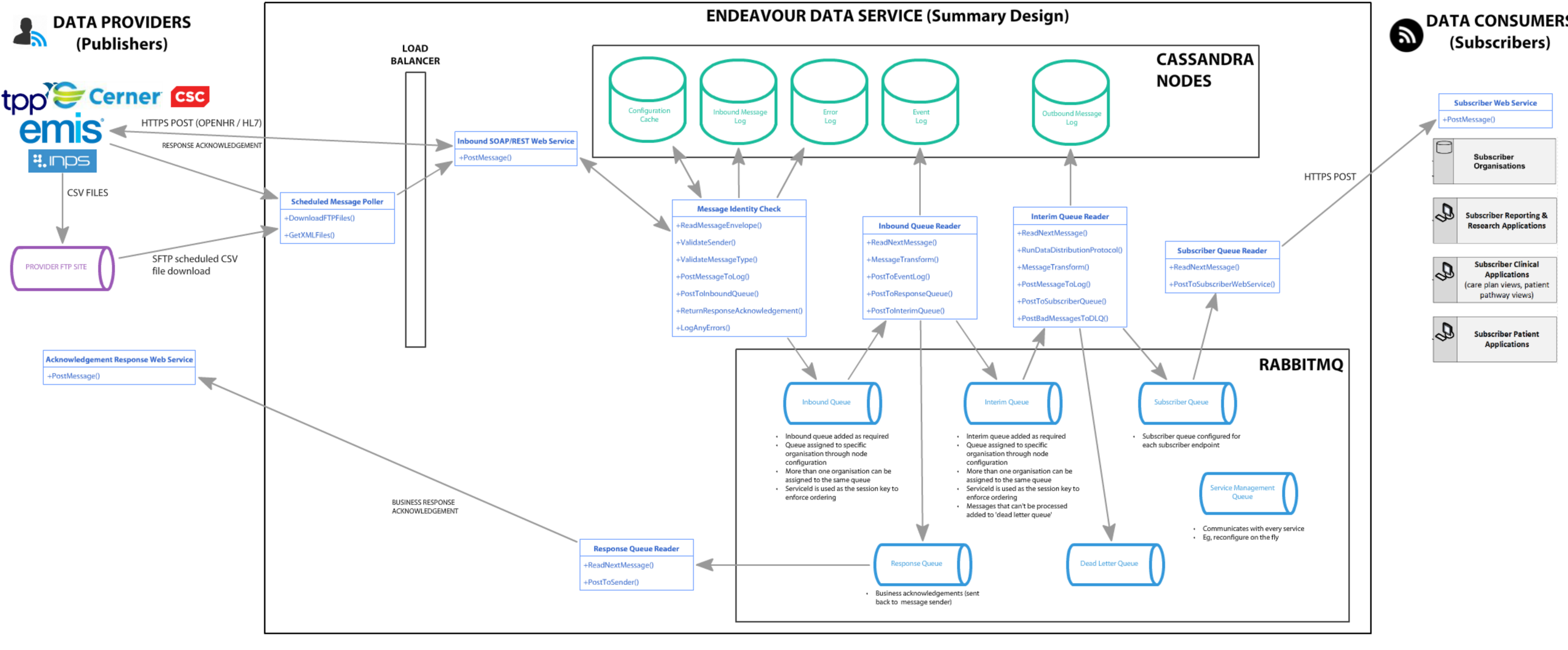
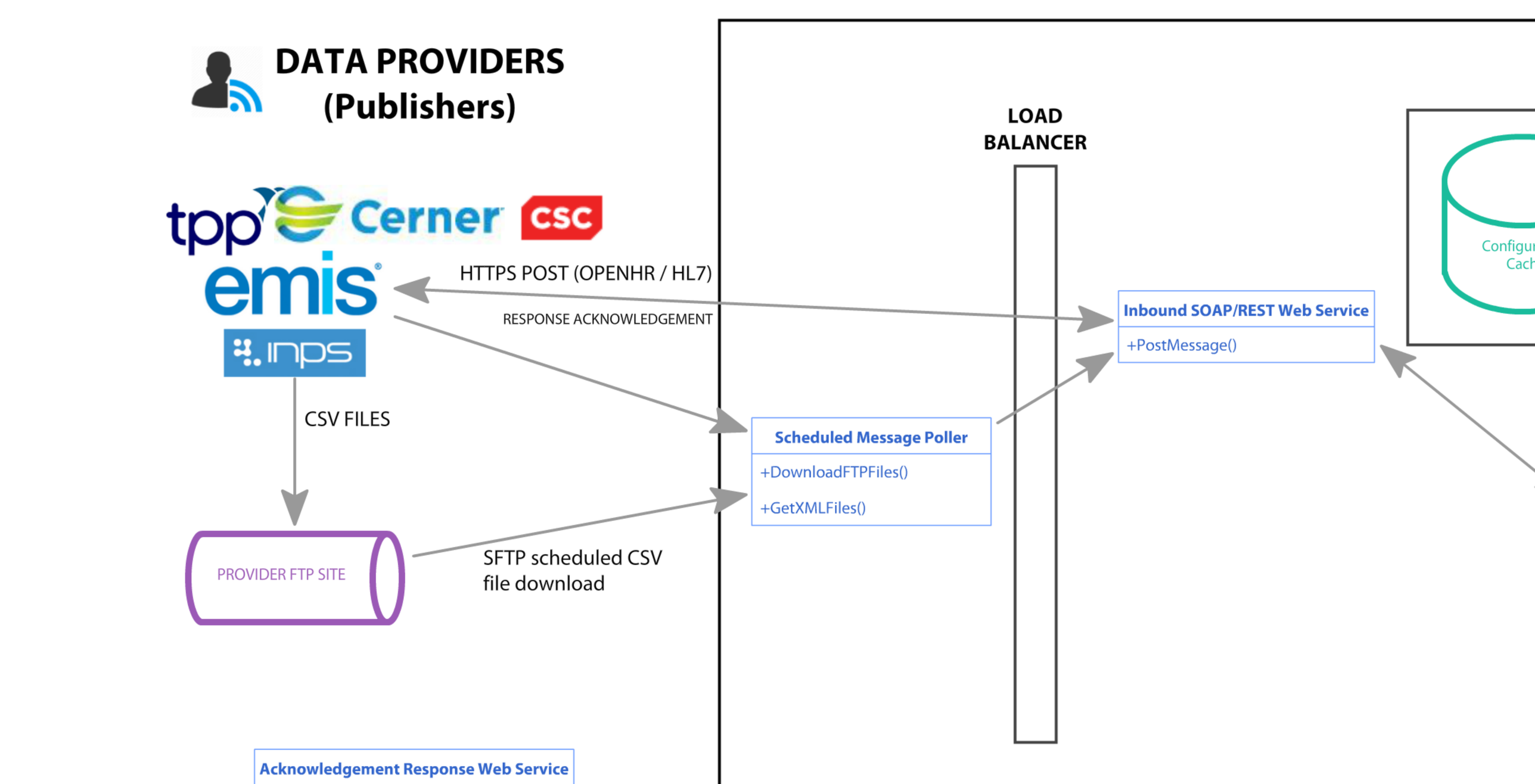

DATA PROVIDERS
(Publishers)
tpp
Cerner
csc
emis
inps
HTTPS POST (OPENHR / HL7)
RESPONSE ACKNOWLEDGEMENT
CSV FILES
PROVIDER FTP SITE
SFTP scheduled CSV
file download
ENDEAVOUR DATA SERVICE (Summary Design)
LOAD
BALANCER
Inbound SOAP/REST Web Service
+PostMessage()
Scheduled Message Poller
+DownloadFTPFiles()
+GetXMLFiles()
CASSANDRA
NODES
Configuration
Cache
Inbound Message
Log
Error
Log
Event
Log
Outbound Message
Log
Message Identity Check
+ReadMessageEnvelope()
+ValidateSender()
+ValidateMessageType()
+PostMessageToLog()
+PostToInboundQueue()
+ReturnResponseAcknowledgement()
+LogAnyErrors()
Inbound Queue Reader
+ReadNextMessage()
+MessageTransform()
+PostToEventLog()
+PostToResponseQueue()
+PostToInterimQueue()
Interim Queue Reader
+ReadNextMessage()
+RunDataDistributionProtocol()
+MessageTransform()
+PostMessageToLog()
+PostToSubscriberQueue()
+PostBadMessagesToDLQ()
Subscriber Queue Reader
+ReadNextMessage()
+PostToSubscriberWebService()
HTTPS POST
RABBITMQ
Inbound Queue
Inbound queue added as required
Queue assigned to specific organisation through node configuration
More than one organisation can be assigned to the same queue
ServiceId is used as the session key to enforce ordering
Interim Queue
Interim queue added as required
Queue assigned to specific organisation through node configuration
More than one organisation can be assigned to the same queue
ServiceId is used as the session key to enforce ordering
Messages that can't be processed added to 'dead letter queue'
Subscriber Queue
Subscriber queue configured for each subscriber endpoint
Service Management
Queue
Communicates with every service
Eg, reconfigure on the fly
Response Queue
Business acknowledgements (sent back to message sender)
Dead Letter Queue
Response Queue Reader
+ReadNextMessage()
+PostToSender()
BUSINESS RESPONSE
ACKNOWLEDGEMENT
Acknowledgement Response Web Service
+PostMessage()
DATA CONSUMERS
(Subscribers)
Subscriber Web Service
+PostMessage()
Subscriber
Organisations
Subscriber Reporting &
Research Applications
Subscriber Clinical
Applications
(care plan views, patient
pathway views)
Subscriber Patient
Applications


DATA PROVIDERS
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tpp
Cerner
csc
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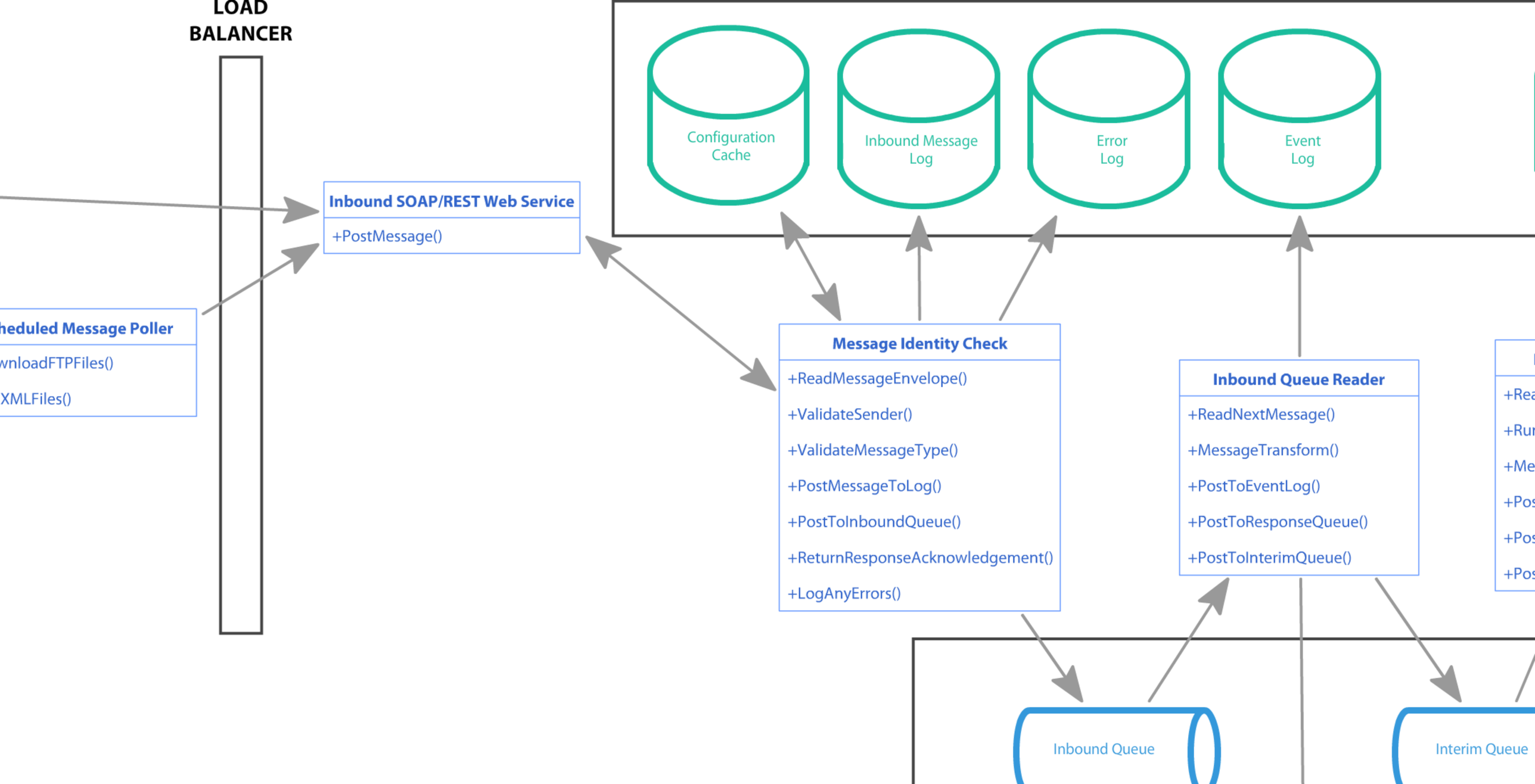
HTTPS POST (OPENHR / HL7)
RESPONSE ACKNOWLEDGEMENT
CSV FILES
PROVIDER FTP SITE
SFTP scheduled CSV
file download
LOAD
BALANCER
Inbound SOAP/REST Web Service
+PostMessage()
Scheduled Message Poller
+DownloadFTPFiles()
+GetXMLFiles()
Acknowledgement Response Web Service


LOAD BALANCER
Configuration Cache
Inbound Message Log
Error Log
Event Log
Inbound SOAP/REST Web Service
+PostMessage()
heduled Message Poller
wnloadFTPFiles()
XMLFiles()
Message Identity Check
+ReadMessageEnvelope()
+ValidateSender()
+ValidateMessageType()
+PostMessageToLog()
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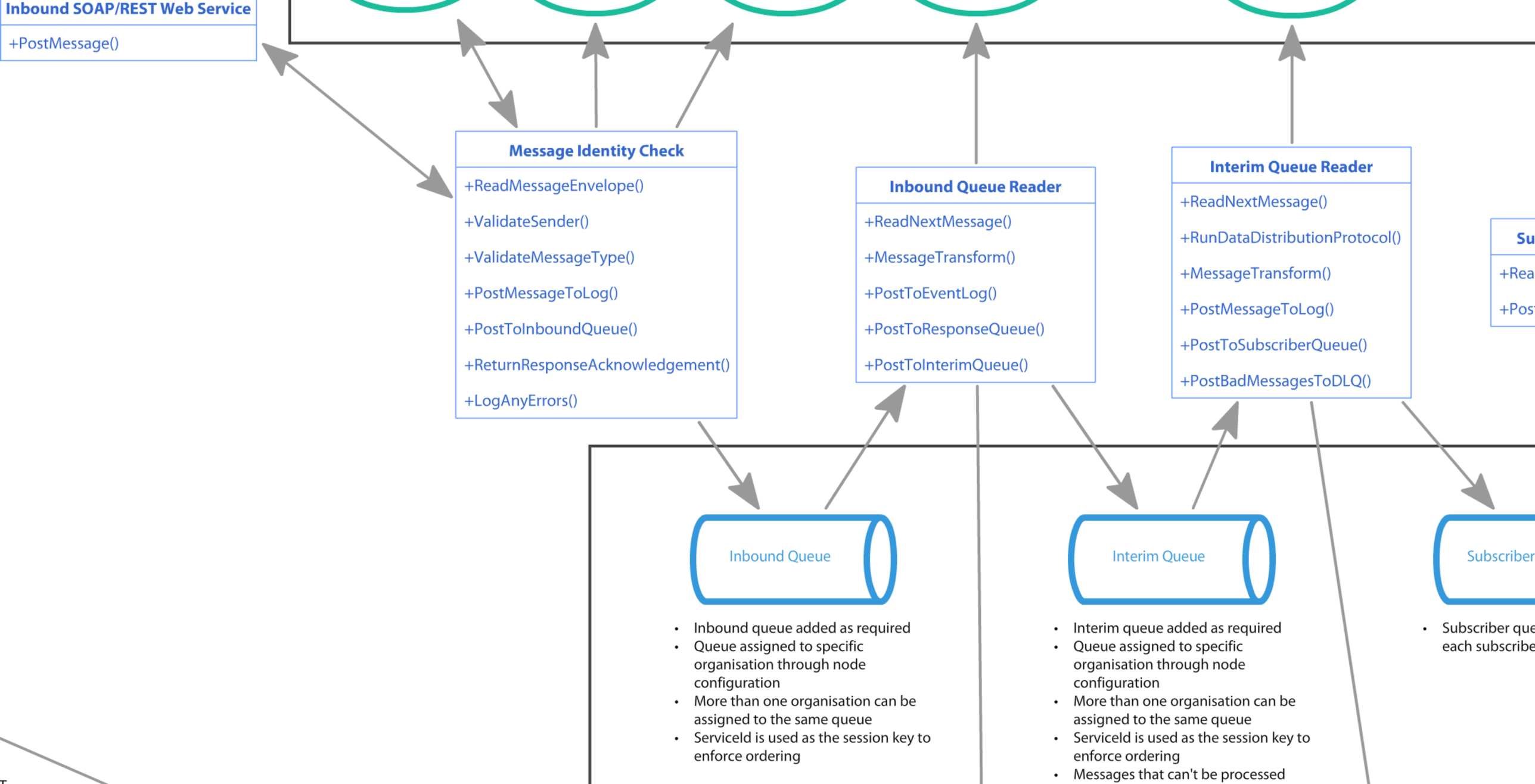
Inbound Queue Reader
+ReadNextMessage()
+MessageTransform()
+PostToEventLog()
+PostToResponseQueue()
+PostToInterimQueue()
Inbound Queue
Interim Queue


Inbound SOAP/REST Web Service
+PostMessage()
Message Identity Check
+ReadMessageEnvelope()
+ValidateSender()
+ValidateMessageType()
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+PostToInboundQueue()
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+MessageTransform()
+PostToEventLog()
+PostToResponseQueue()
+PostToInterimQueue()
Interim Queue Reader
+ReadNextMessage()
+RunDataDistributionProtocol()
+MessageTransform()
+PostMessageToLog()
+PostToSubscriberQueue()
+PostBadMessagesToDLQ()
Inbound Queue
Interim Queue
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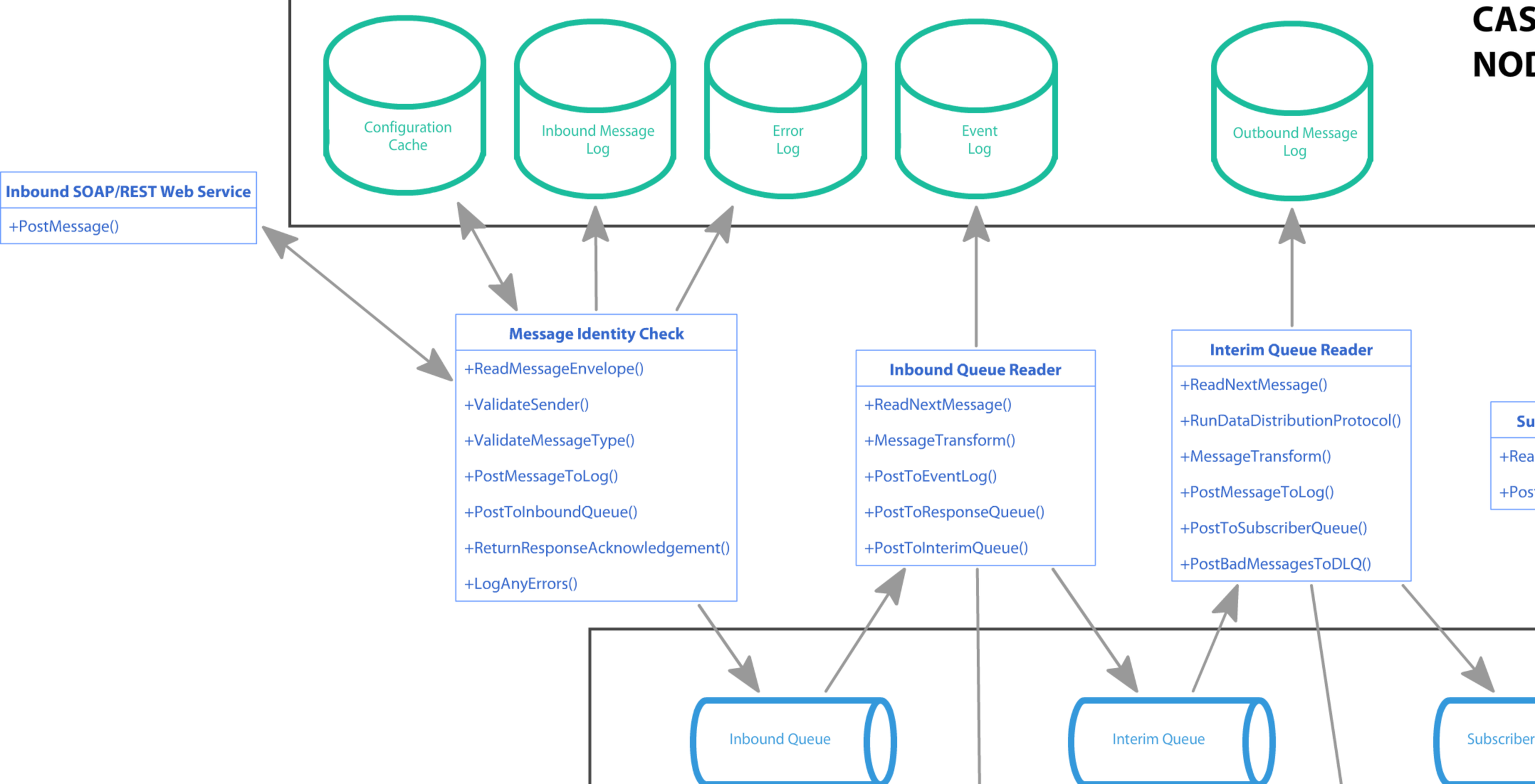
Interim queue added as required
Queue assigned to specific organisation through node configuration
More than one organisation can be assigned to the same queue
ServiceId is used as the session key to enforce ordering
Messages that can't be processed


CAS
NOD
Configuration Cache
Inbound Message Log
Error Log
Event Log
Outbound Message Log
Inbound SOAP/REST Web Service
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Message Identity Check
+ReadMessageEnvelope()
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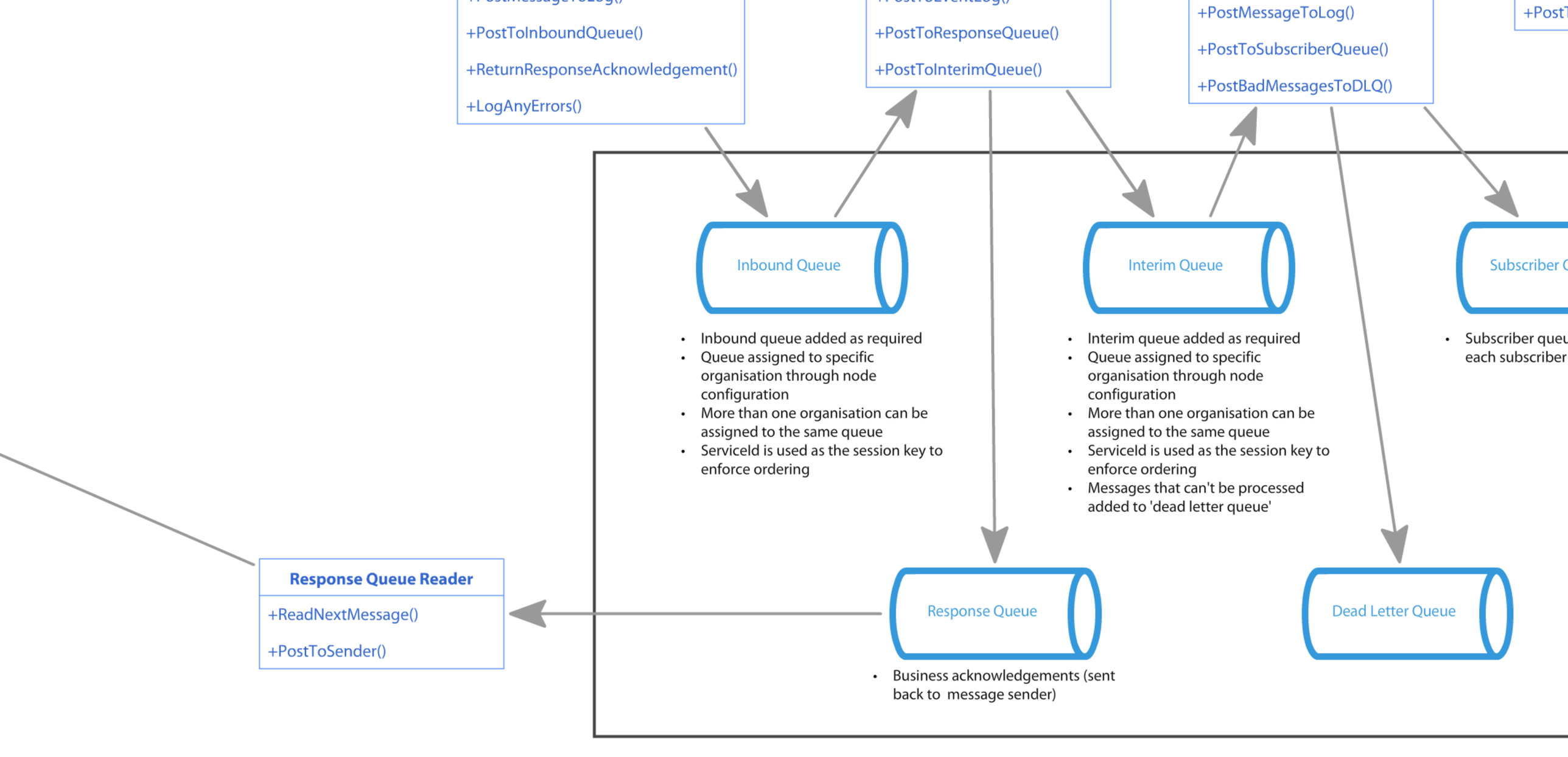
Interim Queue Reader
+ReadNextMessage()
+RunDataDistributionProtocol()
+MessageTransform()
+PostMessageToLog()
+PostToSubscriberQueue()
+PostBadMessagesToDLQ()
Su
+Rea
+Pos
Inbound Queue
Interim Queue
Subscriber


+PostToInboundQueue()
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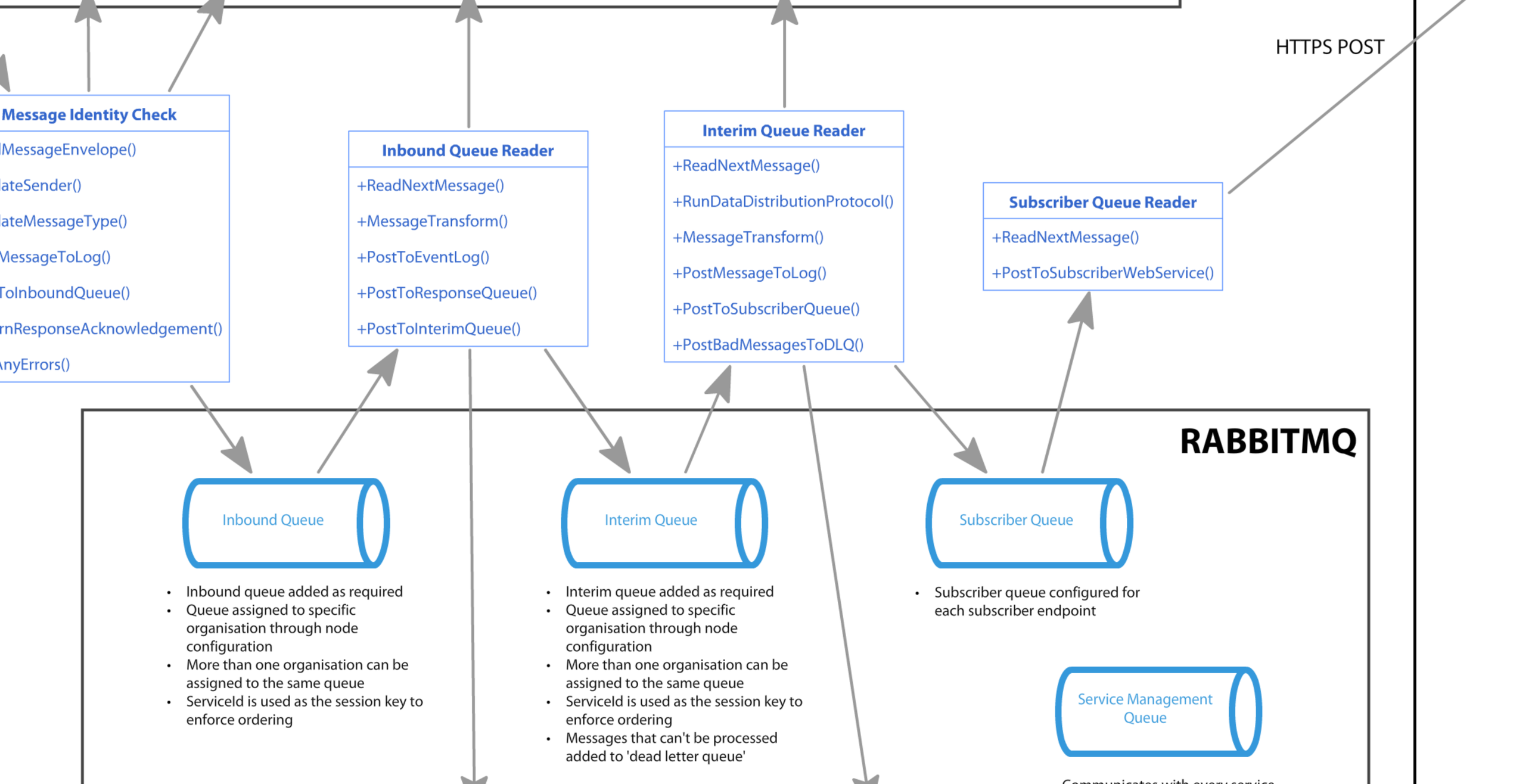
Messages that can't be processed added to 'dead letter queue'
Response Queue Reader
+ReadNextMessage()
+PostToSender()
Response Queue
Business acknowledgements (sent back to message sender)
Dead Letter Queue


HTTPS POST
Message Identity Check
lMessageEnvelope()
lateSender()
lateMessageType()
MessageToLog()
ToInboundQueue()
rnResponseAcknowledgement()
AnyErrors()
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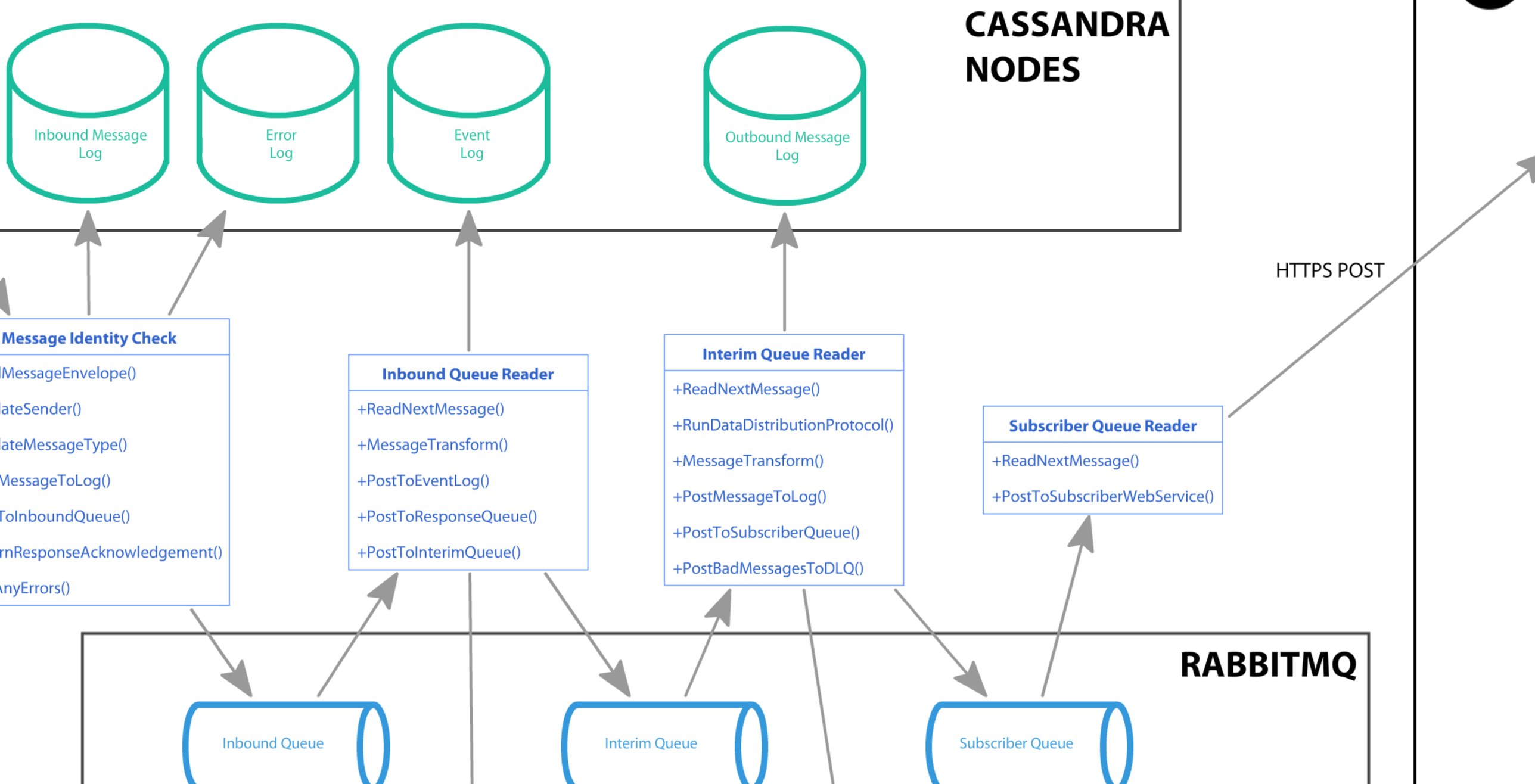
RABBITMQ
Inbound Queue
Interim Queue
Subscriber Queue
Service Management Queue
• Inbound queue added as required
• Queue assigned to specific organisation through node configuration
• More than one organisation can be assigned to the same queue
• ServiceId is used as the session key to enforce ordering
• Interim queue added as required
• Queue assigned to specific organisation through node configuration
• More than one organisation can be assigned to the same queue
• ServiceId is used as the session key to enforce ordering
• Messages that can't be processed added to 'dead letter queue'
• Subscriber queue configured for each subscriber endpoint


CASSANDRA NODES
Inbound Message Log
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Subscriber Queue Reader

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+PostToSubscriberWebService()

RABBITMQ

und Queue

queue added as required
igned to specific
on through node
tion
one organisation can be
o the same queue
s used as the session key to
dering

Interim Queue

- Interim queue added as required
- Queue assigned to specific organisation through node configuration
- More than one organisation can be assigned to the same queue
- ServiceId is used as the session key to enforce ordering
- Messages that can't be processed added to 'dead letter queue'

Subscriber Queue

- Subscriber queue configured for each subscriber endpoint

Service Management Queue

- Communicates with every service
- Eg, reconfigure on the fly

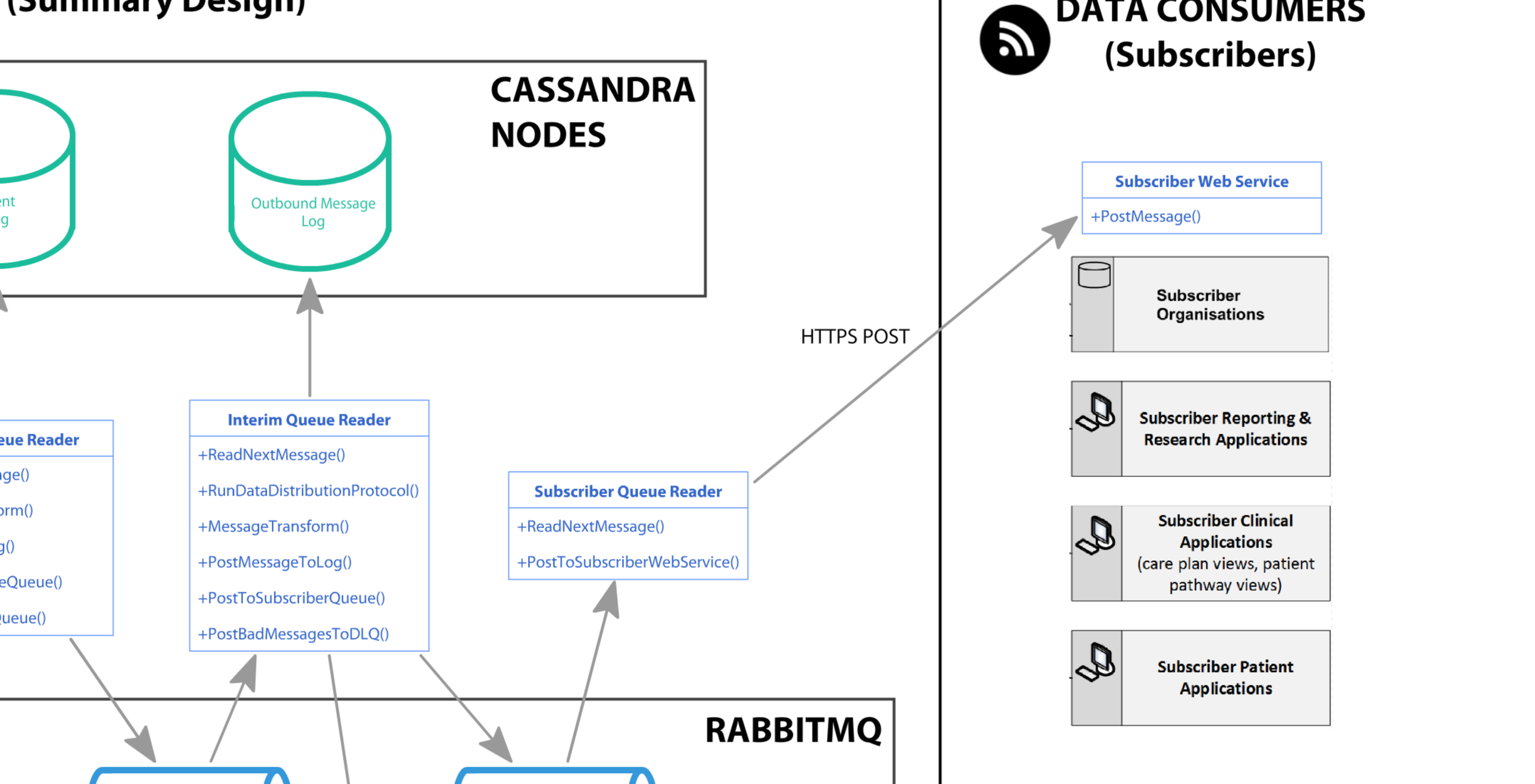
Response Queue

- Business acknowledgements (sent back to message sender)

Dead Letter Queue

Subscriber Re
Research Ap

Subscriber
Applica
(care plan vie
pathway

Subscriber
Applica

(Summary Design)