



# Transport knowledge databases – examples and uses

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# Introduction – need for knowledge databases

- Essential for the sound basis of research endeavour
- Provide a useful and convenient way to access relevant literature and research projects
- Means of avoiding overlap and 'reinventing the wheel'
- Mechanism for sharing and disseminating results of research

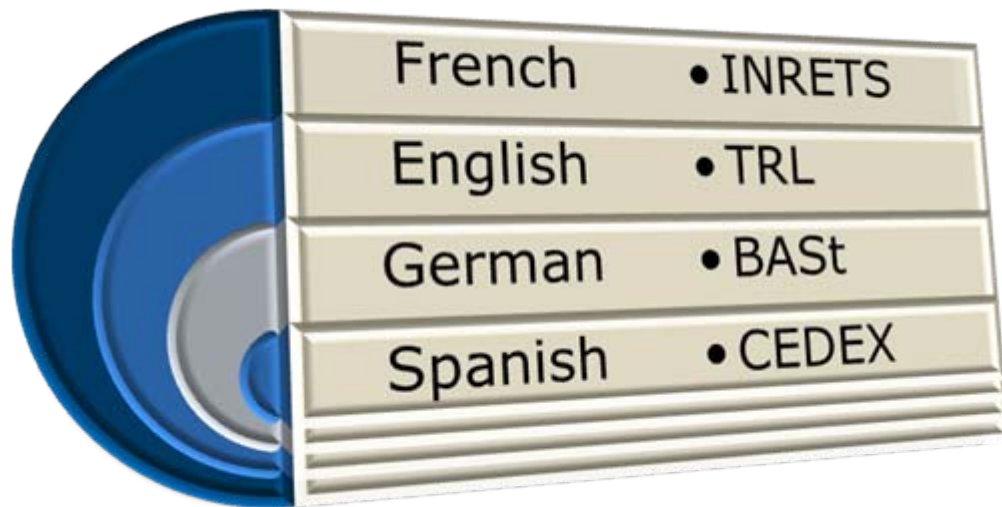
# ITRD

## International Transport Research Documentation

- Co-operative World-wide database of published Information on Transport and Transport Research
- Permanent activity of the joint OECD / International Transport Forum / Joint Transport Research Centre
- Created in 1972 > 400,000 abstracts of publications and on-going research
- >1000 abstracts added every month

# ITRD - How does it work?

- 30 members from respected research organisations in 23 countries world-wide provide abstracts each month
- They choose one of 4 working languages and submit via the appropriate Co-ordinating Centre



**Members select and abstract publications in their preferred language.**



**Send to the relevant Co-ordinating Centre**



**Co-ordinating Centres verify abstracts / key words**



**TRL prepares Monthly Quadrilingual ITRD file**

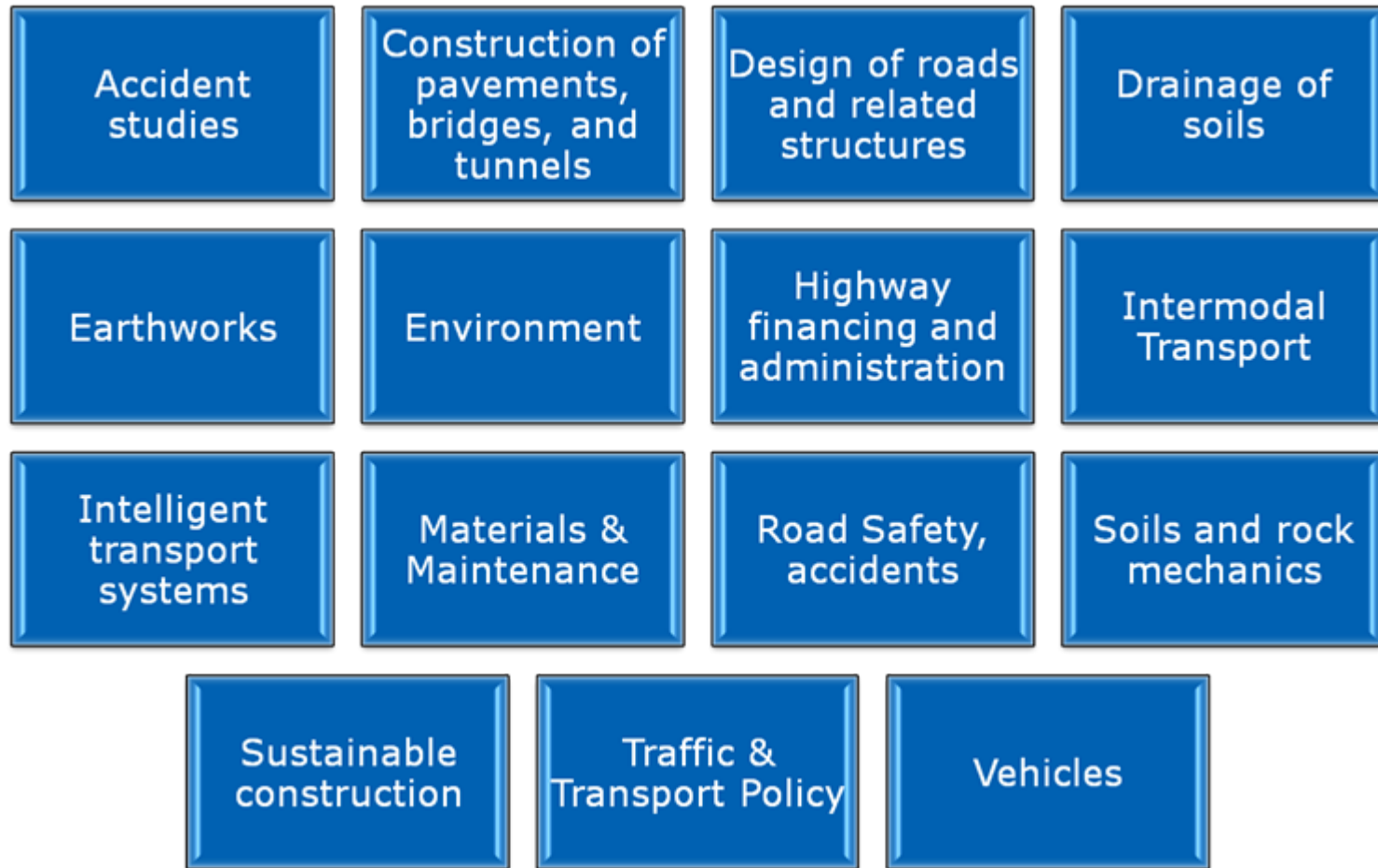


**File distributed to all members**

On-line Hosts (STN & OVID)

Transport Database CD-ROM (OVID)

# ITRD: Subject Coverage



# ITRD: Subject Coverage

Other disciplines when applied to transport issues

Mathematics

Software

Climate  
Change

Psychology

Biology

Economics

Law

Anything  
else!

# ITRD: Sources of information

**Journals**  
(over 500 covered)

**Research in  
Progress**

**Standards  
and  
Specifications**

**Technical  
reports**

**Conference  
proceedings**

**Company  
publications**

**Books**

**Patents**

**Dissertations**

# ITRD: Subject Coverage

Newly developed concepts, materials, etc

New applications / uses of well-known facts

New research on software applications and  
their use

New equipment, and ways to use it

New way of using existing equipment

## ITRD: Excluded Items

Articles of local interest

General news items

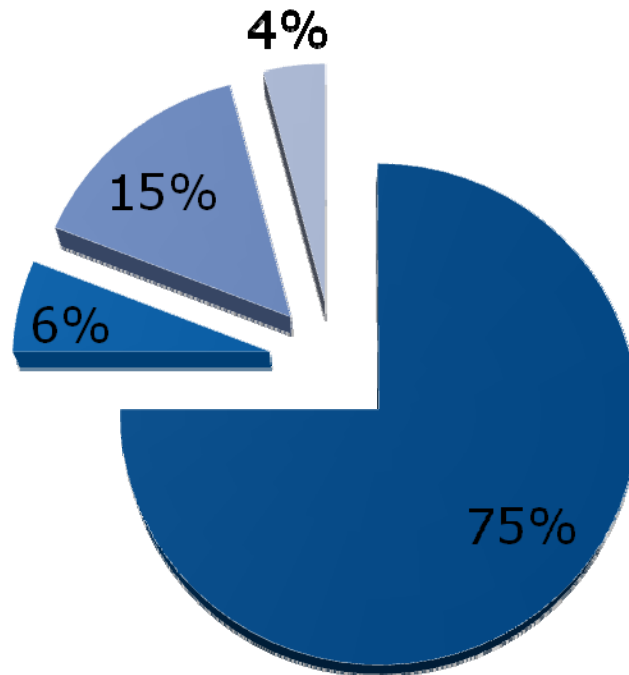
Articles for the general public

Articles published for a second time or summaries of conferences or reports.

# ITRD: Quadrilingual Database

## Content by Language

■ English ■ French ■ German ■ Spanish



# Quadrilingual thesaurus links terms through numeric code

ENGLISH ALPHABETICAL THESAURUS 2005

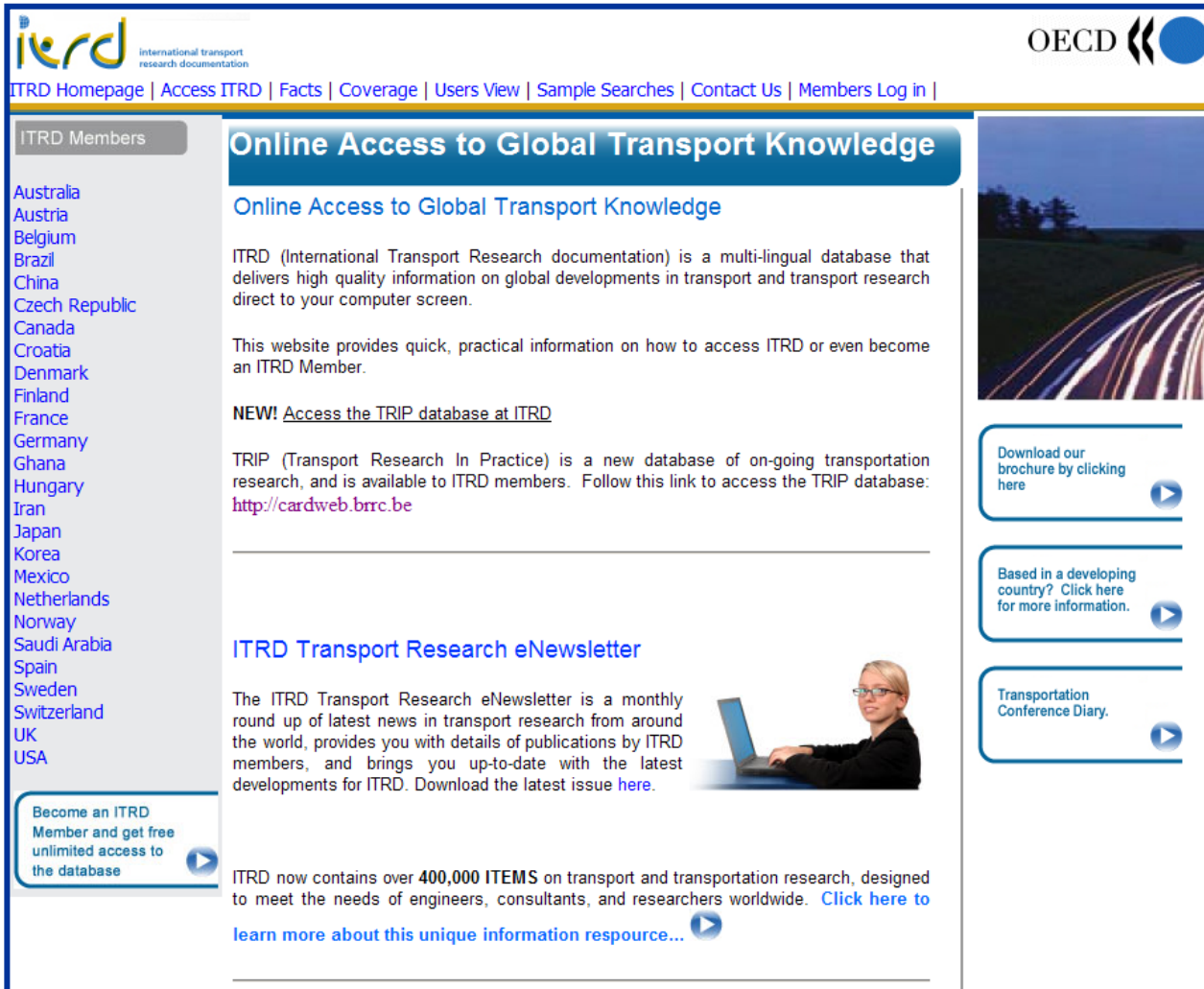
AADT (only since 2004)	0674	TMJA	JDTV	IMD
AASHO ROAD TEST	6278	ESSAI AASHO	AASHO ROAD TEST	ENSAYO AASHO
ABANDONED VEHICLE (only since 1979) (PREVIOUSLY 10 36) (USE FOR VEHICLE LEFT ON ROAD OR ROADSIDE CAUSING HAZARD OR ENVIRONMENTAL POLLUTION)	1514	EPAVE (VEH)	HERRENLOSES FAHRZEUG	VEHICULO ABANDONADO
ABDOMEN	2035	ABDOMEN	UNTERLEIB	ABDOMEN
ABILITY (ROAD USER) = SKILL (ROAD USER)	2205			
ABRASION = WEAR	3868			
ABSORPTION	6758	ABSORPTION	ABSORPTION	ABSORCION
ABUTMENT	3424	CULEE	WIDERLAGER	ESTRIBO (PUENTE)
ACC = ADAPTIVE CRUISE CONTROL	8731			
ACCELERATED = QUICK	9064			
ACCELERATING POLISHING TEST = POLISHING + TEST	3822			
ACCELERATION	6255			
(SEE ALSO QUICK 90 64)	5405	ACCELERATION	BESCHLEUNIGUNG	ACELERACION
ACCELERATOR (CONCRETE)	4726	ACCELERATEUR DE PRISE	ERSTARRUNGSBESCHLEUNIGER	ACELERADOR DE FRAGUADO
ACCELERATOR (VEH)	1363	ACCELERATEUR (VEH)	GASPEDAL	ACELERADOR (VEHICULO)

<b>Accelerator (Concrete)</b>	<b>4726</b>	<b>Accelérateur de Prise</b>	<b>Erstarrungsbeschleuniger</b>	<b>Acelerador de Fraguado</b>
<b>Accelerator (Veh)</b>	<b>1363</b>	<b>Accelérateur (Veh)</b>	<b>Gaspedal</b>	<b>Acelerador (Vehículo)</b>
OF THE CAR	1354			
ACCIDENT	1643	ACCIDENT	UNFALL	ACCIDENTE
ACCIDENT BLACK SPOT	1663	POINT NOIR (ACCID)	UNFALLSCHWERPUNKT	PUNTO NEGRO (ACCIDENTE)
ACCIDENT EXPOSURE = ACCIDENT	1643			

# Accessing the database

Three ways: (links to all via [www.itrd.org](http://www.itrd.org))

- On-Line (STN or Ovid-Wolters-Kluwer)
- CD-ROM
- Via an ITRD member



The screenshot shows the ITRD website homepage. At the top left is the ITRD logo with the text 'international transport research documentation'. At the top right is the OECD logo. Below the logos is a navigation bar with links: 'ITRD Homepage | Access ITRD | Facts | Coverage | Users View | Sample Searches | Contact Us | Members Log in'. The main content area is titled 'Online Access to Global Transport Knowledge'. It features a list of member countries on the left, a central text block about ITRD and TRIP, and a right sidebar with three call-to-action buttons. At the bottom left, there is a button to become an ITRD member. At the bottom right, there is a button to learn more about the information resource.

**ITRD** international transport research documentation

OECD

ITRD Homepage | Access ITRD | Facts | Coverage | Users View | Sample Searches | Contact Us | Members Log in

**ITRD Members**

- Australia
- Austria
- Belgium
- Brazil
- China
- Czech Republic
- Canada
- Croatia
- Denmark
- Finland
- France
- Germany
- Ghana
- Hungary
- Iran
- Japan
- Korea
- Mexico
- Netherlands
- Norway
- Saudi Arabia
- Spain
- Sweden
- Switzerland
- UK
- USA

## Online Access to Global Transport Knowledge

### Online Access to Global Transport Knowledge

ITRD (International Transport Research documentation) is a multi-lingual database that delivers high quality information on global developments in transport and transport research direct to your computer screen.

This website provides quick, practical information on how to access ITRD or even become an ITRD Member.

**NEW!** [Access the TRIP database at ITRD](#)

TRIP (Transport Research In Practice) is a new database of on-going transportation research, and is available to ITRD members. Follow this link to access the TRIP database: <http://cardweb.btrc.be>

### ITRD Transport Research eNewsletter


The ITRD Transport Research eNewsletter is a monthly round up of latest news in transport research from around the world, provides you with details of publications by ITRD members, and brings you up-to-date with the latest developments for ITRD. Download the latest issue [here](#).

ITRD now contains over **400,000 ITEMS** on transport and transportation research, designed to meet the needs of engineers, consultants, and researchers worldwide. [Click here to learn more about this unique information resource...](#)

Download our brochure by clicking here

Based in a developing country? Click here for more information.

Transportation Conference Diary.



# ITRD: Quantity Vs Quality

Search

- TDM is an often used abbreviation for Transport Demand Management

Google

- Searching TDM in Google finds 5.9 million hits - most of the first hits deal with Time Division Multiplexing, Therapeutic Drug Monitoring or Timber Door Manufacturers

ITRD

- TDM in ITRD finds 299 hits **all** of which are transport related and all come from *quality peer-reviewed publications*

# The ECTRI Soft Research Infrastructures Database

ECTRI: the European Conference of Transport Research Institutes  
([www.ectri.org](http://www.ectri.org))

- The purpose and content of the ECTRI Database is to provide information to transport research community:
  - Basic Information of all ECTRI institutes:
  - Contact persons details related to major research activity areas
  - Links to available libraries within the ECTRI institutes
  - Descriptions of datasets
  - Description of ECTRI Research Activity Areas

# Principles

- First generation database
- Free and Open source softwares and tools
- Internal development for the ECTRI community
- Simple database structure, expandable
- Shared effort amongst members

# Database structure - main information



All information items are linked together and can be accessed from everywhere.

# Index of research activity areas

## Index of research activity areas

### Name of research activity area

[- no specific research area -](#)

[Freight Transport & Logistics](#)

[Mobility & Travel Behaviour](#)

[Modelling](#)

[Passenger Transport](#)

[Safety & Security](#)

[Transport & Economics](#)

[Transport & Ergonomics](#)

[Transport & Telematics](#)

[Transport & the Environment](#)

[Transport Infrastructure](#)

[Transport System Management](#)

[Vehicle Technology](#)

# Activity area detailed

Overall	
Name	<b>Freight Transport &amp; Logistics</b>
ECTRI core description	<p>Logistics are a crucial element in the efficiency of the freight transportation system.</p> <p>Research in this area covers the following aspects:</p> <ul style="list-style-type: none"> <li>▪ analyses of institutional and organisational aspects within the transportation sector,</li> <li>▪ development and analyses of systems promoting intermodality,</li> <li>▪ analyses and development of spatial-economic structures,</li> <li>▪ modelling the demand for freight transport,</li> <li>▪ developing and analysing technological improvements and new concepts.</li> </ul>

## Involving institutions

Short name	Full name	Importance
AVV	<a href="#">Adviesdienst Verkeer en Vervoer - Ministerie van Verkeer en Waterstaat</a> Economics: Relationship between economics and transport related to investment in infrastructure that encourages economic development. Shipping: ? Freight transport: Provision of advice, knowledge and information designed to improve the freight transport system. Modelling demand for freight transport. Social forward studies and scenarios: The provision of quantitative and qualitative analyses of the effect of social trends and policy options on the functioning of the transport system.	1
DLR	<a href="#">Deutsches Zentrum für Luft- und Raumfahrt e.V. in der Helmholtz-Gemeinschaft</a>	1
DTF	<a href="#">Danmarks Transportforskning</a>	1
HIT	<a href="#">Ινστιτούτο Μεταφορών Ελλάδας</a>	1

## Activity area detailed (2)

### Contact persons

Surname, first name	Function	Institution
<a href="#">Janssen, Arnwald</a>	Programme Manager Economics, Freight transport	<a href="#">AVV</a>
<a href="#">van der Waard, Jan</a>	Programme manager Social forward studies and scena	<a href="#">AVV</a>
<a href="#">van Ginneken, Pieter</a>	Programme manager Shipping	<a href="#">AVV</a>
<a href="#">Lischke, Andreas</a>	researcher	<a href="#">DLR</a>
<a href="#">Fosgerau, Mogens</a>		<a href="#">DTF</a>
<a href="#">Giannopoulos, George, Prof.</a>	General Director	<a href="#">HIT</a>
<a href="#">Bollo, Daniel</a>		<a href="#">INRETS</a>
<a href="#">Gouernal, Elisabeth, Mrs</a>	Head of Research Unit SPLIT	<a href="#">INRETS</a>
<a href="#">Madre, Jean-Loup</a>	Head of Research Unit DEST	<a href="#">INRETS</a>
<a href="#">Eidhammer, Olav</a>		<a href="#">TØI</a>
<a href="#">Jansen, G.R.M., M.Sc.</a>		<a href="#">TNO</a>
<a href="#">Vallint, J</a>		<a href="#">TRL</a>
<a href="#">Monzón, Andrés</a>		<a href="#">UPM</a>
<a href="#">Eriksson, Jan</a>		<a href="#">VTI</a>
<a href="#">Granqvist, Jani</a>		<a href="#">VTI</a>

### Datasets

Name of dataset	Subject	Institution
<a href="#">Annual Report. Transport and communications in Spain in figures</a>	Main national statistics on Transport	<a href="#">UPM</a>
<a href="#">Freight transport companies</a>	In-depth survey of French freight transport companies	<a href="#">INRETS</a>
<a href="#">LIPASTO</a>	Traffic emissions	<a href="#">VTI</a>

# Benefits of database use

- Maximizing the efficiency of soft research infrastructure within the ECTRI Community
  - Sharing expertise when appropriate
    - Broad range of soft research infrastructures available
    - Detail and specificity
  - Establishing cooperation among facility owners and users
- Easy access to information
  - Datasets and libraries
    - Scope and Accessibility
    - Structure and contact persons
- Development of an instrument to support cooperation
  - Common methodologies
  - Community of practices

## Concluding remarks

- Common purpose of the databases presented is to collect and disseminate information of interest to those involved in transport research
- Both examples important, even essential, tools to the transport researcher
- Both help to create a community of research and cooperation between researchers to facilitate advances in knowledge



**Do You  
Have Any  
Questions?**