

# HOMEPAGE

www.ITSterminology.org

The screenshot shows the homepage of www.ITSterminology.org. The page has a dark header with the site name 'ITS TERMINOLOGY' on the left and navigation links 'Intro', 'Guide', 'Contact', and 'Česky' on the right. Below the header is a search bar with a 'Query' input field, a 'Search' button, and an 'Abbreviations' button. The main content area lists four main categories, each with a checkbox and a list of sub-areas. The categories are: 1. Electronic Fee Collection (EFC), 2. Freight, Logistics and Commercial Vehicle Operations, 3. Public Transport, and 4. Traffic and Travel Information. Each category has a list of sub-areas with their respective numbers. The page is annotated with numbers 1 through 7, pointing to specific elements: 1 points to the 'ITS TERMINOLOGY' header, 2 points to the 'Česky' language selector, 3 points to the 'Abbreviations' button, 4 points to the search bar, 5 points to the checkbox for category 2, 6 points to the checkbox for category 3, and 7 points to the sub-areas of category 4.

1 ITS TERMINOLOGY

Intro Guide Contact Česky

Query Search Abbreviations

1 Electronic Fee Collection (EFC)  
1.1 Roles 1.2 Application characteristics 1.3 General application concepts 1.4 Application concepts 1.5 Data communication elements 1.6 Data types 1.7 Data structures 1.8 Toll charging related events 1.9 Information 1.10 Testing and certification

2 Freight, Logistics and Commercial Vehicle Operations  
2.1 General concepts and processes 2.2 Systems 2.3 Service actors 2.4 Enforcement actors 2.5 Transported and transport entities 2.6 Means of transport 2.7 Information 2.8 Identification and tags 2.9 Shipping documents 2.10 Communication and communication equipment 2.11 Applications

3 Public Transport  
3.1 Public transport systems 3.2 In-vehicle system 3.3 Communication systems 3.4 Payment system and rules 3.6 Transport mode 3.7 Vehicle journey 3.8 Vehicle journey types 3.9 Control centre 3.10 Stops 3.11 Point 3.12 Parking 3.13 User needs 3.14 Data system 3.15 Publication and subscription web services

4 Traffic and Travel Information  
4.1 Data 4.2 Data structures 4.3 System characteristics and parameters 4.4 Information 4.5 Infrastructure 4.6 Communication 4.7 Concepts 4.8 General concepts 4.9 Roles 4.10 Dictionaries and registers

1. „ITS TERMINOLOGY“ serves for return to Homepage
2. Choice of English or Czech interface
3. Browsing in Abbreviations
4. Search bar with autocomplete search suggestions
5. Check box filters
6. Main ITS areas (1–15)
7. Subareas

# SEARCHING AND BROWSING POSSIBILITIES

- ITS Terminology in the dictionary is divided into **15 main areas** (on the main page), containing terms presented in alphabetical order
- Each area contains number of **subareas**, containing terms presented in subject order

SEARCH POSSIBILITY	ORDER
1. Search bar	alphabetical
2. Search bar with filtered areas	alphabetical
3. Browsing in main areas	alphabetical
4. Browsing in subareas	subject

- All terms in the dictionary are **hyperlinks**

The screenshot shows the ITS Terminology website interface. At the top, there is a navigation bar with 'Intro', 'Guide', 'Contact', and 'Česky' (with a Czech flag). Below the navigation bar, there is a search bar containing the text '"Data Link Layer"' and buttons for 'Search' and 'Abbreviations'. The main content area displays the search results for 'Data Link Layer'. The results include the term 'data link layer (DLL; L2)', its definition, and the area 'Traffic Control Systems'. A red box highlights the word 'interface' in the definition. A red arrow points from this box to a pop-up window that displays the search results for 'interface'. The pop-up window shows the term 'interface', its definition, and the area 'Electronic fee collection (EFC)'.

ITS TERMINOLOGY Intro Guide Contact Český

"Data Link Layer" Search Abbreviations

Results for query *Data Link Layer*

TERM **data link layer (DLL; L2)**

DEFINITION the conceptual [layer](#) of control or processing logic existing in the hierarchical structure of a station that is responsible for maintaining control of the [data link](#). The [data link layer functions](#) provide an [interface](#) between the station higher layer logic and the [data link](#). These functions include address/control field interpretation, channel access and command transmission and interpretation

AREA [Traffic Control Systems](#)

Results for query *interface*

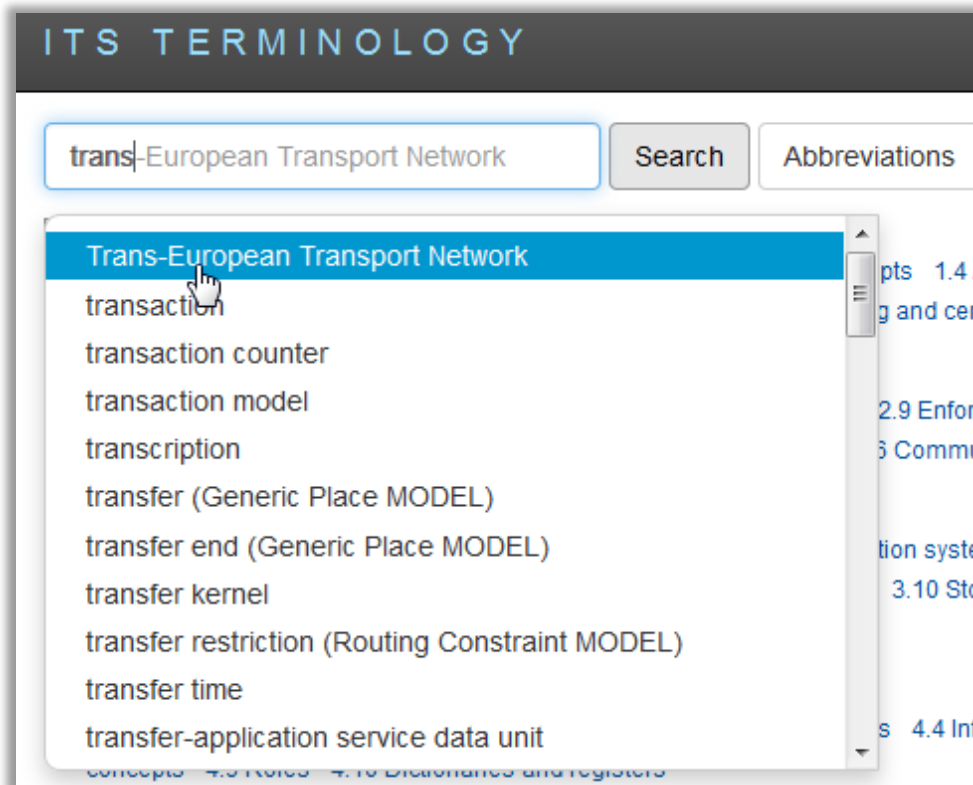
TERM **interface**

DEFINITION abstraction of the [behaviour](#) of an [object](#) that consists of a subset of the interactions of that [object](#) together with a set of [constraints](#) on when they may occur

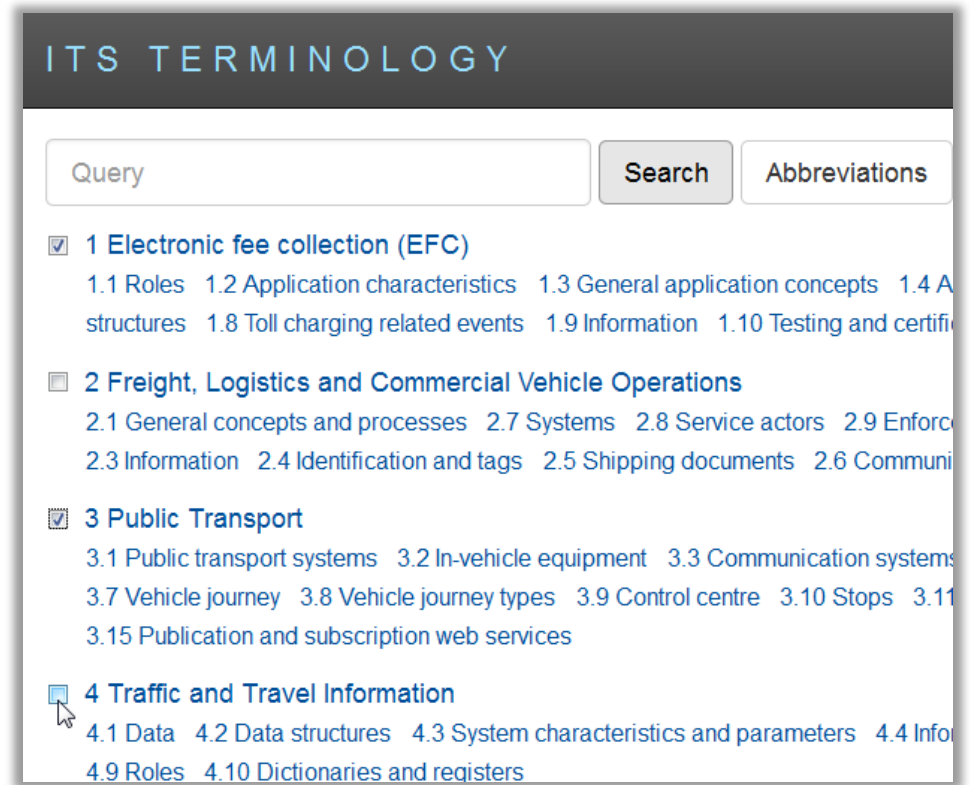
AREA [Electronic fee collection \(EFC\)](#)

# SEARCH USING SEARCH BAR

## A. With autocomplete search suggestions



## B. Filtered by check boxes



# BROWSING IN SUBJECT AREAS

## A. Selection of main area

terms in alphabetical order

The screenshot shows the 'ITS TERMINOLOGY' interface. At the top, there is a search bar labeled 'Query' and two buttons: 'Search' and 'Abbreviations'. Below the search bar, a list of main areas is displayed in alphabetical order, each with a checkbox and a list of sub-terms:

- 1 Electronic fee collection (EFC)
  - 1.1 Roles
  - 1.2 Application characteristics
  - 1.3 General application concepts
  - 1.4 Application structures
  - 1.8 Toll charging related events
  - 1.9 Information
  - 1.10 Testing and certification
- 2 Freight, Logistics and Commercial Vehicle Operations
  - 2.1 General concepts and processes
  - 2.7 Systems
  - 2.8 Service actors
  - 2.9 Enforcement
  - 2.3 Information
  - 2.4 Identification and tags
  - 2.5 Shipping documents
  - 2.6 Communication
- 3 Public Transport
  - 3.1 Public transport systems
  - 3.2 In-vehicle equipment
  - 3.3 Communication systems
  - 3.4 Mode
  - 3.7 Vehicle journey
  - 3.8 Vehicle journey types
  - 3.9 Control centre
  - 3.10 Stops
  - 3.11 System
  - 3.15 Publication and subscription web services
- 4 Traffic and Travel Information
  - 4.1 Data
  - 4.2 Data structures
  - 4.3 System characteristics and parameters
  - 4.4 Information

Three purple arrows originate from the top of the interface and point to the checkboxes of the first three main areas: '1 Electronic fee collection (EFC)', '2 Freight, Logistics and Commercial Vehicle Operations', and '3 Public Transport'. A mouse cursor is positioned over the first sub-term '1.1 Roles' under the first area.

## B. Selection of subarea

terms in subject order

The screenshot shows the 'ITS TERMINOLOGY' interface. At the top, there is a search bar labeled 'Query' and two buttons: 'Search' and 'Abbreviations'. Below the search bar, a list of main areas is displayed in subject order, each with a checkbox and a list of sub-terms:

- 1 Electronic fee collection (EFC)
  - 1.1 Roles
  - 1.2 Application characteristics
  - 1.3 General application concepts
  - 1.4 Application structures
  - 1.8 Toll charging related events
  - 1.9 Information
  - 1.10 Testing and certification
- 2 Freight, Logistics and Commercial Vehicle Operations
  - 2.1 General concepts and processes
  - 2.7 Systems
  - 2.8 Service actors
  - 2.9 Enforcement
  - 2.3 Information
  - 2.4 Identification and tags
  - 2.5 Shipping documents
  - 2.6 Communication
- 3 Public Transport
  - 3.1 Public transport systems
  - 3.2 In-vehicle equipment
  - 3.3 Communication systems
  - 3.4 Mode
  - 3.7 Vehicle journey
  - 3.8 Vehicle journey types
  - 3.9 Control centre
  - 3.10 Stops
  - 3.11 System
  - 3.15 Publication and subscription web services
- 4 Traffic and Travel Information
  - 4.1 Data
  - 4.2 Data structures
  - 4.3 System characteristics and parameters
  - 4.4 Information concepts
  - 4.9 Roles
  - 4.10 Dictionaries and registers

Three purple arrows originate from the top of the interface and point to the checkboxes of the first three main areas: '1 Electronic fee collection (EFC)', '2 Freight, Logistics and Commercial Vehicle Operations', and '3 Public Transport'. A mouse cursor is positioned over the sub-term '1.10 Testing and certification' under the first area.

# ABBREVIATIONS

The screenshot shows the top navigation bar of the ITS Terminology website. On the left, there is a search bar with the text "Query" and a "Search" button. To the right of the search bar is a button labeled "Abbreviations", which is circled in purple. Below the search bar is a horizontal menu of letters from A to Z. The letter "M" is highlighted in blue. Below the menu, there is a list of abbreviations: "AAS" with the definition "acoustic announcement system" and "AC\_CR" with the definition "access credentials".

## 1. Search with Search bar

- regardless of language choice
- abbreviations are also next to the term in brackets

## 2. Search in Abbreviations menu

- A-Z panel

Abbreviation containing its term with definition is a **hyperlink**

The screenshot shows the ITS Terminology website with the search bar containing the text "AC\_CR". The search results are displayed in a white box. The results include the term "access credentials (AC\_CR)", the definition "data that is transferred to on-board equipment (OBE), in order to establish the claimed identity of a roadside equipment (RSE) application process entity", a note "NOTE Access credentials carry information needed to fulfil access conditions in order to perform the operation on the addressed element in the OBE. Access credentials can carry passwords as well as cryptography-based information such as authenticators.", the area "Electronic fee collection (EFC)", and the standard "ISO 13143-1, EN 15509". The term "access credentials (AC\_CR)" is circled in purple, and a purple arrow points from the "AC\_CR" link in the main list to this term in the search results.

## SOURCE DOCUMENT: STANDARD (EXTRACT)

- Each term and definition contains its **source** – „STANDARD (EXTRACT)“
- Hovering mouse cursor over the source number reveals the **title of the standard**

TERM	<b>session</b>
DEFINITION	period of time during which a <b>client</b> and a <b>server</b> exchange multiple <b>data packets</b>
AREA	<b>Traffic Control Systems</b>
STANDARD (EXTRACT)	<a href="#">ISO 14827-2, ISO 14827-3, EN ISO 14906</a> <small>Transport information and control systems – Data interfaces between centres for transport information and control systems – Part 2: DATEX-ASN</small>

- If the standard was made into **EXTRACT** – the PDF file of the standard’s Extract opens in the browser
- In case the Extract has not been created yet, preview pane with information about the relevant standard opens



## EXTRACT (ISO 14827-2)

## INFORMATION ABOUT STANDARD (ISO 14827-2)

The screenshot shows a web interface with a navigation bar at the top containing 'Fulltext', 'Uživatelé', 'Kategorie', and 'Pracovní skupiny'. Below it is a secondary menu with 'Seznam norem', 'Informace o normě', 'Extrakt normy', 'E-learning normy', and 'Dotaz autorovi extraktu'. The main content area is titled 'EXTRAKT z české technické normy' and includes the following text:

Extrakt nenahrazuje samotnou technickou normu, je pouze informativním materiálem o normě.  
ICS 35.240.60

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**Systémy dopravních informací a řídicí systémy (TICS) – Datová rozhraní mezi centry dopravních informací a řídicími systémy – Část 2: Datový slovník DATEX–ASN**      ČSN ISO 14827-2  
01 8270

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Platí od 1.12.2008      70 stran

**Úvod**  
Na dopravní síti je instalována velká řada detekčních a řídicích zařízení. Aby bylo možné optimalizovat jejich služby a zvýšit jejich užitek, musí být tyto systémy integrovány do větších celků. Tato norma popisuje výsledek pokusů o standardizování spojení mezi dopravními řídicími centry (TICS).

**Užití**  
**Orgány státní správy** připravující projekty zahrnující jakoukoli výměnu dat mezi dopravními centry, podobně jako v příkladech uvedených níže, by měli od dodavatelů vyžadovat specifikaci zpráv dle této normy. Jejich úlohou je zaručit, že dodavatelé skutečně definují zprávy dle této normy a implementují všechny příznaky a parametry zde popsané. Je důležité, aby existenci této normy vedli v patnosti. *Detailnější seznámení vzhledem k technickému charakteru této normy není nutné.*

**Dodavatelé technologie** se musí s touto normou seznámit skutečně detailně. Na základě této normy budou schopni definovat a implementovat zprávy v obecném formátu tak, že budou moci být sdíleny i mezi systémy dodávanými různými dodavateli. Jedná se skutečně o detailní definice zpráv nutné pro implementaci.

Následující dva odstavce uvádí příklady aplikací, pro které je tato norma relevantní.  
V současné době probíhá na území ČR celá řada aktivit týkajících se sběru dopravních dat a

The screenshot shows a web interface with a navigation bar at the top containing 'Fulltext', 'Users', 'Categories', and 'Working groups'. Below it is a secondary menu with 'List of results (ITS standards)', 'Information about standard', 'Extract', 'E-learning', and 'Question to the extract author'. The main content area is titled 'ITS STANDARDS SEARCH' and includes the following information:

Identification      ISO 14827-2

Year/month of source document      2008/00

Year of extract creation      2008

Stage of source document for extract      Approved standard

Date of publication      November 1st, 2008

Classification code      01 8270

Title in Czech      Inteligentní dopravní systémy (ITS) – Datová rozhraní mezi centry dopravních informací a řídicími systémy – Část 2: DATEX–ASN

Title in English      Transport information and control systems – Data interfaces between centres for transport information and control systems – Part 2: DATEX-ASN

Standard implementation in ČSN framework      Implemented by translation

Type of standard      Product standards

Use of a standard in ITS      System design