


# M&R Estimate Saga (v1.36)

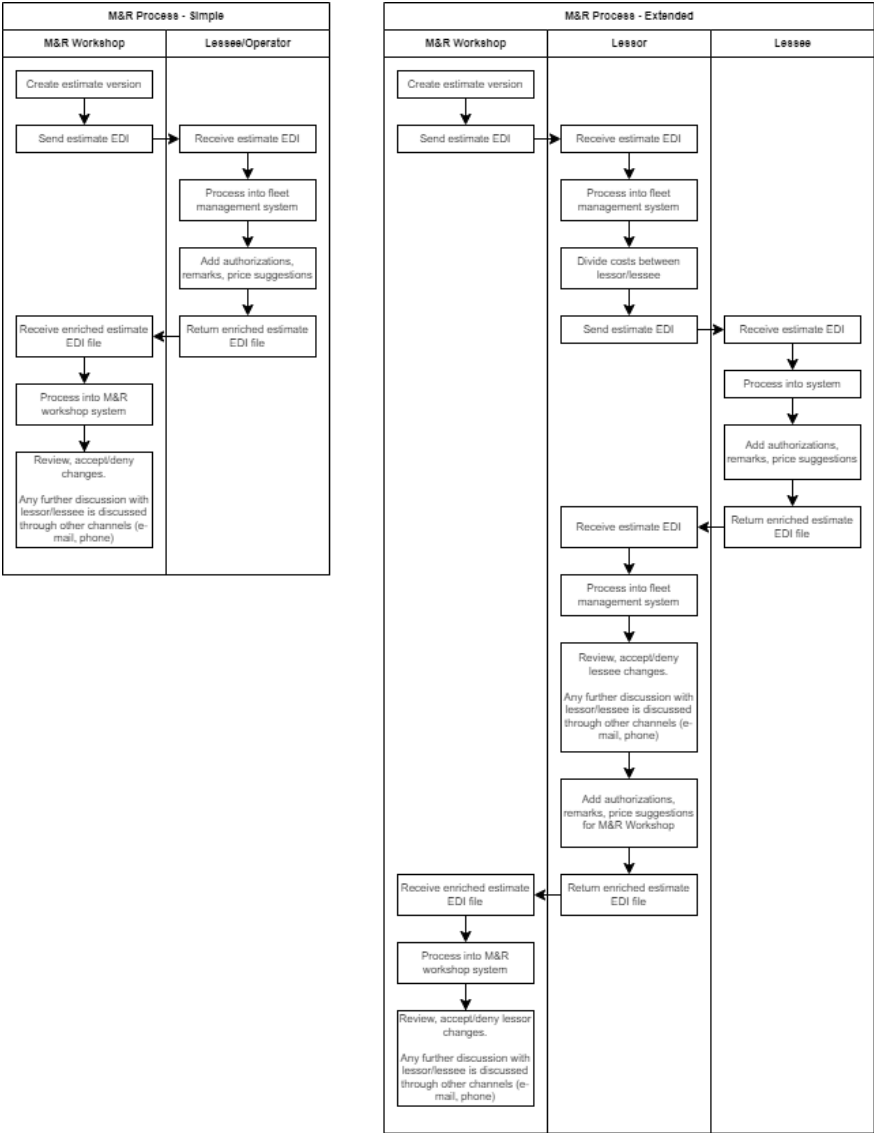
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## Introduction

The M&R Estimate Saga message is initially sent by the M&R workshop to the lessee or lessor. The lessee or lessor can then enrich the file with authorization information and return it to the M&R workshop.

 Please note that the data structure allows for custom code sets to be used (classic tankcontainer repair/damage/location codes, boxcontainer ISO codes, customer-specific codes, etc.)

# Process Flow



## Message Set

The message has 2 variants of roughly the same message:

- M&R Estimate message (MRESTIMATE)
- M&R Estimate Authorization return message (AUTHORIZE)

## Common elements in both messages

### Sample preview

```
1 <?xml version="1.0" standalone="yes"?>
2 <DepotEstimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="">
3   <Header>
4     <Guid>d1355cc8-dc66-4969-ba07-49338fbc794</Guid>
5     <SenderId>DEPOT</SenderId>
6     <ReceiverId>LESSOR</ReceiverId>
7     <DateSent>2019-06-03T16:30:01.3492113+02:00</DateSent>
8     <Type>MREstimate</Type>
```

```

9      <Version>1.1</Version>
10     <CurrencyISO>EUR</CurrencyISO>
11     <ConversationId />
12   </Header>
13
14   M&R ESTIMATE OR AUTHORIZE ELEMENTS WILL COME HERE
15
16 </DepotEstimate>

```

## Definition

### Elements

Table	Explanation
<DepotEstimate>	The entire message is in this tag
<Header>	Exactly ONE header record is to be present
<YardOrder>	Currently there is only ONE suborder per file
<Equipment>	Describes equipment information
<MREstimate>	Currently there is only ONE suborder per file
<MREstimateRemarks>	Remark group
<MREstimateRemark>	Remarks
<MREstimateLines>	M&R repair lines group
<MREstimateLine>	M&R repair line
<Codes>	M&R codes group
<Code>	M&R code

### Sub-elements

<Header>	Datatype	Required	Explanation
<Guid>	xs:string	Reserved	GUID
<SenderId>	xs:string	Required	Agreed between parties
<ReceiverId>	xs:string	Required	Agreed between parties
<DateSent>		Required	Includes timezone
<Type>	xs:string	Required	<ul style="list-style-type: none"> <li>M&amp;R workshop sends message to Lessee/Lessor, value=MRESTIMATE</li> <li>Lessee/Lessor returns authorization to the M&amp;R workshop, value=AUTHORIZE</li> </ul>
<Version>	xs:string	Required	Documentation version for this file (see this article header for the version number associated with this syntax: 19.1)
<CurrencyISO>	xs:string	Required	ISO of currency for all prices in this message
<ConversationID>	xs:string	Reserved	This ID is added by the the SYNDA hub to provide a history of the messageflow (saga's). Sending and receiving parties should not alter the contents of this field.

## MRESTIMATE message

### Sample preview

```

1  <?xml version="1.0" standalone="yes"?>
2  <DepotEstimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="">
3    <Header>
4      <Guid>d1355cc8-dc66-4969-ba07-49338febc794</Guid>
5      <SenderId>DEPOT</SenderId>
6      <ReceiverId>LESSOR</ReceiverId>
7      <DateSent>2019-06-03T16:30:01.3492113+02:00</DateSent>

```

```
8      <Type>MREstimate</Type>
9      <Version>19.1</Version>
10     <CurrencyISO>EUR</CurrencyISO>
11     <ConversationId />
12 </Header>
13 <YardOrder>
14     <Id>956231</Id>
15     <SupplierReference>NLRD-20230101.005</SupplierReference>
16     <CustomerReference>E223344.55</CustomerReference>
17     <DateIn>2019-06-03T16:30:01.3502087</DateIn>
18     <Equipment>
19         <EquipmentNumber>ABCD-123456-0</EquipmentNumber>
20         <EquipmentType>20T0, TANK CONTAINER</EquipmentType>
21         <EquipmentTypeISO>20T0</EquipmentTypeISO>
22         <Lessee>LesseeName</Lessee>
23         <Lessor>Lessor</Lessor>
24         <Manufacturer>Manufacturer</Manufacturer>
25         <LastTestType>H</LastTestType>
26         <LastTestDate>2017-01-03T00:00:00</LastTestDate>
27         <CSCDate>2018-04-07T00:00:00</CSCDate>
28         <Capacity>593873</Capacity>
29         <BuildingYear>2011</BuildingYear>
30     </Equipment>
31     <MREstimate>
32         <Id>123456</Id>
33         <SupplierReference>NLRD-20230101.005.R3</SupplierReference>
34         <DateCreated>2019-06-03T16:30:01.3522034+02:00</DateCreated>
35         <Version>V1</Version>
36         <CustomerReference>12345</CustomerReference>
37         <Description>This is a description</Description>
38         <DateInitiallySent>2019-06-03T16:30:01.3522034+02:00</DateInitiallySent>
39         <DateAuthorizedLessor></DateAuthorizedLessor>
40         <DateAuthorizationAcceptedByRepairWorkshop></DateAuthorizationAcceptedByRepairWorkshop>
41         <DateCancelledLessor></DateCancelledLessor>
42         <MREstimateRemark>
43             <Guid>1358ce0c-2a85-46dc-bcc4-6f622f19b78c</Guid>
44             <Date>2019-06-03T16:30:01.3541985</Date>
45             <Author>Jennifer</Author>
46             <Remark>This is a remark</Remark>
47         </MREstimateRemark>
48         <MREstimateRemark>
49             <Guid>9119f1ad-e9f5-439d-8028-0da0098b4ca3</Guid>
50             <Date>2019-06-03T16:30:01.3551956</Date>
51             <Author>Jennifer</Author>
52             <Remark>And another remark</Remark>
53         </MREstimateRemark>
54         <MREstimateLine>
55             <Id>1</Id>
56             <OriginID>800</OriginID>
57             <Action>true</Action>
58             <ThirdParty>false</ThirdParty>
59             <Description>Replace valves</Description>
60             <Quantity>1</Quantity>
61             <LaborTariff>30.1</LaborTariff>
62             <LaborHours>4</LaborHours>
63             <LaborCost>120</LaborCost>
64             <MaterialCost>250.4</MaterialCost>
65             <LumpSum>250.12</LumpSum>
```

```

66      <Cat>BTM</Cat>
67      <Category>Bottom</Category>
68      <Codes>
69          <KindOfCode>ISOLOC</KindOfCode>
70          <Value>R2AN</Value>
71      </Codes>
72      <Codes>
73          <KindOfCode>LOC</KindOfCode>
74          <Value>BTM</Value>
75      </Codes>
76      <Codes>
77          <KindOfCode>MAT</KindOfCode>
78          <Value>IRON</Value>
79      </Codes>
80      </MREstimateLine>
81  </MREstimate>
82 </YardOrder>
83 </DepotEstimate>

```

## Definition

### Sub-elements

<YardOrder>	Datatype	Required	Explanation
<Id>	xs:long	Reserved	Unique order ID
<CustomerReference>	xs:string		
<DateIn>	xs:dateTime	Required	Returns the local depot yard time when equipment arrived on the depot yard
<Equipment>	complex	Always 1, no more, no less	
<MREstimate>	complex	Always 1, no more, no less	

<Equipment>	Datatype	Required	Explanation
<EquipmentNumber>	xs:string	Required	
<SupplierReference>	xs:string		Unique Yard Order reference provided by the depot
<EquipmentType>	xs:string	Required	Equipment type from a depot perspective (example: 207C)
<EquipmentTypeISO>	xs:string		Equipment type from an ISO standpoint
<Lessee>	xs:string	Required	
<Lessor>	xs:string	Required	
<Manufacturer>	xs:string		
<LastTestType>	xs:string		<ul style="list-style-type: none"> <li>A =</li> <li>H = Hydraulic</li> </ul>
<LastTestDate>	xs:dateTime		
<CSCDate>	xs:dateTime		
<Capacity>	xs:int		
<BuildingYear>	xs:int		4 digit year number (for example: 1999)

<MREstimate>	Datatype	Required	Explanation
<Id>	xs:long	Reserved	Unique order ID

<SupplierReference>	xs:string		Unique Repair Order reference provided by the depot
<DateCreated>	xs:dateTime	Required	
<Version>	xs:string		M&R workshops assign a version to an estimate, which can only be updated BY the M&R workshop. This is sometimes done when the estimate undergoes massive changes.  Customers that use this message to reply to an estimate should use the same version number here as in the file they received. In this way the authorizations, remarks and price change suggestions that the customer sends back to the M&R workshop can be associated with the proper estimate version.
<CustomerReference>	xs:string		Authorization reference of lessor/lessee
<Description>	xs:string		
<DateInitiallySent>	xs:dateTime	Required	
<DateAuthorizedLessor>	xs:dateTime		
<DateAuthorizationAcceptedByRepairWorkshop>	xs:dateTime		
<DateCancelledLessor>	xs:dateTime		Date cancelled always takes precedent over DateAuthorizedLessor
<MREstimateRemark>	complex		

<MREstimateRemark>	Datatype	Required	Explanation
<Guid>	xs:string	Required	GUID
<Date>	xs:datetime	Required	
<Author>	xs:string	Required	
<Remark>	xs:string	Required	

<MREstimateLine>	Datatype	Required	Explanation
<Id>	xs:long	Reserved	Unique line ID
<OriginID>	xs:long		Depot repair workshops have catalogs of standard repair line actions. This field is the "catalog id".  Lessors may want to know better understand the catalog of the depot repair workshops for better matching in their big data. However, we would recommend to rather use the repair line Description field and do a text-based comparison instead, since the descriptions may sometimes be altered to provide more detail by the depot repair workshop.
<Action>	xs:boolean	Required	Should the M&R workshop perform this action according to the lessee/lessor?
<ThirdParty>	xs:boolean	Required	If a line is for a Third Party then all line amounts will show as 0
<Description>	xs:string		
<Quantity>	xs:integer	Required	0 is acceptable
<LaborTariff>	xs:decimal	Required	<ul style="list-style-type: none"> <li>0 is acceptable</li> <li>This field is for reference only.</li> </ul>
<LaborHours>	xs:decimal	Required	<ul style="list-style-type: none"> <li>0 is acceptable</li> <li>Quantity applies</li> </ul>
<LaborCost>	xs:decimal	Required	<ul style="list-style-type: none"> <li>This field is the definitive rounded calculation of (LaborTariff*LaborHours)</li> <li>This field is for reference only, it is only the result of calculation.</li> <li>Quantity applies</li> </ul>
<MaterialCost>	xs:decimal	Required	<ul style="list-style-type: none"> <li>0 is acceptable</li> <li>Quantity applies</li> </ul>
<LumpSum>	xs:decimal		<ul style="list-style-type: none"> <li>Lumpsum overrides all labor &amp; material costs</li> <li>0 means that the price is labor &amp; material, anything non 0 would mean the line is charged as lumpsum</li> <li>Quantity applies</li> </ul>
<Cat>	xs:string		M&R workshop internal category code which is sometimes shared with lessor/lessee (for example: TESTING, RE-WORK, etc.)  Abbreviated category (aka. category code)
<Category>	xs:string		

<Codes>	complex		Please note that this data structure allows for custom code sets to be used (classic tankcontainer repair/damage/location codes, boxcontainer ISO codes, customer-specific codes, etc.)
<Memo>	xs:string		Lessor/lessee information that can be sent back

<Codes>	Datatype	Required	Explanation
<KindOfCode>	xs:string	Required	Please note that this data structure allows for custom code sets to be used (classic tankcontainer repair/damage/location codes, boxcontainer ISO codes, customer-specific codes, etc.)
<Value>	xs:string	Required	

# AUTHORIZE return message

## Sample Preview

```

1  <?xml version="1.0" standalone="yes"?>
2  <DepotEstimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="">
3    <Header>
4      <Guid>d1355cc8-dc66-4969-ba07-49338febc794</Guid>
5      <SenderId>LESSOR</SenderId>
6      <ReceiverId>DEPOT</ReceiverId>
7      <DateSent>2019-07-03T09:30:01.3492113+02:00</DateSent>
8      <Type>AUTHORIZE</Type>
9      <Version>19.1</Version>
10     <CurrencyISO>EUR</CurrencyISO>
11     <ConversationId />
12   </Header>
13   <YardOrder>
14     <Id>956231</Id>
15     <MREstimate>
16       <Id>123456</Id>
17       <Version>V1</Version>
18       <CustomerReference>12345</CustomerReference>
19       <DateAuthorizedLessor>2019-05-31T16:30:01.3522034+02:00</DateAuthorizedLessor>
20       <DateAuthorizationAcceptedByRepairWorkshop></DateAuthorizationAcceptedByRepairWorkshop>
21       <DateCancelledLessor></DateCancelledLessor>
22       <MREstimateRemark>
23         <Guid>1358ce0c-2a85-46dc-bcc4-6f622f19b78c</Guid>
24         <Date>2019-06-03T16:30:01.3541985</Date>
25         <Author>Joop</Author>
26         <Remark>We turned off one line</Remark>
27       </MREstimateRemark>
28       <MREstimateLine>
29         <Id>1</Id>
30         <Action>false</Action>
31         <LaborTariff>30.1</LaborTariff>
32         <LaborHours>4</LaborHours>
33         <MaterialCost>250.4</MaterialCost>
34         <LumpSum>250.12</LumpSum>
35       </MREstimateLine>
36     </MREstimate>
37   </YardOrder>
38 </DepotEstimate>

```

## Definition

### Sub-elements

<YardOrder>	Datatype	Required	Explanation
<Id>	xs:long	Yes	Unique order ID
<MREstimate>	complex	Yes	

<MREstimate>	Datatype	Required	Explanation
<Id>	xs:long	Yes	Unique order ID
<Version>	xs:string	Yes	M&R workshops assign a version to an estimate, which can only be updated BY the M&R workshop. This is sometimes done when the estimate undergoes massive changes.  Customers that use this message to reply to an estimate should use the same version number here as in the file they received. In this way the authorizations, remarks and price change suggestions that the customer sends back to the M&R workshop can be associated with the proper estimate version.
<CustomerReference>	xs:string	Often used, max. 64 characters	Authorization reference of lessor/lessee
<DateAuthorizedLessor>	xs:datetime	Often used	
<DateAuthorizationAcceptedByRepairWorkshop>	xs:datetime	No	
<DateCancelledLessor>	xs:datetime		Date cancelled always takes precedent over DateAuthorizedLessor
<MREstimateRemark>	complex		
<MREstimateLine>	complex		

<MREstimateRemark>	Datatype	Required	Explanation
<Guid>	xs:string	Required	GUID
<Date>	xs:datetime	Required	
<Author>	xs:string	Required	
<Remark>	xs:string	Required	

<MREstimateLine>	Datatype	Required	Explanation
<Id>	xs:long	Reserved	Unique line ID
<Action>	xs:boolean	Required	Should the M&R workshop perform this action according to the lessee/lessor?
<LaborHours>	xs:decimal	Yes	<ul style="list-style-type: none"> <li>0 is acceptable</li> <li>Quantity applies</li> <li>Changeable: If the estimate is returned and this field was changed, receiver can assume that this is a counter offer.</li> </ul>
<MaterialCost>	xs:decimal	Yes	<ul style="list-style-type: none"> <li>0 is acceptable</li> <li>Quantity applies</li> <li>Changeable: If the estimate is returned and this field was changed, receiver can assume that this is a counter offer.</li> </ul>
<LumpSum>	xs:decimal	Yes	<ul style="list-style-type: none"> <li>Lumpsum overrides all labor &amp; material costs</li> <li>0 means that the price is labor &amp; material, anything non 0 would mean the line is charged as lumpsum</li> <li>Quantity applies</li> <li>Changeable: If the estimate is returned and this field was changed, receiver can assume that this is a counter offer.</li> </ul>
<Memo>	xs:string	Commonly used	Lessor/lessee information that can be sent back