

# DHL Duty Drawback Data Models

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## Submit Order

```
@startuml

interface Document {
    +hash: string
    +path: string
    +name: string
}

interface Address {
    +addressLine1: string
    +addressLine2: string
    +POBox: string
    +city: string
    +country: Country
}

interface ConsigneeAddress extends Address {
    +phone: string
    +email: string
}

interface Order {
    +orderNumber: string
    +orderDate?: string
    +actionDate: string
    +ecomBusinessCode?: string
    +mode: ModeType
    +consigneeCode?: string
    +consigneeName?: string
    +consigneeAddress?: ConsigneeAddress
    +billTo: string
    +billToAddress: Address
    +shipTo?: string
    +shipToAddress?: Address
    +documents: Document[]
    +invoices: Invoice[]
}

interface Invoice {
    +invoiceNumber: string
    +invoiceDate: string
    +mode: ModeType
    +cancellationReason: string
    +totalNoOfInvoicePages: number
    +invoiceType: InvoiceType
    +paymentInstrumentType: PaymentInstrumentType
    +currency: Currencies
    +totalValue: number
    +incoTerm: IncoTermCode
    +freightAmount?: number
}
```

```
+freightCurrency?: Currencies
+insuranceAmount?: number
+insuranceCurrency?: Currencies
+exporterCode: string
+fzCode: FreeZoneCode
+warehouseCode: string
+cargoOwnership: string
+associatedEcomCompanies: string[]
+brokerBusinessCode: string
+logisticsSPBusinessCode: string
+documents: Document[]
+returnDetails: ReturnDetail[]
+invoiceParameters: InvoiceParameter[]
+lineItems: LineItem[]
}
interface LineItem {
  +shippingParameterId: string
  +lineNo: number
  +mode: ModeType
  +quantityReturned: number
  +quantity: number
  +quantityUOM: UnitOfMeasurement
  +netWeight: number
  +netWeightUOM: UnitOfMeasurement
  +description: string
  +hscode: string
  +countryOfOrigin: Country
  +discount: Discount
  +valueOfGoods: number
  +originalValueOfItem: number
  +isFreeOfCost: YesNo
  +goodsCondition: GoodsCondition
  +returnDays: number
  +supplementaryQuantity?: number
  +supplementaryQuantityUOM?: UnitOfMeasurement
  +prevDeclarationReference: string
  +permits: Permit[]
  +sku: Sku
  +exemptions: Exemption[]
  +documents: Document[]
  +vehicle: Vehicle
}
interface ReturnDetail {
  +returnRequestNo: string
  +prevTransportDocNo: string
  +returnReason: ReturnReason
  +prevDeclarationReference: string
  +declarationPurposeDetails: string
}
interface InvoiceParameter {
  +shippingParameterId: string
  +shipTo: string
  +shipToAddress: Address
  +deliveryDate: string
}
```

```
}
interface Exemption {
    +exemptionType: ExemptionType
    +exemptionRefNo: string
}
interface Discount {
    +value?: number
    +percentage?: number
}
interface Permit {
    +referenceNo: string
    +issuingAuthorityCode: PermitIssuingAuthorityCode
    +notRequiredFlag: YesNo
}
interface Sku {
    +productCode: string
    +quantityUOM: string
}
interface Vehicle {
    +chassisNumber: string
    +brand: VehicleBrand
    +model: string
    +engineNumber: string
    +capacity: number
    +passengerCapacity: number
    +carriageCapacity: number
    +yearOfBuilt: string
    +color: string
    +condition: VehicleCondition
    +vehicleType: VehicleType
    +drive: VehicleDrive
    +specificationStandard: string
}
@enduml
```

## HyperLedger Blockchain Models

### Smart Contract Order

```
@startuml
interface Address {
    +addressLine1: string
    +addressLine2: string
    +POBox: string
    +city: string
    +country: string
    +phone: string
    +email: string
    +addressType: string
}
interface OtherShipToAddress {
```

```
+ShipToAddress: Address
+ShippingParameterID: string
}
interface Document {
+hash: string
+name: string
+path: string
}
interface ErrorValidation {
+errorCode: string
+errorDiscription: string
+methodName: string
+refFields: string
}
interface ErrorBusiness {
+apiName: string
+mode: string
+timeStamp: number
+errorValidation: ErrorValidation[]
}
interface Order {
+documentName: string
+Key: string
+orderNo: string
+errorCount: number
+orderStatus: string
+orderDate: number
+exporterCodeArr: string[]
+logisticsSPBusinessCodeArr: string[]
+actionDate: number
+actionTimeStamp: number
+ecomBusinessCode: string
+mode: string
+consigneeCode: string
+consigneeName: string
+consigneeAddress: Address
+billTo: string
+hasMultiShipping: string
+isMarketPlace: string
+billToAddress: Address
+shipTo: string
+shipToAddress: Address
+otherShipToAddress: OtherShipToAddress[]
+invoices: string[]
+documents: Document[]
+invoiceSummary: InvoiceSummary[]
+errorBusiness: ErrorBusiness[]
+isFaulty: boolean
}
interface InvoiceSummary {
+currency: string
+invoiceKey: string
+exporterCode: string
+FZCode: string
```

```

    +warehouseCode: string
    +lineItemsKeys: string
    +type: string
    +invoiceNo: string
    +invoiceValue: number
    +status: string
  }
  interface OrderTrack {
    +documentName: string
    +Key: string
    +current: Order
    +History: Order[]
  }
}
@enduml

```

## Smart Contract Invoice

```

@startuml
interface Invoice {
  +documentName: string
  +Key: string
  +invoiceStatus: string
  +ecomBusinessCode: string
  +orderNo: string
  +invoiceNumber: string
  +invoiceDate: number
  +actionDate: number
  +actionTimeStamp: number
  +isExited: boolean
  +isUndelivered: boolean
  +mode: string
  +cancellationReason: string
  +totalNoOfInvoicePages: number
  +invoiceType: string
  +paymentInstrumentType: string
  +currency: string
  +totalValue: number
  +incoTerm: string
  +freightAmount: number
  +freightCurrency: string
  +insuranceAmount: number
  +insuranceCurrency: string
  +exporterCode: string
  +FZCode: string
  +warehouseCode: string
  +cargoOwnership: string
  +invoiceTrackingKey: string[]
  +invoiceTrackingLogs: InvoiceTracking[]
  +associatedEcomCompanies: string
  +brokerBusinessCode: string
  +logisticsSPBusinessCode: string
}

```

```
+documents: Document[]
+lineItemsKeys: string[]
+lineItems: LineItem[]
+shippingParameters: InvoiceShippingParameters[]
+hasMultiShipping: boolean
+returnDetail: ReturnDetails
+returnDetails: Return[]
+returnsList: Return[]
+returns: string[]
+exitConfirmations: ExitConfirmationDetails[]
+exitConfirmationDetail: ExitConfirmation[]
}
interface LineItem {
  +documentName: string
  +Key: string
  +shippingParameterID: string
  +ecomBusinessCode: string
  +orderNo: string
  +invoiceNo: string
  +lineNo: number
  +mode: string
  +quantityReturned: number
  +quantity: number
  +quantityUOM: string
  +netWeight: number
  +netWeightUOM: string
  +description: string
  +hscode: string
  +countryOfOrigin: string
  +country: string
  +discount: Discount
  +valueOfGoods: number
  +originalValueOfItem: number
  +isFreeOfCost: string
  +goodsCondition: string
  +returnDays: number
  +supplementaryQuantity: number
  +supplementaryQuantityUOM: string
  +prevDeclarationReference: string
  +permits: Permit[]
  +sku: Sku
  +exemptions: Exemption[]
  +vehicle: Vehicle
  +documents: Document[]
  +returnComputations: ReturnComputations
}
interface InvoiceTracking {
  +documentName: string
  +Key: string
  +ecomBusinessCode: string
  +orderNo: string
  +invoiceNo: string
  +shippingParameterID: string
  +transportDocNo: string
```

```
+declarationNo: string
+actionDate: number
+actionTimeStamp: number
+actionByOrgType: string
+actionByOrgCode: string
+message: string
+status: string
}
interface Document {
  +hash: string
  +name: string
  +path: string
}
interface InvoiceShippingParameters {
  +shippingParameterID: string
  +isSystemGenerated: boolean
  +lineItems: LineItem[]
  +transport: TransportInfo
  +preference: Preference
  +declarationDetail: DeclarationDetail
  +documentTracking: DocumentTracking
  +transportInfoKey: string
  +transportInfoKeyHistory: string[]
  +preferencesKey: string
  +preferencesKeyHistory: string[]
  +declarationTrackingKey: string
  +declarationTrackingKeyHistory: string[]
  +claimTrackingKey: string
  +claimTrackingHistory: string[]
  +deliveryStatus: DeliveryStatus
}
interface TransportInfo {
  +documentName: string
  +Key: string
  +ecomBusinessCode: string
  +orderNo: string
  +invoices: InvoiceObj[]
  +type: string
  +returnRequestNo: string
  +oldHouseTransportDocNo: string
  +mode: string
  +autoInitiateDeclaration: string
  +shippingDetail: Shipping
  +transportDocumentDetail: TransportDocument
  +packageDetail: Package[]
  +documents: Document[]
}
interface TransportDocumentDetails {
  +InboundMasterDocumentNo?: string
  +InboundTransportDocumentNo?: string
  +OutboundMasterDocumentNo?: string
  +OutboundTransportDocumentNo?: string
  +CargoTypePackageCode?: string
  +GrossWeightUnit?: string
```

```
+TotalGrossWeight?: number
+TotalNetWeight?: number
+NetWeightUnit?: string
+VolumeUnit?: string
+Volume?: number
+PackageDetails: PackageDetails[]
+ContainerDetails: ContainerDetails[]
}
interface Vehicle {
  +chassisNumber: string
  +brand: string
  +model: string
  +engineNumber: string
  +capacity: string
  +passengerCapacity: string
  +carriageCapacity: string
  +yearOfBuilt: string
  +color: string
  +condition: string
  +vehicleType: string
  +drive: string
  +specificationStandard: string
}
@enduml
```