

EUROPEAN UNION AGENCY FOR RAILWAYS - INTEROPERABILITY UNIT

REFERENCE:	DOCUMENT TYPE:	TAF TSI COMPLIANCE TEST REPORT – OLTIS GROUP applications ISOR, KADR, EMAN
VERSION: 0.1		
DATE: 12/07/2018		

Making the railway system
work better for society.

EUROPEAN UNION AGENCY FOR RAILWAYS

Table of Contents

1 Scope.....	3
2 System Design	3
3 Roles.....	3
4 Test Cases.....	4
5 Results	4
6 Conclusions	6
Annex	7

Making the railway system
work better for society.

1 Scope

This document defines the testing process performed to evaluate the compliance of the train running messages and path request messages exchanged between the Infrastructure Managers (IM) and Railway Undertakings (RUs) using the IT application ISOR and KADR developed by OLTIS Group¹ against the official TAF TSI data catalogue (<http://www.era.europa.eu/Document-Register/Pages/Technical-Documents.aspx>). It must be stated here that aforementioned KADR system of OLTIS Group communicates with the path request system EMAN developed for CD Cargo².

2 System Design

OLTIS Group provided the EU Agency for Railways in June 2018 with a set of XML files describing various TAF TSI train running and path request messages³ enabling ERA to perform this evaluation:

2.1 ISOR Train Running Function IS of IM

- SampleFile1TrainDelayCauseMessage_valid.xml
- TrainDelayCauseMessage_valid.xml
- TrainRunningForecastMessage_valid.xml
- TrainRunningInformationMessage_valid.xml

¹ See : <https://www.oltisgroup.com/products/freight-transport/isor-cds-central-dispatching-system/> and <https://www.oltis.cz/produkty/manager-zeleznicni-infrastruktury/isor-kadr-prodej-kapacity-drahy/>

² See : <https://www.cdcargo.cz/is-probis>

³ See : <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1305&from=EN> – chapters 4.2.4 and 4.2.2

Making the railway system
work better for society.

- TrainRunningInterruptionMessage_valid.xml

2.2 EMAN Path Request Dialog IS of RU

- EMAN_Input_Answer_2_d.xml
- EMAN_Input_Anwer_2_b.xml
- EMAN_Input_CZAnswer_1.xml
- EMAN_Input_CZAnswer_2_.xml
- EMAN_Input_Error_Answer.xml
- EMAN_Input_PathDetails_1.xml
- EMAN_Input_PathDetails_2a.xml
- EMAN_Input_PathDetails_2c.xml
- EMAN_Input_PathDetails_2e.xml
- EMAN_Input_RequestOnSeletedID_2_.xml
- EMAN_Intput_Answer_4.xml
- EMAN_Output_Error_PathRequest.xml
- EMAN_Output_PathCanceled_4.xml
- EMAN_Output_PathConfirmed_2d.xml
- EMAN_Output_PathDetailsRefused_2b.xml
- EMAN_Output_PathRequest_1.xml
- EMAN_Output_PathRequest_2.xml
- EMAN_Output_PathRequest_3.xml
- EMAN_OutPut_RequestOnSelectedID_1.xml
- EMAN_Output_RequestOnSelectedID_2_c.xml

Making the railway system
work better for society.

- EMAN_Output_RequestOnSelectedID_2_e.xml

2.3 KADR Path Request Dialog IS of IM

- 01aKADR_PathRequest_input_2.xml
- 01bKADR_ReceiptConfirmation_output_2.xml
- 02a_KADR_CZRequestOnAvailableIDMessage_input.xml
- 02b_KADR_CZIDAvailableMessage_output.xml
- 03a_KADR_CZRequestOnSelectedIDMessage_input.xml
- 03b_KADR_PathDetailsMessage_output.xml
- 101a_KADR_PathRequest_input_1.xml
- 101b_KADR_ReceiptConfirmation_output_1.xml
- 102a_KADR_CZRequestOnSelectedIDMessage_input.xml
- 102b_KADR_PathDetails_output_1.xml
- 103a_KADR_PathDetailsRefused_input_1.xml
- 103b_KADR_CZAnswerMessage_output_1.xml
- 104a_KADR_CZRequestOnSelectedIDMessage_input.xml
- 104b_KADR_PathDetails_output_1.xml
- 105a_KADR_PathConfirmedMessage_input_1.xml
- 105b_KADR_CZAnswerMessage_output_1.xml
- 106a_KADR_CZRequestOnSelectedIDMessage_input_1.xml
- 106b_KADR_PathDetailsMessage_output_1.xml
- 201a_PathCanceledMessage_input.xml
- 201b_CZAnswerMessage_output.xml

Making the railway system
work better for society.

- a_KADR_PathRequest_input_3.xml
- b_KADR_ErrorMessage_output_3.xml

3 Roles

The team of ERA in charge of the regulation TAF TSI has performed the tests and has documented the results of the test campaign. OLTIS GROUP contributed at expert level (in dedicated mapping meetings) to ERA in the case of technical or business process related questions.

4 Results

4.1 ISOR

All above ISOR messages are valid against the official TAF data catalogue version baseline 2.2 (checked with Altova XML Spy 2017 in July 2018) – see <http://www.era.europa.eu/Document-Register/Pages/Technical-Documents.aspx>.

It is noted that in the ISOR messages a slightly different NameSpace is used as compared with the official TAF data catalogue (this does not hamper the validity of the messages).

Aforementioned ISOR messages are exchanged with the business partners using the TAF Common Interface.

4.2 EMAN

The Path Request function is realised at two IT systems. The First system called EMAN is developed for ČD CARGO – the biggest freight RU in the Czech Republic. This IT system communicates via Web service KADR (see next chapter) – here we would like to aspire for a soft compliance solution.

All above EMAN messages - realising the TAF TSI Path Request Functions

Making the railway system
work better for society.

- 4.2.2.2. Path Request message
- 4.2.2.3. Path Details message
- 4.2.2.4. Path Confirmed message
- 4.2.2.5. Path Details Refused message
- 4.2.2.6. Path Cancelled message
- 4.2.2.7. Path Not Available message
- 4.2.2.8. Receipt Confirmation message

- are valid against the official TAF data catalogue version baseline 2.2 (checked with Altova XML Spy 2017 in July 2018) – see <http://www.era.europa.eu/Document-Register/Pages/Technical-Documents.aspx>.

Other EMAN Path Request messages (such as the message „EMAN_Input_RequestOnSelectedID_2_.xml“) are outside of the scope of TAF TSI and have not been tested for validation.

It is noted that in the EMAN messages a slightly different NameSpace is used as compared with the official TAF data catalogue (this does not hamper the validity of the messages).

Aforementioned EMAN messages are exchanged with the business partners using either the TAF Common Interface or proprietary Web Services (with dedicated additional message header within the messages).

4.3 KADR

All above KADR messages - realising the TAF TSI Path Request Functions

- 4.2.2.2. Path Request message
- 4.2.2.3. Path Details message

Making the railway system
work better for society.

- 4.2.2.4. Path Confirmed message
- 4.2.2.5. Path Details Refused message
- 4.2.2.6. Path Cancelled message
- 4.2.2.7. Path Not Available message
- 4.2.2.8. Receipt Confirmation message

- are valid against the official TAF data catalogue version baseline 2.2 (checked with Altova XML Spy 2017 in July 2018) – see <http://www.era.europa.eu/Document-Register/Pages/Technical-Documents.aspx>.

Other KADR Path Request messages (such as the message „102a_KADR_CZRequestOnSelectedID Message_input.xml“) are outside of the scope of TAF TSI and have not been tested for validation.

It is noted that in the KADR messages a slightly different NameSpace is used as compared with the official TAF data catalogue (this does not hamper the validity of the messages).

Aforementioned KADR messages are exchanged with the business partners using either the TAF Common Interface or proprietary Web Services (with dedicated additional message header within the messages).

Test results summary	
Test run on :	12 July 2018
Test result :	passed
Test run by:	vargami
Test validated:	vargami

Making the railway system
work better for society.

5 Conclusions

The tests performed by ERA based on agreement with OLTIS Group to validate the compliance of the ISOR, EMAN and KADR messages delivered satisfactory results.

The organization OLTIS Group may therefore use the results of the assessment performed by ERA as a proof of compliance of its own ISOR train running and and EMAN / KADR path request messages from above chapters 2 and 4 against the TAF TSI data catalogue.

Making the railway system
work better for society.

Annex – OLTIS Group ISRO, EMAN and KADR messages used for compliance testing

ISOR Train Running

```
<?xml version="1.0" encoding="UTF-8"?>
<TrainRunningInformationMessage xmlns="http://www.era.europa.eu/schemes/TAFTSI/2.2" xmlns:ns="http://taf-jsg.info/schemes"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.era.europa.eu/schemes/TAFTSI/2.2 file...
... 20check/Phase%203/taf_cat_complete_v2.2.2.xsd">
    <MessageHeader>
        <MessageReference>
            <MessageType>4005</MessageType>
            <MessageTypeVersion>2.1.3</MessageTypeVersion>
            <MessageIdentifier>237</MessageIdentifier>
            <MessageDateTime>2018-01-19T11:30:44+01:00</MessageDateTime>
        </MessageReference>
        <Sender>0054</Sender>
        <Recipient>3161</Recipient>
    </MessageHeader>
    <MessageStatus>1</MessageStatus>
    <TrainOperationalIdentification>
        <TransportOperationalIdentifiers>
            <ObjectType>TR</ObjectType>
            <Company>0022</Company>
            <Core>---LV024475-</Core>
            <Variant>00</Variant>
            <TimetableYear>2018</TimetableYear>
```

Making the railway system
work better for society.

```
<StartDate>2018-01-19</StartDate>
  </TransportOperationalIdentifiers>
</TrainOperationalIdentification>
<OperationalTrainNumberIdentifier>
  <OperationalTrainNumber>43232</OperationalTrainNumber>
</OperationalTrainNumberIdentifier>
<TrainLocationReport>
  <Location>
    <CountryCodeISO>UK</CountryCodeISO>
    <LocationPrimaryCode>12345</LocationPrimaryCode>
    <PrimaryLocationName>A City</PrimaryLocationName>
    <LocationSubsidiaryIdentification>
      <LocationSubsidiaryCode xmlns:ns1="http://www.era.europa.eu/schemes/TAFTSI/2.2"
ns1:LocationSubsidiaryTypeCode="0">22</LocationSubsidiaryCode>
      <AllocationCompany>0021</AllocationCompany>
    </LocationSubsidiaryIdentification>
  </Location>
  <LocationDateTime>2018-01-19T11:30:00+01:00</LocationDateTime>
  <TrainLocationStatus>02</TrainLocationStatus>
  <BookedLocationDateTime>2018-01-19T07:30:00+01:00</BookedLocationDateTime>
  <TrainDelay>
    <AgainstBooked>+0240</AgainstBooked>
  </TrainDelay>
</TrainLocationReport>
</TrainRunningInformationMessage>
```

Making the railway system
work better for society.

EMAN / KADR Path Request

```
<?xml version="1.0" encoding="utf-16"?>
<PathRequestMessage xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.era.europa.eu/schemes/TAFTSI/2.2" xsi:schemaLocation="http://www.era.europa.eu/schemes/TAFTSI/2.2 file.....
Compliance%20mapping/OLTIS%20CEF%20call%20check/Phase%203/taf_cat_complete_v2.2.2.xsd">
<MessageHeader>
  <MessageReference>
    <MessageType>2006</MessageType>
    <MessageTypeVersion>2.1.8</MessageTypeVersion>
    <MessageIdentifier>4433ace8-d25a-4e20-ad4a-161094c92b4f</MessageIdentifier>
    <MessageDateTime>2018-06-14T12:45:48.0420545+02:00</MessageDateTime>
  </MessageReference>
  <Sender xsi:CI_InstanceId="01" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">0033</Sender>
  <Recipient xsi:CI_InstanceId="01" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">0035</Recipient>
</MessageHeader>
<AdministrativeContactInformation>
  <Name>extnouza1</Name>
</AdministrativeContactInformation>
<Identifiers>
  <PlannedTransportIdentifiers>
    <ObjectType>TR</ObjectType>
    <Company>0033</Company>
    <Core>EMAN0013450B</Core>
    <Variant>00</Variant>
    <TimetableYear>2018</TimetableYear>
  </PlannedTransportIdentifiers>
  <PlannedTransportIdentifiers>
    <ObjectType>PR</ObjectType>
    <Company>2154</Company>
    <Core>EMAN0013450B</Core>
  </PlannedTransportIdentifiers>
```

Making the railway system
work better for society.

```
<Variant>00</Variant>
<TimetableYear>2018</TimetableYear>
</PlannedTransportIdentifiers>
</Identifiers>
<MessageStatus>1</MessageStatus>
<TypeOfRequest>2</TypeOfRequest>
<TypeOfInformation>19</TypeOfInformation>
<TrainInformation>
  <PlannedJourneyLocation>
    <CountryCodeISO>UK</CountryCodeISO>
    <LocationPrimaryCode>98765</LocationPrimaryCode>
    <TimingAtLocation>
      <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
        <xsi:Time>12:40:00.000000+02:00</xsi:Time>
        <xsi:Offset>0</xsi:Offset>
      </Timing>
    </TimingAtLocation>
    <ResponsibleRU>0033</ResponsibleRU>
    <ResponsibleIM>0035</ResponsibleIM>
    <PlannedTrainData>
      <TrainType>2</TrainType>
      <TrafficType>C5</TrafficType>
      <PlannedTrainTechnicalData>
        <TrainWeight>1991</TrainWeight>
        <TrainLength>671</TrainLength>
        <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
        <TractionDetails>
          <LocoTypeNumber>03630</LocoTypeNumber>
          <TractionMode>11</TractionMode>
        </TractionDetails>
        <TractionDetails>
          <LocoTypeNumber>07550</LocoTypeNumber>
          <TractionMode>12</TractionMode>
        </TractionDetails>
      </PlannedTrainTechnicalData>
    </PlannedTrainData>
  </PlannedJourneyLocation>
</TrainInformation>
```

Making the railway system
work better for society.

```
</TractionDetails>
<TractionDetails>
    <LocoTypeNumber>03720</LocoTypeNumber>
    <TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
    <Name>CZRunningResistance</Name>
    <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
    <CountryCodeISO>UK</CountryCodeISO>
    <LocationPrimaryCode>98765</LocationPrimaryCode>
    <TimingAtLocation>
        <Timing xsi:TimingQualifierCode="ALA" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
            <xsi:Time>13:06:00.000000+02:00</xsi:Time>
            <xsi:Offset>0</xsi:Offset>
        </Timing>
    </TimingAtLocation>
    <FreeTextField>posun</FreeTextField>
    <ResponsibleRU>0033</ResponsibleRU>
    <ResponsibleIM>0035</ResponsibleIM>
    <PlannedTrainData>
        <TrainType>2</TrainType>
        <TrafficType>C5</TrafficType>
        <PlannedTrainTechnicalData>
            <TrainWeight>1991</TrainWeight>
```

Making the railway system
work better for society.

```
<TrainLength>671</TrainLength>
<LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
<TractionDetails>
  <LocoTypeNumber>03630</LocoTypeNumber>
  <TractionMode>11</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>07550</LocoTypeNumber>
  <TractionMode>12</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>03720</LocoTypeNumber>
  <TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedCalendar>
  <BitmapDays>110011</BitmapDays>
  <ValidityPeriod>
    <StartDateTime>2018-07-12T00:00:00</StartDateTime>
    <EndDateTime>2018-07-17T00:00:00</EndDateTime>
  </ValidityPeriod>
</PlannedCalendar>
<PathPlanningReferenceLocation>
```

Making the railway system
work better for society.

```
<CountryCodeISO>UK</CountryCodeISO>
<LocationPrimaryCode>98765</LocationPrimaryCode>
</PathPlanningReferenceLocation>
</TrainInformation>
<PathInformation>
  <PlannedJourneyLocation>
    <CountryCodeISO>UK</CountryCodeISO>
    <LocationPrimaryCode>98765</LocationPrimaryCode>
    <TimingAtLocation>
      <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
        <xsi:Time>12:40:00.000000+02:00</xsi:Time>
        <xsi:Offset>0</xsi:Offset>
      </Timing>
    </TimingAtLocation>
    <ResponsibleRU>0033</ResponsibleRU>
    <ResponsibleIM>0035</ResponsibleIM>
    <PlannedTrainData>
      <TrainType>2</TrainType>
      <TrafficType>C5</TrafficType>
      <PlannedTrainTechnicalData>
        <TrainWeight>1991</TrainWeight>
        <TrainLength>671</TrainLength>
        <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
        <TractionDetails>
          <LocoTypeNumber>03630</LocoTypeNumber>
          <TractionMode>11</TractionMode>
        </TractionDetails>
        <TractionDetails>
          <LocoTypeNumber>07550</LocoTypeNumber>
          <TractionMode>12</TractionMode>
        </TractionDetails>
        <TractionDetails>
          <LocoTypeNumber>03720</LocoTypeNumber>
```

Making the railway system
work better for society.

```
<TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>12:43:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
  <PlannedTrainData>
    <TrainType>2</TrainType>
    <TrafficType>C5</TrafficType>
    <PlannedTrainTechnicalData>
      <TrainWeight>1991</TrainWeight>
      <TrainLength>671</TrainLength>
      <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
      <TractionDetails>
        <LocoTypeNumber>03630</LocoTypeNumber>
```

Making the railway system
work better for society.

```
<TractionMode>11</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>07550</LocoTypeNumber>
  <TractionMode>12</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>03720</LocoTypeNumber>
  <TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>12:46:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
</PlannedTrainData>
```

Making the railway system
work better for society.

```
<TrainType>2</TrainType>
<TrafficType>C5</TrafficType>
<PlannedTrainTechnicalData>
  <TrainWeight>1991</TrainWeight>
  <TrainLength>671</TrainLength>
  <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
  <TractionDetails>
    <LocoTypeNumber>03630</LocoTypeNumber>
    <TractionMode>11</TractionMode>
  </TractionDetails>
  <TractionDetails>
    <LocoTypeNumber>07550</LocoTypeNumber>
    <TractionMode>12</TractionMode>
  </TractionDetails>
  <TractionDetails>
    <LocoTypeNumber>03720</LocoTypeNumber>
    <TractionMode>31</TractionMode>
  </TractionDetails>
  <TrainMaxSpeed>100</TrainMaxSpeed>
  <BrakeType>P</BrakeType>
  <BrakingRatio>75</BrakingRatio>
  <BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
```

Making the railway system
work better for society.

```
<Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
  <xsi:Time>12:48:00.000000+02:00</xsi:Time>
  <xsi:Offset>0</xsi:Offset>
</Timing>
</TimingAtLocation>
<ResponsibleRU>0033</ResponsibleRU>
<ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
  <TrainType>2</TrainType>
  <TrafficType>C5</TrafficType>
  <PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
      <LocoTypeNumber>03630</LocoTypeNumber>
      <TractionMode>11</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>07550</LocoTypeNumber>
      <TractionMode>12</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>03720</LocoTypeNumber>
      <TractionMode>31</TractionMode>
    </TractionDetails>
    <TrainMaxSpeed>100</TrainMaxSpeed>
    <BrakeType>P</BrakeType>
    <BrakingRatio>75</BrakingRatio>
    <BrakeWeight>1493</BrakeWeight>
  </PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
```

Making the railway system
work better for society.

```
<Name>CZRunningResistance</Name>
<Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
<CountryCodeISO>UK</CountryCodeISO>
<LocationPrimaryCode>98765</LocationPrimaryCode>
<TimingAtLocation>
<Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
<xsi:Time>12:52:00.000000+02:00</xsi:Time>
<xsi:Offset>0</xsi:Offset>
</Timing>
</TimingAtLocation>
<ResponsibleRU>0033</ResponsibleRU>
<ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
<TrainType>2</TrainType>
<TrafficType>C5</TrafficType>
<PlannedTrainTechnicalData>
<TrainWeight>1991</TrainWeight>
<TrainLength>671</TrainLength>
<LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
<TractionDetails>
<LocoTypeNumber>03630</LocoTypeNumber>
<TractionMode>11</TractionMode>
</TractionDetails>
<TractionDetails>
<LocoTypeNumber>07550</LocoTypeNumber>
<TractionMode>12</TractionMode>
</TractionDetails>
<TractionDetails>
<LocoTypeNumber>03720</LocoTypeNumber>
<TractionMode>31</TractionMode>
```

Making the railway system
work better for society.

```
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>12:56:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
  <PlannedTrainData>
    <TrainType>2</TrainType>
    <TrafficType>C5</TrafficType>
    <PlannedTrainTechnicalData>
      <TrainWeight>1991</TrainWeight>
      <TrainLength>671</TrainLength>
      <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
      <TractionDetails>
        <LocoTypeNumber>03630</LocoTypeNumber>
        <TractionMode>11</TractionMode>
```

Making the railway system
work better for society.

```
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>07550</LocoTypeNumber>
  <TractionMode>12</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>03720</LocoTypeNumber>
  <TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>12:59:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
  <PlannedTrainData>
    <TrainType>2</TrainType>
```

Making the railway system
work better for society.

```
<TrafficType>C5</TrafficType>
<PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
        <LocoTypeNumber>03630</LocoTypeNumber>
        <TractionMode>11</TractionMode>
    </TractionDetails>
    <TractionDetails>
        <LocoTypeNumber>07550</LocoTypeNumber>
        <TractionMode>12</TractionMode>
    </TractionDetails>
    <TractionDetails>
        <LocoTypeNumber>03720</LocoTypeNumber>
        <TractionMode>31</TractionMode>
    </TractionDetails>
    <TrainMaxSpeed>100</TrainMaxSpeed>
    <BrakeType>P</BrakeType>
    <BrakingRatio>75</BrakingRatio>
    <BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
    <Name>CZRunningResistance</Name>
    <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
    <CountryCodeISO>UK</CountryCodeISO>
    <LocationPrimaryCode>98765</LocationPrimaryCode>
    <TimingAtLocation>
        <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
```

Making the railway system
work better for society.

```
<xsi:Time>12:59:00.0000000+02:00</xsi:Time>
<xsi:Offset>0</xsi:Offset>
</Timing>
</TimingAtLocation>
<ResponsibleRU>0033</ResponsibleRU>
<ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
  <TrainType>2</TrainType>
  <TrafficType>C5</TrafficType>
  <PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
      <LocoTypeNumber>03630</LocoTypeNumber>
      <TractionMode>11</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>07550</LocoTypeNumber>
      <TractionMode>12</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>03720</LocoTypeNumber>
      <TractionMode>31</TractionMode>
    </TractionDetails>
    <TrainMaxSpeed>100</TrainMaxSpeed>
    <BrakeType>P</BrakeType>
    <BrakingRatio>75</BrakingRatio>
    <BrakeWeight>1493</BrakeWeight>
  </PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
```

Making the railway system
work better for society.

```
<Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
<CountryCodeISO>UK</CountryCodeISO>
<LocationPrimaryCode>98765</LocationPrimaryCode>
<TimingAtLocation>
  <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
    <xsi:Time>13:00:00.000000+02:00</xsi:Time>
    <xsi:Offset>0</xsi:Offset>
  </Timing>
</TimingAtLocation>
<ResponsibleRU>0033</ResponsibleRU>
<ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
  <TrainType>2</TrainType>
  <TrafficType>C5</TrafficType>
  <PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
      <LocoTypeNumber>03630</LocoTypeNumber>
      <TractionMode>11</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>07550</LocoTypeNumber>
      <TractionMode>12</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>03720</LocoTypeNumber>
      <TractionMode>31</TractionMode>
    </TractionDetails>
  </PlannedTrainTechnicalData>
</PlannedTrainData>
```

Making the railway system
work better for society.

```
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>13:00:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
  <TrainType>2</TrainType>
  <TrafficType>C5</TrafficType>
  <PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
      <LocoTypeNumber>03630</LocoTypeNumber>
      <TractionMode>11</TractionMode>
    </TractionDetails>
```

Making the railway system
work better for society.

```
<TractionDetails>
  <LocoTypeNumber>07550</LocoTypeNumber>
  <TractionMode>12</TractionMode>
</TractionDetails>
<TractionDetails>
  <LocoTypeNumber>03720</LocoTypeNumber>
  <TractionMode>31</TractionMode>
</TractionDetails>
<TrainMaxSpeed>100</TrainMaxSpeed>
<BrakeType>P</BrakeType>
<BrakingRatio>75</BrakingRatio>
<BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALD" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>13:03:00.000000+02:00</xsi:Time>
      <xsi:Offset>0</xsi:Offset>
    </Timing>
  </TimingAtLocation>
  <ResponsibleRU>0033</ResponsibleRU>
  <ResponsibleIM>0035</ResponsibleIM>
  <PlannedTrainData>
    <TrainType>2</TrainType>
    <TrafficType>C5</TrafficType>
```

Making the railway system
work better for society.

```
<PlannedTrainTechnicalData>
  <TrainWeight>1991</TrainWeight>
  <TrainLength>671</TrainLength>
  <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
  <TractionDetails>
    <LocoTypeNumber>03630</LocoTypeNumber>
    <TractionMode>11</TractionMode>
  </TractionDetails>
  <TractionDetails>
    <LocoTypeNumber>07550</LocoTypeNumber>
    <TractionMode>12</TractionMode>
  </TractionDetails>
  <TractionDetails>
    <LocoTypeNumber>03720</LocoTypeNumber>
    <TractionMode>31</TractionMode>
  </TractionDetails>
  <TrainMaxSpeed>100</TrainMaxSpeed>
  <BrakeType>P</BrakeType>
  <BrakingRatio>75</BrakingRatio>
  <BrakeWeight>1493</BrakeWeight>
</PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
  <Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedJourneyLocation>
  <CountryCodeISO>UK</CountryCodeISO>
  <LocationPrimaryCode>98765</LocationPrimaryCode>
  <TimingAtLocation>
    <Timing xsi:TimingQualifierCode="ALA" xmlns:xsi="http://www.era.europa.eu/schemes/TAFTSI/2.2">
      <xsi:Time>13:06:00.000000+02:00</xsi:Time>
```

Making the railway system
work better for society.

```
<xsi:Offset>0</xsi:Offset>
</Timing>
</TimingAtLocation>
<FreeTextField>posun</FreeTextField>
<ResponsibleRU>0033</ResponsibleRU>
<ResponsibleIM>0035</ResponsibleIM>
<PlannedTrainData>
  <TrainType>2</TrainType>
  <TrafficType>C5</TrafficType>
  <PlannedTrainTechnicalData>
    <TrainWeight>1991</TrainWeight>
    <TrainLength>671</TrainLength>
    <LengthOfSetOfCarriages>620</LengthOfSetOfCarriages>
    <TractionDetails>
      <LocoTypeNumber>03630</LocoTypeNumber>
      <TractionMode>11</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>07550</LocoTypeNumber>
      <TractionMode>12</TractionMode>
    </TractionDetails>
    <TractionDetails>
      <LocoTypeNumber>03720</LocoTypeNumber>
      <TractionMode>31</TractionMode>
    </TractionDetails>
    <TrainMaxSpeed>100</TrainMaxSpeed>
    <BrakeType>P</BrakeType>
    <BrakingRatio>75</BrakingRatio>
    <BrakeWeight>1493</BrakeWeight>
  </PlannedTrainTechnicalData>
</PlannedTrainData>
<NetworkSpecificParameter>
  <Name>CZRunningResistance</Name>
```

Making the railway system
work better for society.

```
<Value>S</Value>
</NetworkSpecificParameter>
</PlannedJourneyLocation>
<PlannedCalendar>
<BitmapDays>110011</BitmapDays>
<ValidityPeriod>
<StartDateTime>2018-07-12T00:00:00</StartDateTime>
<EndDateTime>2018-07-17T00:00:00</EndDateTime>
</ValidityPeriod>
</PlannedCalendar>
</PathInformation>
<NetworkSpecificParameter>
<Name>CZReason</Name>
<Value>0</Value>
</NetworkSpecificParameter>
<NetworkSpecificParameter>
<Name>CZOfferPrice</Name>
<Value>P2</Value>
</NetworkSpecificParameter>
<NetworkSpecificParameter>
<Name>CZSystemName</Name>
<Value>K_modul</Value>
</NetworkSpecificParameter>
<NetworkSpecificParameter>
<Name>CZSystemVersion</Name>
<Value>2.0.6738.14869</Value>
</NetworkSpecificParameter>
<NetworkSpecificParameter>
<Name>CZActivationApproval</Name>
<Value>0</Value>
</NetworkSpecificParameter>
<NetworkSpecificParameter>
<Name>CZDecisionNSA</Name>
```



Making the railway system
work better for society.

```
<Value>0</Value>
</NetworkSpecificParameter>
</PathRequestMessage>
```



Making the railway system
work better for society.