

# ISO/TS 21219-16:2016-09 (E)

## Intelligent transport systems - Traffic and travel information via transport protocol exports group, generation 2 (TPEG2) - Part 16: Fuel price information and availability (TPEG2-FPI)

<b>Contents</b>	<b>Page</b>
Foreword .....	v
Introduction .....	vii
<b>1</b> <b>Scope</b> .....	<b>1</b>
<b>2</b> <b>Normative references</b> .....	<b>1</b>
<b>3</b> <b>Terms and definitions</b> .....	<b>2</b>
<b>4</b> <b>Abbreviated terms</b> .....	<b>2</b>
<b>5</b> <b>Application specific constraints</b> .....	<b>3</b>
5.1    Application identification .....	3
5.2    Version number signalling .....	3
5.3    Ordered Components .....	3
5.4    Extension .....	4
5.5    TPEG Service Component Frame .....	4
<b>6</b> <b>FPI Structure</b> .....	<b>4</b>
6.1    General .....	4
6.2    FPI Structuring concepts .....	4
6.2.1   Design .....	4
6.2.2   Factoring out definitions .....	5
6.2.3   Transmission of tables of information .....	6
6.2.4   MMC usage and FPI message combinations .....	7
6.3    FPI Message structure .....	9
6.3.1   General .....	9
6.3.2   FuelingDefinitions .....	11
6.3.3   StationFuelingInformation .....	12
6.3.4   Station Extra Information .....	13
6.3.5   Station Site Information .....	14
6.3.6   Station Location Information .....	14
<b>7</b> <b>FPI Message components</b> .....	<b>16</b>
7.1    FPIMessage .....	16
7.2    FPIapplicationContainerTemplate .....	17
7.3    FuelingDefinitions .....	17
7.4    MessageManagement .....	18
7.5    StationExtraInfoCluster .....	18
7.6    StationExtraInformation .....	19
7.7    StationFuelingInfoCluster .....	20
7.8    StationMapLocationCluster .....	21
7.9    StationNavLocationAlongRoadCluster .....	21
7.10   StationPOILocationCluster .....	22
7.11   StationSiteInfo .....	22
7.12   StationSiteInfoCluster .....	23
7.13   GeographicCoverageLocation .....	24
7.14   MessageManagementContainerLink .....	24

7.15	MMCMasterMessageLink .....	24
7.16	MMCMessagePartLink .....	24
7.17	StationEntryLocation .....	24
7.18	StationMapLocation .....	24
7.19	RoadLocation .....	24
7.20	StationExitLocation .....	24
8	FPI Datatypes .....	25
8.1	FuelDeliveryRestrictionType .....	25
8.2	FuelTypeInfoInformation .....	25
8.3	FuelTypePrice .....	25
8.4	StationContactInformation .....	26
8.5	POILinkType .....	26
8.6	SizeRestrictions .....	26
8.7	StationBrandAndRating .....	27
8.8	StationFuelingInformation .....	27
8.9	StationMapLocationInfo .....	28
8.10	StationLocationVectorInfo .....	28
8.11	StationPOILocationInfo .....	29
8.12	WGS84coordinate .....	29
9	FPI Tables .....	30
9.1	Introduction of FPI Tables .....	30
9.2	fpi001:DeliveryUnitType .....	30
9.3	fpi003:FuelKindType .....	30
9.4	fpi004:PaymentMethodType .....	31
9.5	fpi005:FuelServicePolicyType .....	32
9.6	fpi006:AssociatedServiceType .....	32
9.7	fpi007:SpatialResolution .....	32
9.8	fpi008:FuelBrand .....	33
9.9	fpi009:AltFuelBrand .....	38
	Annex A (normative) TPEG application, TPEG-Binary Representation .....	39
	Annex B (normative) TPEG application, TPEG-ML Representation .....	52
	Bibliography .....	62