



INTERNATIONAL UNION
OF RAILWAYS

unity, solidarity, universality

Statistics at the International Union of Railways

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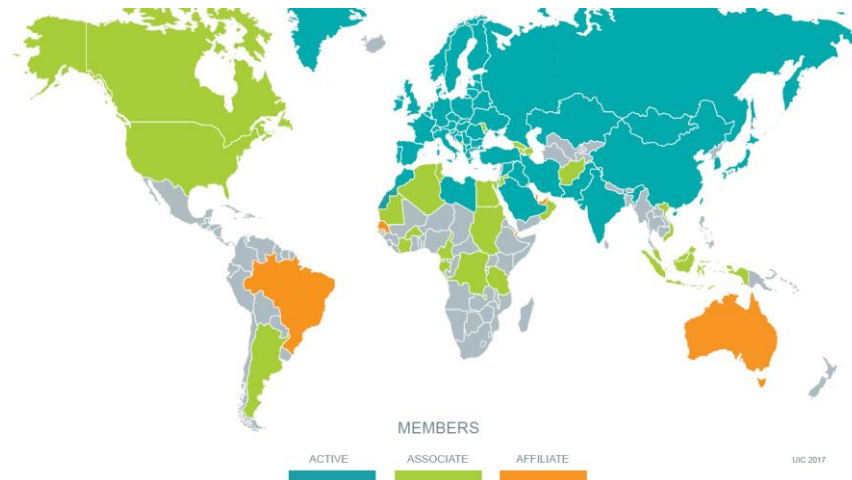
UIC - Presentation

The UIC (Union Internationale des Chemins de fer) is a worldwide association currently has about **200 members**.

>>> **145** are railway companies or associations of railway companies

- Infrastructure managers
- Freight operators
- Passenger operators

>>> Other members are administrations, research institutes...



UIC – Statistics Group

~ **100 railway companies** participate to the statistics group

At least one statistics correspondent per company



Steering committee :

Chairman: Roman Sterba CD (CZ)

16 collaborators from 9 railway companies

+ CER (Communauté Européenne du Rail)

Meeting twice a year

Plenary meeting in December open to all our statistics correspondents.

4 online questionnaires

3 languages: English\French\German



International Railways Statistics data collection tool

User settings ->

- Monthly data → Monthly data collection tool ->
- KPIs – provisional annual data → KPI annual data collection tool ->
- Final annual data → STI annual data collection tool ->
STI Synthesis ->
- 5-yearly data → Five Yearly Tables data collection tool ->

<- Logout

Data collection

Monthly data



Monthly data collection tool - INTERNE

Traffic data

Passenger Freight Trains

8 variables collected

Railway Undertaking

Passenger Traffic

- Passenger carried
- Passenger-kilometres

Wagon load freight Traffic / Global

- Tonnes carried
- Tonne-kilometres

Wagon load freight Traffic / Traffic international

- Tonnes carried
- Tonne-kilometres

Infrastructure manager

- Passenger trains
- Freight trains

Select a company :

CD

Select year :

2017

Railway undertaking - Passenger Traffic

Passengers - Month X 1 000

Legend

Header Data in Production database

Header Data in Application

Step 1 : data entry

Months	2015	2016	2017	2017 ?	Comment
01 - January	13991	14272	14371		
02 - February	12739	12915			
03 - March	14354	14224			
04 - April	14595	14238			
05 - May	14728	15183			
06 - June	15060	14784			
07 - July	13253	13477			
08 - August	13415	14669			
09 - September	14876	15199			
10 - October	14654	14489			
11 - November	14422	14370			
12 - December	13629	13671			
Total	169716	171491	14371	0	

Data collection

KPIs - provisional data

Network infrastructure

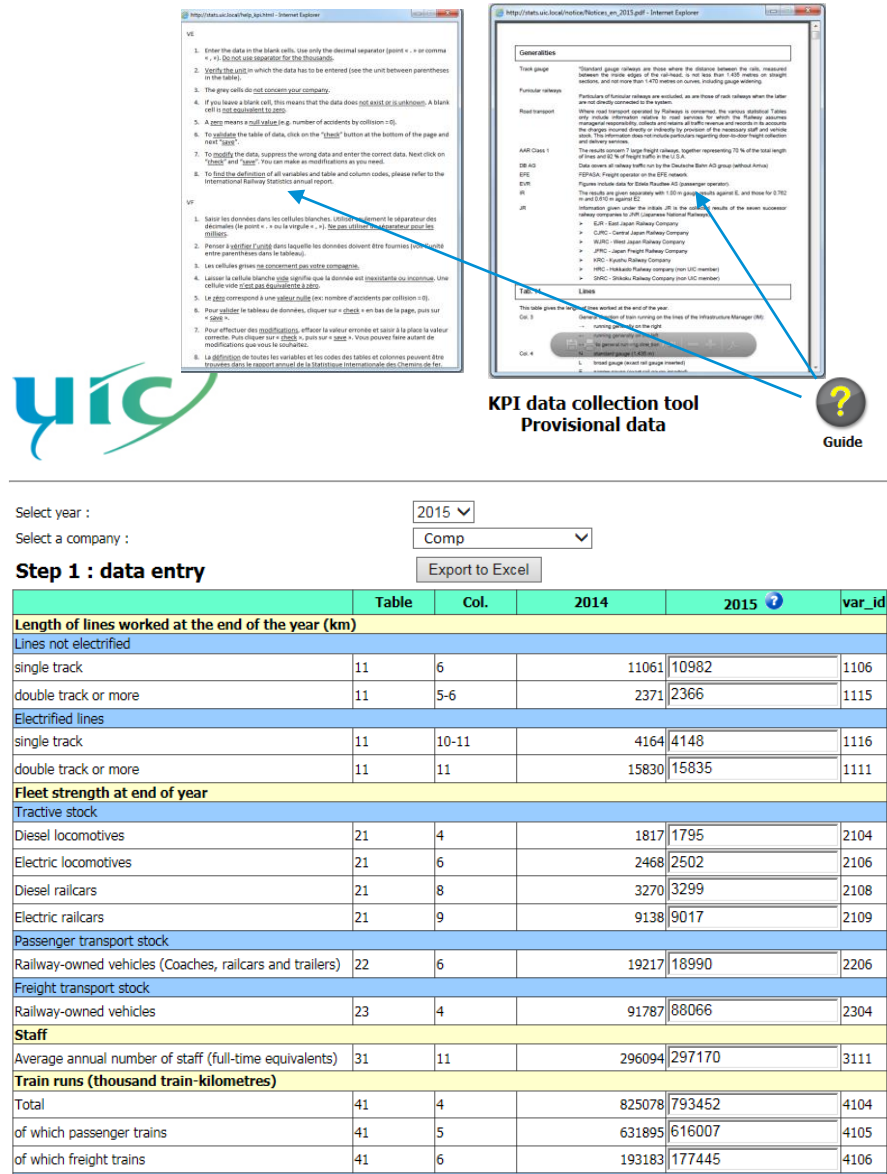
Rolling stock

Staff

Traffic (passenger, freight and trains)

Turnover

Total of 40 variables collected



The screenshot displays the UIC KPI data collection tool interface. On the left, a list of instructions in English and French guides the user through data entry. On the right, a 'Generatives' form is shown with fields for 'Track gauge', 'Rolling transport', and 'Passenger transport'. Below the form, a table titled 'Step 1 : data entry' is visible, showing data for 2014 and 2015. The table includes columns for 'Table', 'Col.', '2014', '2015', and 'var_id'. The data is organized into sections: 'Length of lines worked at the end of the year (km)', 'Fleet strength at end of year', 'Passenger transport stock', 'Freight transport stock', 'Staff', and 'Train runs (thousand train-kilometres)'.

Instructions (English):

- Enter the data in the blank cells. Use only the decimal separator (point « . » or comma « , »). Do not use separator for thousands in the values.
- The grey cells do not concern your company.
- If you leave a blank cell, this means that the data does not exist or is unknown. A blank cell is not considered as zero.
- A zero means a null value (e.g. number of accidents by collision = 0).
- To update the table of data, click on the "Update" button at the bottom of the page and wait "Save".
- To modify the data, suppress the wrong data and enter the correct data. Next click on "Update" and "Save". You can make as many modifications as you want.
- To find the definitions of all variables and table and column codes, please refer to the International Railway Statistics annual report.

Instructions (French):

- Saisir les données dans les cellules blanches. Utilisez uniquement le séparateur des décimales (le point « . » ou la virgule « , »). Ne pas utiliser de séparateur pour les milliers.
- Les cellules grises ne concernent pas votre compagnie.
- Si vous laissez une cellule blanche, cela signifie que la donnée n'existe pas ou est inconnue. Une cellule vide n'est pas considérée comme 0.
- Le zéro signifie une valeur nulle (e.g. nombre d'accidents par collision = 0).
- Pour mettre à jour le tableau de données, cliquer sur « Mettre à jour » en bas de la page, puis sur « Sauve ».
- Pour effectuer des modifications, effacer la valeur erronée et saisir la place la valeur correcte. Puis cliquer sur « Mettre à jour » puis sur « Sauve ». Vous pouvez faire autant de modifications que vous le souhaitez.
- La définition de toutes les variables et les codes des tables et colonnes peuvent être trouvées dans le rapport annuel des Statistiques Internationales des Chemins de fer.

Generatives Form:

Track gauge: (Standard gauge) railways are those where the distance between the rails measured between the flange edges of the wheelset, is not more than 1 435 mm (or 4 feet 8 1/2 inches) and not more than 1 525 mm (or 5 feet 1 1/4 inches) in the case of special gauge railways.

Rolling transport: Particulars of individual railways are included, as are those of each railway when the latter are not directly connected to the system. When used transport services by railways to convert, the various statistical Tables only include information relative to rail transport, not when the Railway authority management resources the vehicles or directly stations or the management of the vehicles.

Passenger transport: The results concern 7 large freight railways, together representing 70 % of the total length of lines and 85 % of freight traffic in the U.E. Data covers all railway traffic run by the Deutsche Bahn AG group (national railway). It includes freight transport on the RFE network. Figures include data for Deutsche Bahn AG (passenger operators). This includes passenger transport with 1 500 in passenger cars, and those for 7 000 in and 1 500 in passenger cars. The results of the seven passenger railway companies in the U.E. are:

- DB - Deutsche Bahn AG
- SNCF - French National Railway Company
- CP - Canadian National Railway Company
- RF - Russian Railways
- NR - Nederlandse Spoorwegen
- IC - Italian Railways
- SR - Spanish Railways
- OS - Österreichische Bundesbahnen
- ÖBB - Austrian Federal Railways
- ČD - Czech Railways
- PKP - Polish Railways
- RM - Romanian Railways
- UIC - International Union of Railways

Table: This table gives the length of lines worked at the end of the year.

Col. 1: ... meaning passenger (km).

Col. 2: ... meaning freight (km).

Col. 3: ... meaning total (km).

Col. 4: ... meaning total (km).

Col. 5: ... meaning total (km).

Col. 6: ... meaning total (km).

Col. 7: ... meaning total (km).

Col. 8: ... meaning total (km).

Col. 9: ... meaning total (km).

Col. 10: ... meaning total (km).

Col. 11: ... meaning total (km).

Col. 12: ... meaning total (km).

Col. 13: ... meaning total (km).

Col. 14: ... meaning total (km).

Col. 15: ... meaning total (km).

Col. 16: ... meaning total (km).

Col. 17: ... meaning total (km).

Col. 18: ... meaning total (km).

Col. 19: ... meaning total (km).

Col. 20: ... meaning total (km).

Col. 21: ... meaning total (km).

Col. 22: ... meaning total (km).

Col. 23: ... meaning total (km).

Col. 24: ... meaning total (km).

Col. 25: ... meaning total (km).

Col. 26: ... meaning total (km).

Col. 27: ... meaning total (km).

Col. 28: ... meaning total (km).

Col. 29: ... meaning total (km).

Col. 30: ... meaning total (km).

Col. 31: ... meaning total (km).

Col. 32: ... meaning total (km).

Col. 33: ... meaning total (km).

Col. 34: ... meaning total (km).

Col. 35: ... meaning total (km).

Col. 36: ... meaning total (km).

Col. 37: ... meaning total (km).

Col. 38: ... meaning total (km).

Col. 39: ... meaning total (km).

Col. 40: ... meaning total (km).

Step 1 : data entry

Select year : 2015

Select a company : Comp

Export to Excel

Table	Col.	2014	2015	var_id
Length of lines worked at the end of the year (km)				
Lines not electrified				
single track	11	6	11061	1106
double track or more	11	5-6	2371	1115
Electrified lines				
single track	11	10-11	4164	1116
double track or more	11	11	15830	1111
Fleet strength at end of year				
Tractive stock				
Diesel locomotives	21	4	1817	2104
Electric locomotives	21	6	2468	2106
Diesel railcars	21	8	3270	2108
Electric railcars	21	9	9138	2109
Passenger transport stock				
Railway-owned vehicles (Coaches, railcars and trailers)	22	6	19217	2206
Freight transport stock				
Railway-owned vehicles	23	4	91787	2304
Staff				
Average annual number of staff (full-time equivalents)	31	11	296094	3111
Train runs (thousand train-kilometres)				
Total	41	4	825078	4104
of which passenger trains	41	5	631895	4105
of which freight trains	41	6	193183	4106

Data collection

■ Annual data

Collected from July to September

37 tables – 559 variables



Data collection tool



Data type :

Select year :

Select a company :

Select a table :

Step 1 : data entry

		2014	2015 ?	Calc	Comment	var_id	Visibility	Indicators financial	Indicators traffic, staff...
12 - Train movements on the network of the infrastructure manager									
thousand train-kilometres									
All modes of traction (including steam)									
Total (Col.4)	E	9614	9366	<input checked="" type="checkbox"/>	⊞	1204	Public		*
	L	144358	142043	<input checked="" type="checkbox"/>	⊞	1204	Public		*
	N	47023	46165	<input checked="" type="checkbox"/>	⊞	1204	Public		*
	_TOTAL	200995	197574	<input checked="" type="checkbox"/>	⊞	1204	Public		*
of which passenger trains (Col.5)	E	8581	8437		⊞	1205	Public		
	L	118154	116062		⊞	1205	Public		
	N	46887	46019		⊞	1205	Public		
	_TOTAL	173622	170518	<input checked="" type="checkbox"/>	⊞	1205	Public		

Network – Transport stock – Staff – Traffic – Punctuality –
Financial Results – Energy – Accidents – High Speed

Data collection

■ 5 yearly data 2015

200 variables collected

CATEGORY	Tables
NETWORK	Tracks and Installations
TRANSPORT STOCK	Purpose-built wagons (for standard or broad gauge lines)
	Age of powered stock
	Age of passenger transport stock
	Age of freight transport stock



Data collection tool



Select a year :

2015 ▼

Select a company :

ADIF ▼

Select a table :

11A Tracks and installations ▼

Step 1 : data entry

Export to Excel

		2010	2015	Calc	Comment	Visibility
11A Tracks and installations						
Track length at end of year (in km)						
Non electrified						
Total - Not electrified	E	0	807			Public ▼
	L	5385	4880			Public ▼
	N	0	0			Public ▼
	_TOTAL	5385	5687	✓		Public ▼
of which running tracks - Not electrified						
	E		807			Public ▼
	L	5385	4880			Public ▼
	N	0	0			Public ▼
	_TOTAL	5385	5687	✓		Public ▼
Electrified						
Total - Electrified	E	18	483			Public ▼
	L	9300	10076			Public ▼

Data verification

Control: Absolute difference with the previous year above 10% = red signal

Data type :

Production ▼

Select year :

2015 ▼

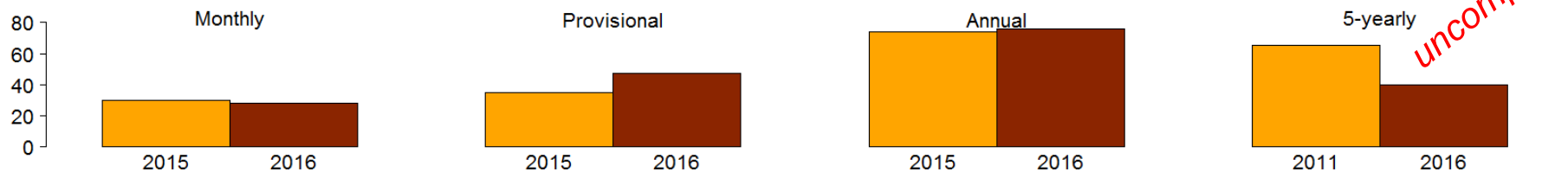
Step 2 : Control data

		2014	2015 ?	Calc	Control	var_id	Visibility	Indicators financial	Indicators traffic, staff...
71 - Balance sheet									
in millions National Currency									
WITH 3 DIGITS AFTER THE COMMA									
ASSETS									
Fixed assets									
Intangible assets (Col.3)		4195	3762		-10,32%	7103	Public ▼		
Tangible assets									
Net balance sheet value									
Land and buildings (Col.4)		17691	17269		-2,39%	7104	Public ▼	*	
Plant, machinery, equipment and furniture (Col.5)		7401	7095		-4,13%	7105	Public ▼	*	
Transport stock (Col.6)		11046	11111		0,59%	7106	Public ▼	*	
Advance payments and fixed assets in construction (Col.7)		2884	3584		24,27%	7107	Public ▼	*	

Level of participation - 4 data collections

companies

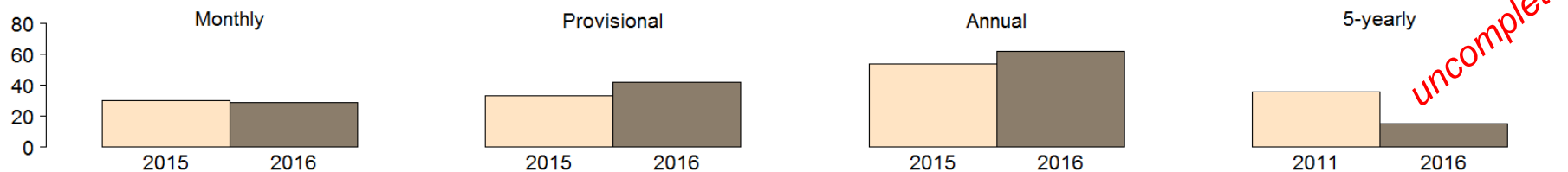
Infrastructure Managers



Passenger Operators



Freight Operators



Data Dissemination

Online consultation for UIC members

Quarterly and annual traffic data

From 2012 to 2017

Can be downloaded

Railway undertaking - Passenger Traffic

Pkm - Month X 1 000 000

Region	Country	Company	2015	2016	M	%
EU	AT	WB	186	190	3	2,15
	BE	SNCF/NMBS	2666	2437	3	-8,58
	BG	BDZ PP	344,341	327,33	3	-4,94
	CZ	CD	1601	1675	3	4,62
	DE	DB AG	18715,24	18969,45	3	1,35
	DK	DSB	1456	1441	3	-1,03
	ES	FGC	211,79	219,04	3	3,42
	ES	RENFE	5582	5868	3	5,12
	FI	VR	930	932,9	3	0,31
	FR	SNCF MOBILITES	20042,317515	20122,387967	3	0,39
	GB	ATOC	5104,955163	5108,095772	1	0,06
	HR	HZ PASSENGER	215,4	218,7	3	1,53
	HU	GYSEV/RÖEE	76	76	3	0
	HU	MAV	1220	1206	3	-1,14
	IE	CIE	453	459	3	1,32



Railway Undertaking

Passenger Traffic

- Passenger carried
- Passenger-kilometres

Wagon load freight Traffic / Global

- Tonnes carried
- Tonne-kilometres

Wagon load freight Traffic / Traffic international

- Tonnes carried
- Tonne-kilometres

Infrastructure manager

- Passenger trains
- Freight trains

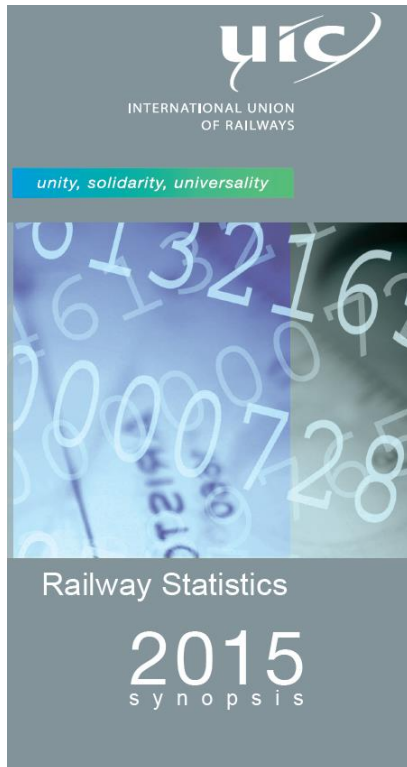
Full year
Quarter 1
Quarter 2
Quarter 3

View print

Export to Excel

Publication

Railway Statistics – Synopsis Provisional data



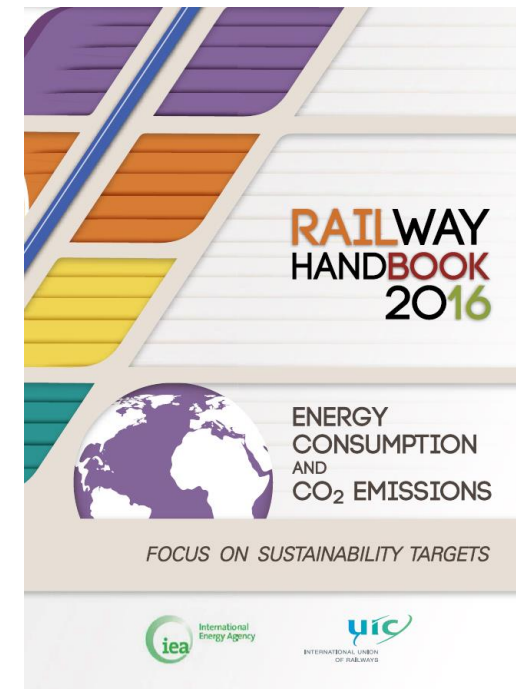
<http://www.uic.org/>

UIC Safety Report



Railway Handbook: Energy Consumption and CO2 emissions.

*In collaboration with the
International Energy Agency*



Restricted to UIC Members

International Railway Statistics

Statistique Internationale des Chemins de fer

Internationale Eisenbahnstatistik

International Railway Statistics

2015

Statistique Internationale des Chemins de fer

Internationale Eisenbahnstatistik

International Railway Statistics

Annexe \ Anhang \ Appendix

Tableaux Quinquénaux
Fünffährliche Tafeln
Five Yearly Tables

2015



unity, solidarity, universality

11 - Lines Strecken Lignes															
2015															
Country Code	Infrastructure Manager	Rail gauge	5	6	7	8	9	10	11	12	13	14			
			Length of lines worked at the end of the year										Track length at the end of the year		
			Lines not electrified		Catenary supplied		Supplied by direct-current contact rail		Total	double track or more	Total length of lines col. 5+10	Total	of which electrified		
			Total	single track	AC current	DC current	col. 7 to 9								
			in kilometres												
Ländercode	Infrastrukturbetreiber	Spurweite	5	6	7	8	9	10	11	12	13	14			
			Streckenlänge am Jahresende										Gleislänge am Jahresende		
			Nicht elektrifizierte Strecken		Elektrifizierte Strecken								Betriebslänge	Summe	darunter elektrifiziert
			Fahrlösung				Strom- schiene mit Gleichstrom		Summe	zwei- und mehrgleisig	Sp. 5+10				
			Summe	eingleisig	Wechselstrom	Gleichstrom			Sp. 7 bis 9		Sp. 5+10				
in Kilometer															
Code Pays	Gestaltung d'Infrastructure	Ecartement des rails	5	6	7	8	9	10	11	12	13	14			
			Longueur des lignes exploitées à la fin de l'année										Longueur des voies à la fin de l'année		
			Lignes non électrifiées		Lignes électrifiées						Longueur totale des lignes	Total	dont électrifiées		
			Alimentées par caténaire		Alimentées par rail de contact en courant continu		Total	à double voie et plus							
			Total	à voie unique	courant alternatif	courant continu			col. 7 à 9		col. 5+10				
en kilomètres															
Var ID			1105	1106	1107	1108	1109	1110	1111	1112	1113	1114			
EU / UE															
AT	GKB	2015	N	91	91						91	91			
			TOTAL	91	91			0			91	91			
	ÖBB	2015	N	1 329	1 329	3 517		3 517	2 087	4 846	9 646	8 066			
			TOTAL	1 329	1 329	3 517		3 517	2 087	4 846	9 646	8 066			
BE	INFRABEL	2015	N	125	125	0	0	0	0	0	125	138	0		
BG	NRIC	2015	L	0	0	0	0	0	0	0	0	15	0		
			N	1 035	1 035	2 859	0	2 859	0	3 894	6 321	4 711			

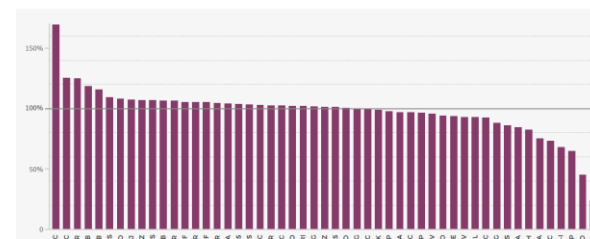


Financial indicators

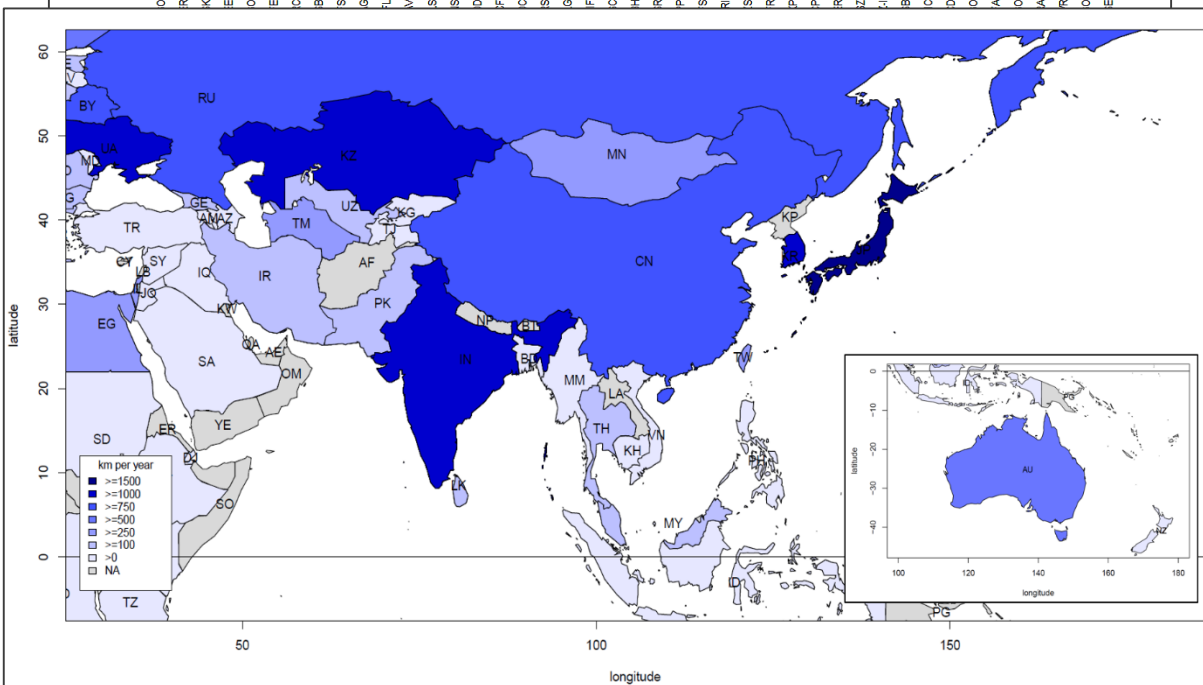
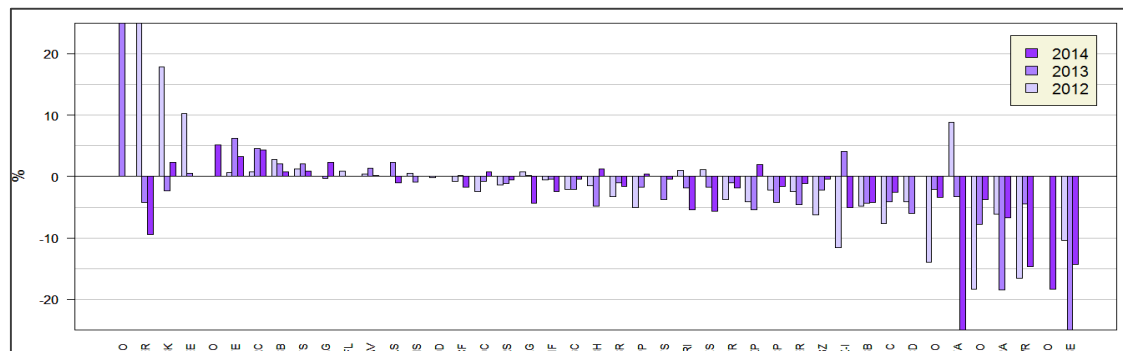
3. Viability Ratio (%)

This is the quotient of total operating income to total operating expenses. If this ratio is higher than 1 (or 100%), the operation was profitable during the financial year.

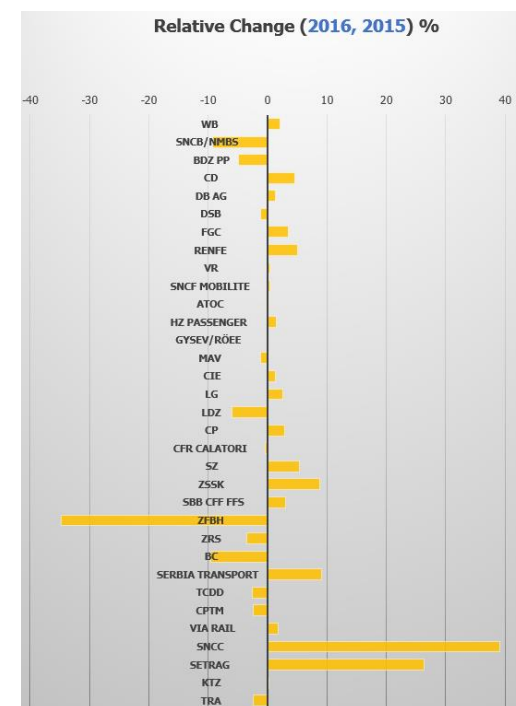
$$\text{Viability} = \frac{\text{Total Operating Income}}{\text{Total Operating Expenses}} = \frac{72.22}{77.13}$$



Railway activity indicators and maps



Quarterly report recent trends - traffic



Our projects

- Modifications of the data collection – Passenger and Freight traffic
- Online Consultation – UIC members and Public



■ ■ ■ **Thanks for your attention!**

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