Heating Audit (v1.3)

Introduction

Data exchange for cleaning OT instructions and return data, with heating systems supplier

Supported Messages

XSD	Message type	Required	Source	Target	Activated by	Remarks
DepotHeatingProcess	INSTRUCTION	No	DEPOT Software	HS PLC Middleware	End-user button press in DEPOT Software	
DepotHeatingProcess	MEASUREMENT	Yes	HS PLC Middleware	DEPOT Software	Periodic reporting from HS PLC middleware	

Heating Audit

Sample file

```xml
1  <DepotHeatingProcess xmlns="">
2    <MessageHeader>
3      <MessageIdentifier>3f65197f-c6e9-4acf-b133-fcd3cf77ed34</MessageIdentifier>
4      <MessageTypeDescription>MEASUREMENT</MessageTypeDescription>
5      <MessageFunctionCode>4</MessageFunctionCode>
6      <MessageDateTime>2020-03-12T15:03:32.3538494+01:00</MessageDateTime>
7      <SenderIdentifier></SenderIdentifier>
8      <SenderQualifier></SenderQualifier>
9      <ReceiverIdentifier></ReceiverIdentifier>
10   </MessageHeader>
11   <HeatingProcess>
12     <DeviceIdentifier>1</DeviceIdentifier>
13     <ContainerNumber>ABCD-123456-7</ContainerNumber>
14     <DeviceTargetTemperatureCelsius>80.7</DeviceTargetTemperatureCelsius>
15     <Measurement>
16       <DateTimeLocal>2020-03-12T15:03:32.356841</DateTimeLocal>
17       <TemperatureCelsius>25.4</TemperatureCelsius>
18       <DeviceStatusCode>1</DeviceStatusCode>
19     </Measurement>
20   </HeatingProcess>
21 </DepotHeatingProcess>
```

Definition

Header

MessageHeader	XML type	Remarks
MessageIdentifier	xs:string (constrained to msdata: System.Guid)	Unique message identifier (GUID)
MessageTypeDescription	xs:string	Constrained to these codes: • INSTRUCTION (out) • MEASUREMENT (in)
MessageFunctionCode	xs:int	Enumeration constrained code indicating the function of the message: • 1 = Cancellation/Archive • 4 = Change/Update • 9 = Original/New
MessageDateTime	xs:dateTime	Message date and time in XML dateTime format.
SenderIdentifier	xs:string (64)	Agreed qualifier for sender identification.
SenderQualifier	xs:string (64)	Optional but recommended, agreed qualifier for sender identification.
ReceiverIdentifier	xs:string (64)	Agreed receiver identification.

Heating Process

HeatingProcess	XML type	Remarks
DeviceIdentifier	xs:string (32)	Unique for every HeatingProcess element, an identifier published by the device owner to indicate unique heating devices.
ContainerNumber	xs:string (32)	Unique for every HeatingProcess element the container number used to identify the container/order in Depot for which MEASUREMENT messages data is to be processed.
DeviceTargetTemperatureCelsius	xs:decimal	Optional, • INSTRUCTION: this temperature is requested by Depot to be set in the device. • MEASUREMENT: this temperature is the current set target temperature of the device. Unit of the temperature is degrees Celsius.

Periodic Measurements

/Measurement	XML type	Remarks
DateTimeLocal	xs:dateTime	ISO 8601 date and time (yyyy-MM-ddTHH:mm:ss.FFF) when the measurement is taken. This is date and time in XML dateTime format but without time zone; e.g. 2020-03-12T15:03:32.356
TemperatureCelsius	xs:decimal	The measured temperature in degrees Celsius. An arbitrary value can be used when the measurement attempt failed and DeviceErrorDescription is set.
DeviceStatusCode	xs:int	Optional, enumeration constrained code indicating the function of the message: • 0 = at the time of measurement, the device was off. • 1 = at the time of measurement, the device was on.
DeviceErrorDescription	xs:string (256)	Optional but when the measurement attempt failed it is required to set the error description or not include the Measurement element at all.