

IT2Rail WP7 Glossary iteration2

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1. SCOPE

This document formulates definitions of all the key concepts that are used all over the IT2Rail project. Its aim is to provide non-technical understandable definitions to be shared amongst the project stakeholders, either technical or non-technical ones.

The list of key terms and definitions provided in this document shall remain in line with the technical definitions provided in the Ontology produced and compiled in the context of the Interoperability Framework.

2. REFERENCED DOCUMENTS

This section lists the document reference number, title, revision, and date of all documents referenced in the specifications document.

Reference Number	Title	Revision	Date
	IT2RAIL-Proposal_second stage_SECTION 1-3_28082014_.pdf	1	09/10/14
	FM Submission IP4-V4.pdf	4	08/11/14
	ITR-T7.2-W-THA-001-03_-_IT2Rail_Glossary	3	18/12/2015

Table 1: Referenced documents

3. GLOSSARY OF TERMS

	Term	Description
A	Access Area (or Access Space)	<p>An area such as a concourse and/or a booking hall and/or other areas (e.g. commercial or lounge) which is secured or not and which is managed by a StopPlace manager.</p> <p>An air station manager is the airport manager. Some parts of the Access Area may be opened to the general public, and others restricted to passengers with a valid token/embodiment and also in some cases after a police control (at least of the luggage, often of individual ID or passport as well). In such cases the traveller's token shall be checked more than one time before boarding. An Access Area can offer one travel services to the traveller either from the Transport Service Provider (business lounge) or from the station manager (restrooms, prayers room...). Tax free areas are other examples of parts of Access Areas accessible under specific conditions (valid token) in international stations.</p>
A	Access system	These systems manage the access to the transportation system (like bus validators and metro gates). It could also be manual and even not existing in certain cases.
A	Accountability	Property that ensures that the actions of an entity may be traced uniquely to the entity.
A	Accounting	The Accounting activity consists of processing sales and After-Sales transactions described by confirmed Bookings for financial and controlling purposes (including apportionment, Settlement, etc.).
A	Actor	An Actor is a behaviour classifier which specifies a role played by an external entity that interacts with the considered system. Can be a Person, or an Organization or a digital system.
A	After sales	After Sales refers to a collection of transactions (ticket cancellation, refund, exchange, modification, revalidation etc.) which share the fact that they can only be performed on Issued and paid for Entitlements.
A	Agglomeration	Set of cities served by shared transport services in a continuous territory.
A	Air transport	A transport mode dedicated to the transportation by air

A	Airport	Airport is an infrastructure prepared to operate and accommodate the arrival and departure for air traffic. An Airport can also be considered a Stop Place qualified for Air Transportation (Air station).
A	Alert Management	A function managing the tracking of messages concerning the trip, such as alerts concerning disruptions affecting the trip.
A	Ancillary Service	Ancillary Services are side Products which are bound to transportation Products in an Offer and enhance its value for the Customer.
A	Acquisition	Process of acquiring a Contract. It includes Shopping, Booking, Pricing, Billing, and Paying among other processes.
A	Arrival	An Arrival is a Transport Event, occurring, or planned to occur at a specific Arrival Date Time and Stop Place.
A	Arrival Date Time	The date and time values associated with the Arrival which marks the actual and/or planned end of a Travel Episode.
A	Authentication	The authentication consists in checking the identity of a Customer or a Traveller in order to allow him to do some actions.
A	Authenticity	Property that an entity is what it is claims to be. Authenticity applies to entities such as users, processes, systems and information.
A	Authorization Token	A unique identifier of an interaction session. By extension a UserID Token will grant credentials to trigger operations related to a specific user.
A	Availability	The quality of being at hand when needed (Collins).
B	Barcode	A barcode is a machine-readable optical label that contains information about the item to which it is attached.
B	Benefit card	An element of the Passenger Profile allowing a Passenger to use a dedicated Fare Policy or Loyalty Card allowing a Passenger to access dedicated services of a loyalty program.
B	Booked Offer	A solution to a travel needs that has been booked and paid.
B	Booked Offer Item	An offer item provided by a single TSP on Travel Episode(s) that has been booked and paid.

B	Booking	Operational process involved in the sales process to commit to a sales transaction binding the customer and supplier on the offer. It informs the customer about price and reservation.
B	Booking Elements	Is a set of records linking a Booking with each ItineraryOfferItem for availability.
B	Booking provider	Entity that manages the booking / reservation process.
B	Broker	One that acts as an agent for others, as in negotiating contracts (like travel services), purchases, or sales in return for a fee or commission.
B	Bus Station	Bus Station is a Stop Place qualified for Bus Transport.
B	Bus stop	There are possibly several Bus Stop for a given Bus Station.
B	Bus transport	Bus transport is an urban ¹ transport mode operated by a bus operating carrier and dedicated to the transportation by origin / destination without seat reservation.
B	Business Analytics	The activity of analysing transport information by correlating, aggregating and applying statistical functions on measures and KPI. It is usually performed by producing reports / dashboards on collected information.
C	Cancellation	Process of terminating a Contract. It may include Refunding among other processes.
C	Capabilities	Measure of the ability of an entity (department, organization, person, system) to achieve its objectives, especially in relation to its overall mission.
C	Carbon footprint (of a journey)	Quantity of CO2 equivalent produced by the fact a vehicle moves over the journey divided by expected number of passengers on-board.
C	City	A centre of population, commerce, and culture with different transport infrastructures.
C	Cloud Wallet (CW)	The part of the application, invisible to the user (in the cloud), where are stored his booked offers, preferences, profile, etc.

¹ Standing passengers are allowed in a bus

C	Coach station	Coach Station is a Stop Place qualified for Coach Transport.
C	Coach transport	A transport mode dedicated to the transportation by coaches (long distance buses) with booking ² .
C	Community	Group of Social Network Users that are Friends in a closer way than with other Social Network Users.
C	Co-modal	A travel is considered as co-modal when it involves multiple modes and operators (multimodal) but there are multiple contractual agreements, all linked to the passenger - one agreement Travel Service Provider.
C	Confirmed Booking	An entity describing the committed sales transaction.
C	Connection	Connection is a link between two Vehicle Stopping Places.
C	Consumption	Process of using a Fare Product, during the validation process. Consumption context and data are used for business analytics and inspection process.
C	Contactless Smart Card (CSC)	A smart card is a device that includes an embedded integrated circuit that can be either a secure microcontroller with internal memory or a memory chip alone. The card connects to a reader with a remote contactless radio frequency interface (NFC standard). According to their kind, they allow, or not, to be written by an access system.
C	Context Dimension Tree (CDT)	The Context Dimension Tree is a hierarchical representation of the possible perspectives describing the situations in which the users can act in each application scenario.
C	Contextual Preferences (C)	These preferences depend on the context in which the travel develops; therefore, they are tailored to apply to all the situations of a certain type (e.g.: leisure vs. working trip, airplane vs. train, temporary impairment or others). Some of these preferences (C*) are connected to travels and travel habits and can be accounted for by the Travel Companion whenever a given context is active.
C	Contract of Carriage	A Contract of Carriage for Passengers concluded between a Carrier (Transport Operating Carrier) and the Passenger. Contracts of Carriage define the rights, duties and liabilities of the parties to the contract (the entitlement).

² And all passengers seated

C	Corridor	An itinerary test case that demonstrates the ability of the solution to reach the IT2Rails specifications.
	Critical product	Is a product which is absolutely required to achieve a travel. Without a critical product, the travel cannot be purchased.
C	Customer	Role of a Person who makes the payment for an offer and is a party (a person or an organization) to a contractual agreement concluded with a Travel Service Provider. The Customer buys offer(s) in the name of and for the benefit of Passenger(s). The Customer (a person) may also have the Passenger role.
D	Departure	A Departure is a Transport Event, occurring, or planned to occur at a specific Departure Date Time and Stop Place.
D	Departure Date Time	The date and time values associated with the Departure which marks the actual and/or planned start of a Travel Episode.
D	Destination	A Destination is a Stop Place marking the logical end of the Itinerary.
D	Detailed Quotation	Quotation corresponding to one or several products of the itinerary offer item for one of several passengers of this itinerary offer item.
D	Device Info	Device information used to perform the search transaction.
D	Disruptive Alert	Information raised to the traveller related to a disruptive event which is impacting his travel.
D	Disruptive Event	Unexpected event that causes a delay or a cancellation of the initially planned travel solution.
D	Distributor	An entity that buys noncompeting products or product lines, warehouses them, and resells them to retailers or directly to the end users or customers.
E	Effective Time	The effective time of transportation services.
E	Embodiment	An Embodiment is a physical medium containing one or more Token(s). Examples are paper tickets, magnetic-stripe tickets, chip cards, smartphones.
E	Europay Mastercard Visa (EMV)	Payment protocol sponsored by the EMVCo organization and relying on short range radio communication where the payment card is used as the media for travelling.

	Engine	In software context, an engine is executing components to render a service.
E	Entitlement	Entitlement is the digital record representing the rights (license) to travel. It contains all necessary information for a traveller to get access to the transportation systems.
E	Entitlement number	This is a unique ID, which is associated to a given entitlement.
E	E-Passport Management	A function which provides the user with an additional secure storage to carry information around with him, within the SIM card of his Passport.
E	Equipment	Is a component of the transportation system used for carrying Passenger(s) and goods.
F	Facility	A resource associated with a Vehicle and / or a Stop place and / or an Access Area such as elevator, a seat, couchette, rack space, lounge etc., used in the physical delivery of a Product. May be allocated to a Traveller through a Reservation.
F	Fare media	See embodiment and token.
F	Fare Policy	Fare Policy is a collection of business rules available to compute the Price of the Product on that Travel Episode for that Traveller in the Quotation process of an Offer. The Fare Policy may also determine the service terms and conditions.
F	Fare Price	Is the set of items describing the price paid by the customer. It includes among other things: taxes, fees and other debited or credited amounts.
F	Fare Product	A Fare Product is a purchasable item supplied by a Product Supplier allowing travellers to travel.
F	Fare product consumption	Step of a validation process where a fare product instance is altered to reflect the fact that it has been used.
F	Fare Product Family	A set of related fare products types.
F	Fare Rules	Refer to Fare Policy.
F	Fare set	Related to all parameters referring to different types of fares that exist in a single transport network, or in a group of transport networks (if integrated).
F	Fare Type	Category of product dedicated to transportation.

F	Fidelity Program	Structured marketing efforts that reward and encourage loyal buying behaviour (see also Loyalty Program).
F	Free Travel Episode	Part of the travel of the user that is not covered by a fare product.
F	Friend	A person who is in good relation with another person. This term is used in Social Networks to denote the relationship that will lead to possible communications among friends.
G	Gate	Gate is a Vehicle Stopping Place available at an Airport for air transportation. This is also the name of some close transport network access systems, like some metro systems.
G	Global Quotation	Total quotation of an ItineraryOfferItem.
G	Guaranteed Price Booking	Is a Booking where all booked ItineraryOfferItem(s)'s OfferItemPrice(s) are guaranteed by the ItineraryOfferItem(s) provider.
G	GUI	Graphical User Interface.
H	Happening	An association between POIs and start/end dates and times.
H	HistoricalData	Past-periods data, used usually as a basis for forecasting the future trends in transportations uses.
I	Information and communication s technology (ICT)	Information and communications technology (ICT) is an extended term for information technology (IT) which stresses the role of unified communications and the integration of telecommunications, computers as well as necessary software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.
I	Identification	Recognition of a Customer or a Passenger in order to provide him with a personalized process.
I	Influence	Capacity of a Social Network User to have an impact among his/her friends through messages broadcasted. The influence is computed by using past facts or information collected from one or more Social Networks.

I	Infrastructure	Is the collection of physical assets and installations that allow and often control travel operations including the movement and servicing of Vehicle(s) and the access of persons and freight to Vehicle(s).
I	Inspection	This activity is made by a roving enforcement officer to verify if the traveller has a valid entitlement and has correctly validated his / her embodiment against an access system.
I	Inspection Device	Is a portable Equipment used for Inspection.
I	Integrity	Ensure that data has not been modified or deleted in an unauthorized and undetected manner.
I	Interface	Interface describes how different entities/functions are linked, by what and how.
I	Intermodal	A travel is considered as intermodal when travel services involve multiple modes and operators (multimodal) which are integrated from a customer's perspective. The contractual agreement links the customer to only one contractor.
I	Intermodality	Intermodality ^[1] is a characteristic of a transport system that allows at least two different modes to be used in an integrated manner in a door-to-door transport chain. Mainly used by the freight sector, "Intermodality" is an issue for both freight and passenger transport sector.
I	Interoperability Framework	A set of services of the IT2Rail project providing assets and services used to handle interoperability of distributed and heterogeneous ICT assets on behalf of data/service providers and consumers.
	Inventory	An itemized catalogue or list of tangible goods or property, or the intangible attributes or qualities.
I	Inventory Lock	A temporary holding of inventory making it unavailable to other processes.
I	Issuer	Is an organization issuing Entitlement, Token and Embodiment.
I	Itinerary	A itinerary defines the Departure and Arrival places and associated Departure and Arrival times used for the realization of a travel.

^[1] Commission communication of 29 May 1997 on intermodality and the intermodal carriage of goods within the European Union

I	Itinerary Customer Satisfaction Survey	Score associated with an itinerary by a user, describing the quality he/she has perceived.
I	Itinerary Offer	An offer on the whole itinerary.
I	Itinerary Offer Item	Is an element of an ItineraryOffer describing a specific offer to Passengers of Products on TravelEpisode(s) (including Start Point and/or End point only) in a specific shopping process instance.
I	Itinerary Sentiment Analysis	Analysis of the attitude of the messages posted on the social networks regarding a specific Itinerary. It is described through the number of the discovered messages showing a positive opinion and the number of the discovered messages showing a negative opinion.
J	Journey	A Journey is a collection of Travel Episode(s).
J	Journey Planner	A Service that, given an origin and a destination (identified by geo-coordinates, station names, addresses etc.) and a date and time, returns an itinerary or a part of it.
K	Key Performance Indicator (KPI)	Indicator measuring the performance of an organization on a specific task.
L	Limited Supply Product	A Product whose supply is constrained by the Product Provider and whose Availability is computed by the Product Provider during the shopping process.
L	Line	An ordered set of Stop Places.
L	Local storage	(some) data must be available to the user even in cases of lack of connectivity (e.g., on an airplane).
L	Location	A specific position or point in physical space. Location has geographical coordinates.
L	Logical Topology	Abstracts a physical topology for ticketing purpose.
L	Loyalty Program	Rewards/benefits offered by an organization to customers who frequently make purchases/make use of associated service (see also Fidelity Program).

M	Merchant	Wholesaler or retailer who may buy goods from any or all sources for resale to anyone and everyone for profit.
M	MetaJourney	Is the couple Origin and Destination requested by the end-user.
M	Meta-Route Network	Network containing all Stop Places and all route link joining these Stop Places. The meta-route network is defined for a given zone (Europa, Berlin's agglomeration, ...) and based on schedule data which is provided by each travel expert.
M	Mileage	Is the number of miles covered.
M	Minimum connection time	A property of a trip Connection.
M	Mission	A Mission is a set of inter-related Use Cases / Capabilities.
M	Mobility request	Is the Traveller's query for travel information about a specific Itinerary.
M	Mono-modal	A travel is mono-modal when it involves just one transport mode.
M	Multimodal	A travel is considered multimodal as soon as it involves multiple modes or multiple ticketing schemes. Note: However, in some particular situations, one ticket may allow to travel in multiple modes.
M	Multimodal Hub	Multimodal Hub is a Stop Place or (most often) a station at which different Transportation Mode(s) converge.
N	Navigation at interchanges	One of the functions offered by the travel companion is to help the user navigate the stations at the interchanges.
N	Near Field Communication (NFC)	Is a set of protocols that enables electronic devices to establish radio communication with each other by touching the devices together or bringing them into proximity to a distance of typically 5cm or less.
N	Network Statistics	Required data to build the network reference resource.
O	Obstacle-free route	An obstacle-free route is a link between two or more public areas dedicated to the transport of passengers. It can be navigated by all persons with disabilities and reduced mobility.
O	Offer	A potential solution to a travel needs that can be booked and paid for.

O	Offer Item	An offer item provided by a single TSP on Travel Episode(s).
O	Offer Item Price	Is the price of an ItineraryOfferItem charged for its purchase. Is composed of OfferItemPriceItem(s).
O	Offer Item Price Item	Is an element of an OfferItemPrice charged for its purchase.
O	Offer Time Limit	The Offer Time Limit is the deadline controlled by the Travel Service Provider beyond which the Offer is invalid.
O	OfferItemProvider	An organization providing offer items to OfferProvider.
O	OfferProvider	An organization also BusinessUser providing travellers with travel offers.
O	Ontology	The machine-readable, formal and explicit description of the concepts and their relationships of the IT2Rail domain. It is used to annotate data and interface descriptors to allow automation of discovery and transformation ICT assets that participate in the realization of shopping/booking/payment and tracking instance.
O	Open Service	A Product bound to a part of an itinerary which is only characterized by its boarding and alighting Stop Places, while the associated Vehicle, and its departure/arrival time/date, is unspecified.
O	Operational management	The design, execution, and control of operations that convert resources into desired goods and services, and implement a company's business strategy.
O	Orchestrator	An entity that arrange or control the elements of the system to achieve a desired overall effect.
O	Origin	When considering an access to the transportations systems, an Origin is a Stop Place marking the logical start of the Itinerary or of a travel segment.
P	Passenger	The person actually travelling the Itinerary when he/she is transported (on-board a vehicle).
P	Payload	Is a collection of bytes meaning that a token is able to be used for validation. In the context of IT2Rail it contains the User ID and Booked Offers.
P	Payment	Is the act of paying.

P	Payment Details	Is the detailed data that can be used to perform the payment process depending on the PaymentMean(s).
P	Payment Engine	In software context, a payment engine is executing components to render a payment service.
P	Payment Mean	Is the description of a mean that can be used to perform Paying.
P	Payment Module	A payment module is a standard unit that can be combined with other different but compatible modules to assemble a wide range of varied end-products in terms of payment.
P	Person with Reduced Mobility	Traveller (Passenger) with reduced mobility, indicates both a Traveller (Passenger) with mobility constraints and the set of specific legal and business rules that apply in Offer and delivering Products for this Traveller (Passenger).
P	Persona	Personas are fictionalized characters which are created to fully understand the target user's way of life and needs.
P	Physical topology	Organized set of the various elements of a transport Infrastructure.
P	Place	A location or a set of locations (like a zone).
P	Planned Arrival	Associative class representing the relation departsAt(Vehicle, StopPlace).
P	Planned Departure	Associative class representing the relation departsAt(Vehicle, StopPlace).
P	Platform	please refer to <Quay>.
P	Point Of Interest	POI is a Location that holds relevant information for a travel.
P	Preference	Is the Traveller-related information that represents its travel-related needs and choices.
P	Preference Management	A function managing the creation and modification of user preferences.
P	Price	Is the monetary value for a Product.

P	Pricing	Process that computes (quotes) the Fare Price applicable to the journey based on passengers, itinerary details, pricing options and contexts.
P	Product	Is a travel-related, purchasable Service or Good supplied by a service provider.
P	Product owner	A Product Owner creates Fare Products, fixes the Fare Rules (terms and conditions) attached to them used in the computation of the Fare Price. It can be a Transport Service Provider or Travel Service Provider (Tour Operator).
P	Product Provider	Is contractually responsible for providing a Product to the Traveller.
P	Profile Connected Preferences (P)	This is a list of personal characteristics of a user among which we can include some “stable” preferences, which are tailored by the permanent features of the customer, in the sense that they can be modified, but at a low rate (Years) (e.g. Vegetarian food, Diabetic diet, ...). There preferences are permanently connected to the user (e.g. if he/she is on a wheel chair he/she prefers an elevator vs. an escalator).
P	Proof of Payment	Is an evidence that Paying has already been made or will be made in the future.
P	Public Area	Area reachable by a traveller own means (feet, wheelchair, among others).
P	Public Transport Authorities (PTA)	Public Transport Authorities are responsible for the organisation of convenient local public transport and apply fare policies very attractive for local citizens.
Q	Quay	A physical installation of a Stop Place. Also named a platform.
Q	Quotation	Quotation of the itinerary offer.
R	Rail station	A Rail Station is a Stop Place dedicated to Rail Transport.
R	Rail transport mode	A Transport Mode dedicated to the transportation by rail.
R	Refund	After sales process that allow a customer to get his money back in accordance with the sales policies and the provisions of the entitlement.

R	Reliability	People or things that are reliable can be trusted to work well or to behave in the way that you want them to (Collins).
R	Reservation	Reservation is the allocation of named Facilities associated with a Fare Product.
R	Resolved mobility request	A well-defined need to travel.
R	Retailer	A retailer is an organization selling the Products of Travel Service Provider(s) using the services of Distributors. A retailer may have a direct relationship with a TSP whereby it acts as an appointed agent and/or it may have an indirect relationship with a TSP whereby it uses the services of a Commercial Distributor. A TSP can play the role of a retailer.
R	Revenues	Revenue is the amount of money that is brought into a company by its business activities.
R	Route	An ordered list of RouteLink(s) connecting Stop Place(s), e.g. an ordered set of physical links between stop points where a vehicle can circulate.
R	Route Link	An element of a Route that connects a pair of contiguous Stop Place(s) of the Route.
S	Safety	Safety is the state of being safe from harm or danger (Collins).
S	SalesConditions	Is a subset of terms and conditions specifying the conditions to be allowed to book an ItineraryofferItem.
S	Schedule	Transportation schedules, such as airline timetables, train schedules, bus schedules, and various public transport timetables are published to allow commuters to plan their travels. A schedule list the times at which certain events, such as arrivals and departures at a transportation station, are expected to take place.
S	Search Options (M)	Among the Contextual Preferences there are still some possible choices left, which can be selected by the traveller on a per-travel instance (e.g.: "hand_luggage_only", ...). These preferences can be selected by the user from a drop-down menu, where only a few residual possibilities are displayed, when planning or booking the travel (e.g.: "hand_luggage_only" can be meaningful only if the context is "airplane").
S	Secure storage	Important data must be saved to a permanent, reliable, secure storage, which is highly available.

S	Security	Property of a system by which confidentiality, integrity, availability, accountability, authenticity, and reliability are achieved.
S	Segment	A Segment is part of a Journey. This is delimited by two Stop Places
S	Semantic	Match-making the process of automating the discovery and transformation of semantically annotated ICT assets.
S	Semantic Annotation	The process of adding machine-readable fragments from the Ontology to data and interface descriptors, thus enabling machines to automate discovery and transformation of ICT assets.
S	Semantic web service registry	A shared registry of validated, approved and versioned semantically annotated interfaces to services, e.g. Travel Expert, Booking Engine, for the execution of a shopping/booking/payment/tracking process instance.
S	Service architecture	A type of business information architecture model designed to allow all current business processes as well as future process additions to be integrated. Large processes and applications are broken into smaller units referred to as "services". By using a Service Architecture, a system can allow the sharing of data across business units.
S	Service Provider	Role of an Organization offering Service(s), especially but not exclusively on transportation.
S	Shopping	A function managing the definition of the itinerary.
S	Shopping Request Context	Information specific to a given shopping request.
S	Smart Device	<p>This is a personal device, like a smart phone, a tablet or even a portable Personal Computer.</p> <p>It must be able to connect prior to the trip to the Internet in order to download, using the Travel Companion application, the travel wallets of the traveller.</p> <p>The Travel Companion application, using the hardware of the Smart Device and the downloaded data of the travel wallet, will acts as a classical fare medium (NFC contactless smart card, displayed barcode, ...) when it is presented in front of an access system or an inspection system.</p>

S	Social Data	Information that travellers exchange with one another on a social network related to their travels or the feedback that travellers provide to the BA module through the TC Travel Questionnaire.
S	Social Graph	Conceptual representation of a Social Network. In other words, conceptual representation of a group of Social Network Users that are linked among them by Friendship relationships, by communications among them, or by other aspects that determine relationships of "similar taste", "similar objectives in a trip", etc.
S	Social Network Activity	A Web application or service that provides data about the social activity of individuals who are customers of that application or service. The data provided may be both interactions among those customers and opinion about their trips.
S	Social Network User	Person who uses a Web application or service to make Friends in a Social Network and to broadcast messages about his/her personal activities and in relation with their Friends.
S	Station	<p>A station is a StopPlace offering as well an AccessArea (or AccessSpace).</p> <p>The name of a station shall depend on a hierarchy of modes. In an airport which is an air station you can have many other stations (for e.g. rail and/or other modes). In a rail station, you can have other stations as well (e.g. a metro station).</p>
S	Statistics data provider	Entity providing network statistics.
S	Stop Place	<p>A stop place is an element of the Transport Infrastructure where Vehicle(s) may stop and where Traveller(s) may board or leave Vehicle(s).</p> <p>In most of the cases, a stop place has means to control the access to the transportation system.</p>
T	Tap	First step of the validation process. Act to tap his / her embodiment on the access system or have it properly read by the access system (e.g. for contactless or barcode embodiment).
T	Tapping module	The tapping module is part of the Travel Companion application. Its role is to communicate with the access system using the payload of the token.
T	Tax	Part of the Price of an ItineraryOfferItem related to charges and duties.

T	Terms and Conditions	Terms and Conditions refer to the rules and provisions that can be applied to any type of product.
T	The preference model	The preference model considered in IT2Rail has been defined based on the CDT model. Every preference is associated with a score which can be represented using different semantics.
T	Ticket	An artefact covering entitlement, embodiment and token.
T	Ticket Controlling Organization (TCO)	A Ticket Controlling Organization is any organization charged with inspection of passengers' tickets.
T	Ticket Time Limit	Time limit by which entitlement generation must occur before that inventory synchronization is un-done, and the requested capacity/availability lost.
T	Timetable	See schedule.
T	Token	A Token is a proprietary instantiation of an entitlement. It is used by TSP to perform their operations.
T	Topology	The way in which constituent parts are interrelated or arranged.
T	Transport	A category of travel which refers to on-board vehicle travel.
T	Transport Intelligence	All the KPIs provided to transport operators. A transport intelligence KPI could also be a travel intelligence KPI and vice versa. The two types of KPIs are not mutually exclusive.
T	Transport Mode	Category of transport grouped by transport means or ticketing scheme.
T	Transport network	A transport network refers to a group of lines of one or more transport modes, within a geographical territory, provided by one or more companies and depending upon a local transport authority.
T	Transport Service Provider (TSP)	<p>Organization providing services for journeys using one or more modes of transports: aircrafts, trains, metros, coaches, buses; or possible other services connected to the journeys (e.g. trip tracking).</p> <p>A Transport Service Provider can also be seen as a specific case of Travel Service Provider (see below) which is only responsible to the journeys.</p>

T	Travel Service Provider	<p>A Travel Service Provider is a company providing travel services. Travel includes “transport” (on-board vehicles) and possibly services which are not transport but connected to it – either at the beginning or during the travel, like the access to a lounge or trip tracking – or at the end of the trip, like the access to a sky resort.</p> <p>The Travel Service Provider offers the customers its Products (including Fare Products) for purchase (through Travel Shopping and Ticketing). It is also responsible for the travel service corresponding to the purchased offer.</p>
	Transportation Service	Service (Flight, Rail, ...) that provides transportation on a TravelEpisode.
T	Travel	<p>Generic term without any technical assumptions, referring to the combination of services provided to a customer between a physical origin and a physical destination. Travel includes transport (on-board vehicles), as well as possible transfer between modes, possibly services which are offered during the trip out of vehicles, and possibly non-transport services which are proposed at either end of the trip from A to B.</p>
T	Travel Cloud	<p>Digital system accessible from any place by any digital means (mobile phone, tablet or PC) and dedicated to the travel management. It is composed of several wallets: travel wallet, preferences wallet and payment wallet.</p>
T	Travel Companion application	<p>This application is hosted by the Smart Device of the Traveller and that the Traveller must have installed before travelling.</p>
T	Travel Data	<p>Generically, any information related to travels.</p>
T	Travel Episode	<p>Part of itinerary, characterized by Departure and Arrival consisting of an ordered sequence of RouteLinks operated with the same vehicle.</p>
T	Travel Episode Endpoint	<p>A Travel Episode Endpoint is a Stop Place at which a Travel Episode starts or ends.</p>
T	Travel Episode Start Point	<p>Is the spatial beginning of a Travel Episode.</p>
T	Travel Events	<p>Events that a generic traveller regards as important to his/her current journey.</p>

T	Travel Expert	Technical entity that render services to allow to build an offer. This entity may be deployed by a TSP or distributors thus relying on a TSP fare products and prices services.
T	Travel Intelligence	All the KPIs provided to travellers. A travel intelligence KPI could also be a transport intelligence KPI and vice versa. The two types of KPIs are not mutually exclusive.
T	Travel Service Operator (TSO/TOC)	The TSO delivers the service. For transport, it could be named also TOC: “Transport Operating Carrier”, the company running the vehicles used for transport.
T	Travel Shopper	Technical entity offering shopping services based on travel experts.
T	Travel Solution	Solution provided to the customer answering its travel need.
T	Traveller	The Traveller (see also “Passenger” when on-board a vehicle) is the person making a travel in accordance with the terms and conditions of the entitlement(s).
T	Traveller Medium	See "Smart Device".
T	Traveller Preferences	All information related to a customer or a traveller, which can be used by the travel solutions (fidelity program, PRM, preferred carrier, preferred Transport Mode, preferred payment means, needed facilities, etc.).
T	Trip	A set of linked segments of an itinerary from a traveller’s perspective (a trip has also a purpose).
T	Trip Sentiment Analysis	Analysis of the attitude of the messages posted on the social networks regarding a specific Trip. It is described through the number of the discovered messages showing a positive and negative opinion.
T	Trip Tracker (Or TT)	A module within the application which follows the trip of the traveller in real time. It is designed to alert the user of any delay, cancellation, etc.
U	User Interface (UI)	User Interface: what the user is able to see and interact with.
U	Uniform Resource Identifier	Is used as ID to provide reference to different resources (data or services).
U	UniqueID	This identifies unambiguously a person in the whole IT2Rails ecosystem.

U	Unlimited Supply Product	A Product whose supply is not constrained by the Product Provider and is assumed to have unlimited Availability.
U	Urban transport	A set of transportation modes operated at the local level of a city or an agglomeration, including bus, metro, ferry, tram, train, which are part of an integrated mobility offer, that uses a common ticketing environment (business rules, no booking, ...). As a result, it is considered as a transportation mode.
U	User ID Authorization Token	Unique string of characters identifying a unique user and containing the list of authorizations that guarantees the access to the list of functions for each component, and for different devices.
U	User Preferences	A set of characteristics representing the user needs and choices for travelling.
U	UserID	A unique string of characters identifying a specific user. This unique identification will be helpful to identify a user for different kinds of operations and on each of his devices.
U	UUID	Universally Unique Identifier: see UserID.
V	Validation	This process is made by the access system to allow or deny the access to the transportation system. To get access to the transportation system, the embodiment must be compatible with its access system and the token must instantiate a valid entitlement.
V	Validation Transaction	Is the data describing a Token alteration by an AccessSystem at a date and time.
V	Vehicle	Vehicle describe the transportation means that circulate on a physical infrastructure e.g. a Train, a Bus, etc.
V	Vehicle Stopping Place	The physical point at which passengers board or alight from Vehicle(s).
V	Versioned Operational Parameter	Set of parameters used by a TSP to build his Offer Item, referring to Fare Product and Fare Rules and Topology.
W	Wallet	Technical component that will store customer / traveller preferences, itineraries and entitlements.

W	WishedArrivalDate	ArrivalDateTime wished by the Customer.
W	WishedDepartureDate	DepartureDateTime wished by the Customer.
Z	Zone	A set of stop places sharing a common set of business rules.

Table 2: Glossary