."

Use Case Ends in: SUCCESS

use case: RecordEntryData

Scope: GANTRY

Level: SUB\_FUNCTION

Intention: "The gantry records the entry time, date, and location of a vehicle."

Multiplicity: "The gantry can record data for many vehicles."

Primary Actor: None

Main Success Scenario:

"The gantry stores the entry time, date, and location in the system."

Use Case Ends in: SUCCESS

use case: RecordExitData

Scope: GANTRY

Level: SUB\_FUNCTION

Intention: "The gantry records the exit time, date, and location of a vehicle."

Multiplicity: "The gantry can record data for many vehicles."

Primary Actor: None

. None

Main Success Scenario:

"The gantry stores the exit time, date, and location in the system."

Use Case Ends in: SUCCESS

use case: CalculateToll

Scope: AccountManagementSystem

Level: SUB\_FUNCTION

Intention: "The system calculates the toll based on distance and time of day."

Multiplicity: "The system can calculate tolls for many vehicles."

Primary Actor: None

Main Success Scenario:

"The system retrieves the entry and exit data."

"The system calculates the distance traveled."

"The system determines the time of day."

"The system applies the appropriate toll rate based on distance and time of day."

Use Case Ends in: SUCCESS

use case: DebitAccount

Scope: AccountManagementSystem

Level: SUB\_FUNCTION

Intention: "The system debits the associated account."

Multiplicity: "The system can debit many accounts."

Primary Actor: None

Main Success Scenario:

"The system deducts the toll amount from the account balance."

Use Case Ends in: SUCCESS

use case: CaptureNumberPlateImage

Scope: GANTRY

Level: SUB\_FUNCTION

Intention: "The gantry captures images of the vehicle's number plate."

Multiplicity: "The gantry can capture images for many vehicles."

Primary Actor: None

Main Success Scenario:

"The gantry activates the cameras to capture images of the number plate."

Use Case Ends in: SUCCESS

use case: ClassifyVehicle

Scope: GANTRY

Level: SUB\_FUNCTION

Intention: "The gantry classifies the vehicle using laser scanners."

Multiplicity: "The gantry can classify many vehicles."

Primary Actor: None

Main Success Scenario:

"The gantry activates the laser scanners to measure the vehicle's dimensions."

"The system classifies the vehicle based on its dimensions."

Use Case Ends in: SUCCESS

use case: IdentifyVehicleOwner

Scope: AutomaticNumberPlateRecognitionSystem

Level: SUB\_FUNCTION

Intention: "The system identifies the vehicle owner using the GovernmentVehicleDatabase."

Multiplicity: "The system can identify owners for many vehicles."

Primary Actor: None

Main Success Scenario:

"The system retrieves the vehicle's number plate from the captured image."

"The system queries the GovernmentVehicleDatabase using the number plate."

"The system retrieves the vehicle owner's information from the database."

Use Case Ends in: SUCCESS

use case: GenerateInvoice

Scope: AutomaticNumberPlateRecognitionSystem

Level: SUB\_FUNCTION

Intention: "The system generates an invoice for the vehicle owner."

Multiplicity: "The system can generate invoices for many vehicles."

Primary Actor: None

Main Success Scenario:

"The system retrieves the vehicle owner's information."

"The system calculates the toll amount."

"The system generates an invoice with the vehicle owner's information and the toll amount."

Use Case Ends in: SUCCESS

use case: ProcessPayment

Scope: PaymentGateway

Level: SUB\_FUNCTION

Intention: "The payment gateway processes the payment."

Multiplicity: "The payment gateway can process payments for many users."

Primary Actor: None

Main Success Scenario:

"The payment gateway receives the payment information."

"The payment gateway verifies the payment information."

"The payment gateway processes the payment."

Use Case Ends in: SUCCESS

use case: GenerateFine

Scope: AccountManagementSystem

Level: SUB\_FUNCTION

Intention: "The system generates a fine for the violation."

Multiplicity: "The system can generate fines for many violations."

Primary Actor: None

Main Success Scenario:

"The system retrieves the violator's information."

"The system determines the fine amount based on the violation type."

"The system generates a fine with the violator's information and the fine amount."

Use Case Ends in: SUCCESS

handler use case: HandleTransponderFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle transponder identification failure."

Multiplicity: "The system can handle transponder failures for many vehicles."

Primary Actor: None

**Contexts and Exceptions:** 

ProcessRegisteredVehicle {HARDWARE\_EXCEPTION::TransponderReaderFailure}

ProcessRegisteredVehicle {SOFTWARE\_EXCEPTION::TransponderCommunicationFailure}

ProcessUnregisteredVehicle {HARDWARE\_EXCEPTION::TransponderReaderFailure}

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::TransponderCommunicationFailure}

Main Success Scenario:

"The system attempts to identify the transponder again."

"If the transponder is still not identified, the system records the vehicle as unregistered."

Use Case Ends in: SUCCESS

handler use case: HandleDataRecordingFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle data recording failure."

Multiplicity: "The system can handle data recording failures for many vehicles."

Primary Actor: None

**Contexts and Exceptions:** 

ProcessRegisteredVehicle {HARDWARE\_EXCEPTION::DataStorageFailure}

ProcessUnregisteredVehicle {HARDWARE EXCEPTION::DataStorageFailure}

Main Success Scenario:

"The system attempts to record the data again."

"If the data cannot be recorded, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleExitWithoutGantry

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle vehicle exit without passing under the exit gantry."

Multiplicity: "The system can handle exits without gantries for many vehicles."

Primary Actor: None

Contexts and Exceptions:

ProcessRegisteredVehicle {ENVIRONMENT\_EXCEPTION::ExitGantryUnavailable}

ProcessUnregisteredVehicle {ENVIRONMENT\_EXCEPTION::ExitGantryUnavailable}

Main Success Scenario:

"The system attempts to identify the vehicle using other means (e.g., cameras)."

"If the vehicle cannot be identified, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleTollCalculationFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle toll calculation failure."

Multiplicity: "The system can handle toll calculation failures for many vehicles."

Primary Actor: None

Contexts and Exceptions:

ProcessRegisteredVehicle {SOFTWARE\_EXCEPTION::TollCalculationFailure}

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::TollCalculationFailure}

Main Success Scenario:

"The system attempts to calculate the toll again."

"If the toll cannot be calculated, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleAccountDebitFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle account debit failure."

Multiplicity: "The system can handle account debit failures for many accounts."

Primary Actor: None

Contexts and Exceptions:

ProcessRegisteredVehicle {SOFTWARE\_EXCEPTION::AccountDebitFailure}

Main Success Scenario:

"The system attempts to debit the account again."

"If the account cannot be debited, the system logs the error and sends a notification to the account holder."

Use Case Ends in: DEGRADED

handler use case: HandleImageCaptureFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle number plate image capture failure."

Multiplicity: "The system can handle image capture failures for many vehicles."

Primary Actor: None

Contexts and Exceptions:

ProcessUnregisteredVehicle {HARDWARE\_EXCEPTION::CameraFailure}

Main Success Scenario:

"The system attempts to capture the image again."

"If the image cannot be captured, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleVehicleClassificationFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle vehicle classification failure."

Multiplicity: "The system can handle classification failures for many vehicles."

Primary Actor: None

Contexts and Exceptions:

ProcessUnregisteredVehicle {HARDWARE\_EXCEPTION::LaserScannerFailure}

Main Success Scenario:

"The system attempts to classify the vehicle again."

"If the vehicle cannot be classified, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleOwnerIdentificationFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle vehicle owner identification failure."

Multiplicity: "The system can handle owner identification failures for many vehicles."

Primary Actor: None

**Contexts and Exceptions:** 

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::GovernmentVehicleDatabaseFailure}

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::AutomaticNumberPlateRecognitionSystemFailure}

Main Success Scenario:

"The system attempts to identify the owner again."

"If the owner cannot be identified, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleAutomaticNumberPlateRecognitionSystemFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle AutomaticNumberPlateRecognitionSystem failure."

Multiplicity: "The system can handle AutomaticNumberPlateRecognitionSystem failures for many

vehicles."

Primary Actor: None

**Contexts and Exceptions:** 

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::AutomaticNumberPlateRecognitionSystemFailure}

Main Success Scenario:

"The system attempts to use alternative methods for vehicle identification."

Use Case Ends in: DEGRADED

handler use case: HandleGovernmentVehicleDatabaseFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle GovernmentVehicleDatabase failure."

Multiplicity: "The system can handle GovernmentVehicleDatabase failures for many vehicles."

Primary Actor: None

**Contexts and Exceptions:** 

ProcessUnregisteredVehicle {SOFTWARE\_EXCEPTION::GovernmentVehicleDatabaseFailure}

Main Success Scenario:

"The system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandlePaymentProcessingFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle payment processing failure."

Multiplicity: "The system can handle payment processing failures for many payments."

Primary Actor: None

Contexts and Exceptions:

ManagePayments {SOFTWARE\_EXCEPTION::PaymentGatewayFailure}

Main Success Scenario:

"The system attempts to process the payment again."

"If the payment cannot be processed, the system logs the error and sends a notification to the customer."

Use Case Ends in: DEGRADED

handler use case: HandleAccountBalanceUpdateFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle account balance update failure."

Multiplicity: "The system can handle account balance update failures for many accounts."

Primary Actor: None

**Contexts and Exceptions:** 

ManagePayments {SOFTWARE\_EXCEPTION::AccountBalanceUpdateFailure}

Main Success Scenario:

"The system attempts to update the account balance again."

"If the account balance cannot be updated, the system logs the error and sends a notification to the customer."

Use Case Ends in: DEGRADED

handler use case: HandleViolationDetectionFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle violation detection failure."

Multiplicity: "The system can handle violation detection failures for many violations."

Primary Actor: None

Contexts and Exceptions:

EnforceCompliance {SOFTWARE\_EXCEPTION::ViolationDetectionSystemFailure}

Main Success Scenario:

"The system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleFineGenerationFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle fine generation failure."

Multiplicity: "The system can handle fine generation failures for many violations."

Primary Actor: None

Contexts and Exceptions:

EnforceCompliance {SOFTWARE\_EXCEPTION::FineGenerationFailure}

Main Success Scenario:

"The system attempts to generate the fine again."

"If the fine cannot be generated, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandleFineDeliveryFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle fine delivery failure."

Multiplicity: "The system can handle fine delivery failures for many violations."

Primary Actor: None

**Contexts and Exceptions:** 

EnforceCompliance {SOFTWARE\_EXCEPTION::FineDeliveryFailure}

Main Success Scenario:

"The system attempts to send the fine again."

"If the fine cannot be sent, the system logs the error and continues."

Use Case Ends in: DEGRADED

handler use case: HandlePaymentGatewayFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle PaymentGateway failure."

Multiplicity: "The system can handle PaymentGateway failures for many payments."

Primary Actor: None

**Contexts and Exceptions:** 

ManagePayments {SOFTWARE EXCEPTION::PaymentGatewayFailure}

Main Success Scenario:

"The system attempts to use an alternative payment gateway."

Use Case Ends in: DEGRADED

handler use case: HandleViolationDetectionSystemFailure

Scope: ETRSystem407

Level: SUMMARY

Intention: "To handle ViolationDetectionSystem failure."

Multiplicity: "The system can handle ViolationDetectionSystem failures for many violations."

Primary Actor: None

Contexts and Exceptions:

 $Enforce Compliance \ \{SOFTWARE\_EXCEPTION:: Violation Detection System Failure\}$ 

Main Success Scenario:

"The system logs the error and continues."

Use Case Ends in: DEGRADED