



INTERNATIONAL UNION  
OF RAILWAYS

*unity, solidarity, universality*

# Statistics at the International Union of Railways

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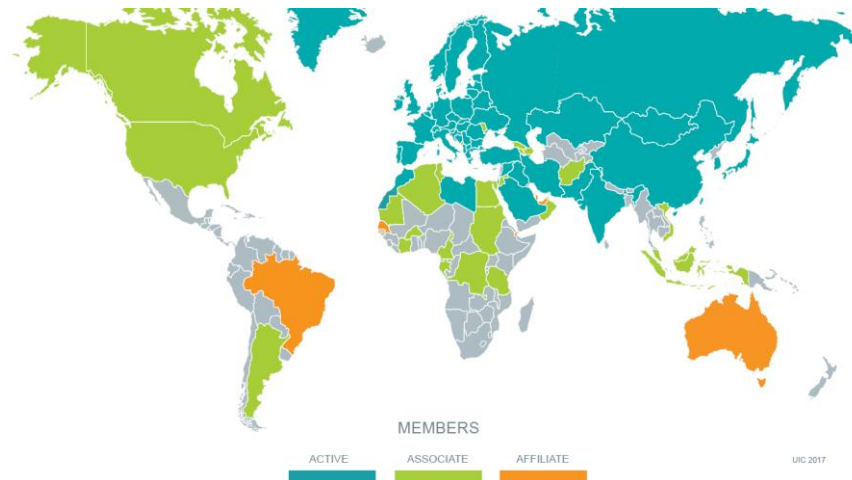
# UIC - Presentation

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...



~ **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

## 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			
<b>Total</b>	<b>169716</b>	<b>171491</b>	<b>14371</b>	<b>0</b>	

# Data collection

## KPIs - provisional data

Network infrastructure

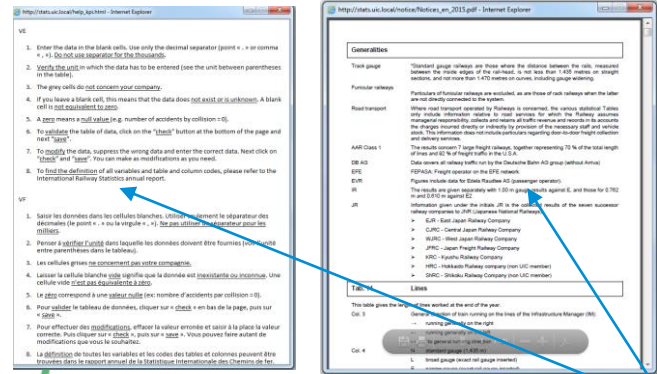
Rolling stock

Staff

Traffic (passenger, freight and trains)

Turnover

Total of 40 variables collected



KPI data collection tool  
Provisional data



Select year :

Select a company :

### Step 1 : data entry

	Table	Col.	2014	2015	var_id
<b>Length of lines worked at the end of the year (km)</b>					
<b>Lines not electrified</b>					
single track	11	6	11061	10982	1106
double track or more	11	5-6	2371	2366	1115
<b>Electrified lines</b>					
single track	11	10-11	4164	4148	1116
double track or more	11	11	15830	15835	1111
<b>Fleet strength at end of year</b>					
<b>Tractive stock</b>					
Diesel locomotives	21	4	1817	1795	2104
Electric locomotives	21	6	2468	2502	2106
Diesel railcars	21	8	3270	3299	2108
Electric railcars	21	9	9138	9017	2109
<b>Passenger transport stock</b>					
Railway-owned vehicles (Coaches, railcars and trailers)	22	6	19217	18990	2206
<b>Freight transport stock</b>					
Railway-owned vehicles	23	4	91787	88066	2304
<b>Staff</b>					
Average annual number of staff (full-time equivalents)	31	11	296094	297170	3111
<b>Train runs (thousand train-kilometres)</b>					
Total	41	4	825078	793452	4104
of which passenger trains	41	5	631895	616007	4105
of which freight trains	41	6	193183	177445	4106



# Data collection

- Annual data



Data collection tool



Collected from July to September

37 tables – 559 variables

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 :  
Select a company :

2015

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	<input checked="" type="checkbox"/>		Public
of which running tracks - Not electrified						
of which running tracks - Not electrified	E	0	807			Public
	L	5385	4880			Public
	N	0	0			Public
	_TOTAL	5385	5687	<input checked="" type="checkbox"/>		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

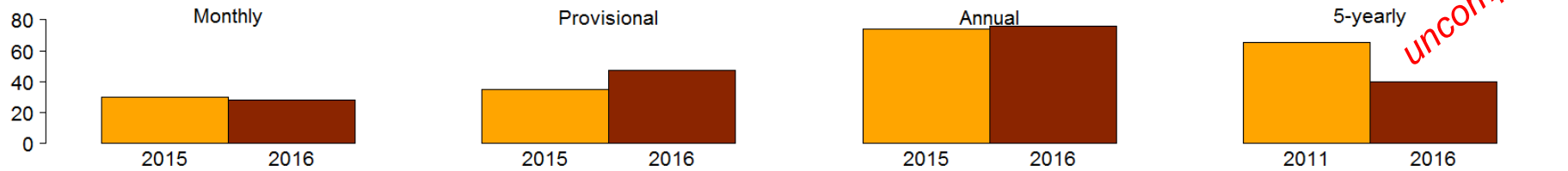
## Step 2 : Control data

	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	*	

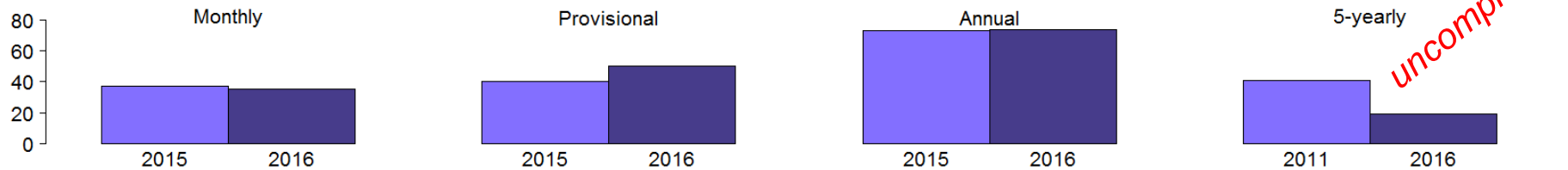
## Level of participation - 4 data collections

### # companies

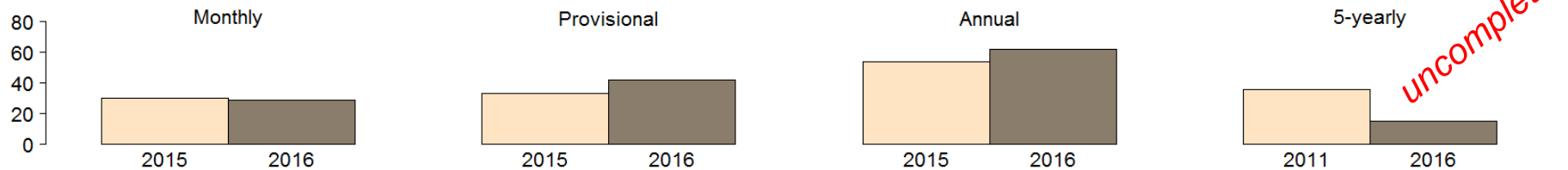
#### Infrastructure Managers



#### 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

- 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

### 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	SNCB/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	

Full year
Quarter 1
Quarter 2
Quarter 3

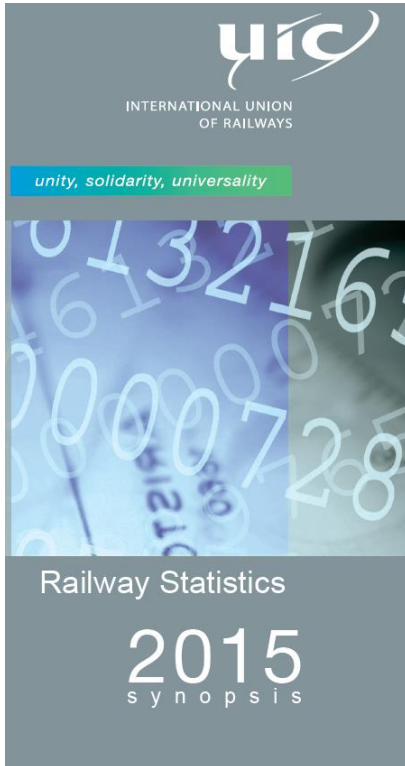
View print

Export to Excel



# Publication

## Railway Statistics – Synopsis Provisional data



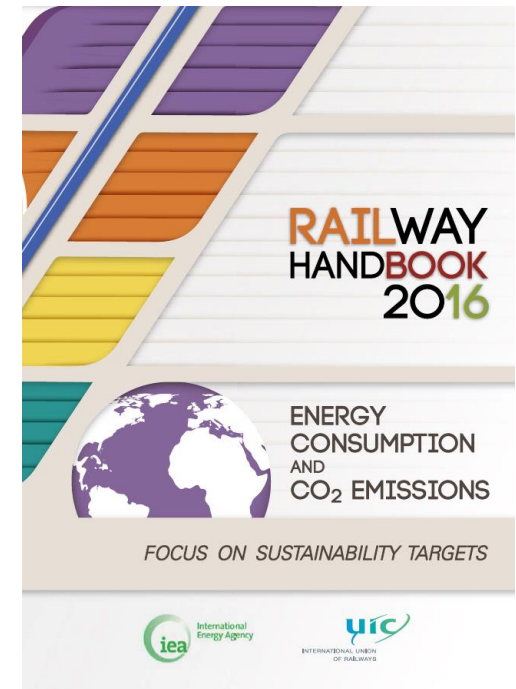
<http://www.uic.org/>

## 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  
 Fünfjährige Tafeln  
 Five Yearly Tables

2015



unity, solidarity, universality

11 - Lines Strecken Lignes														
2015														
Country Code	Infrastructure Manager	Rail gauge	Length of lines worked at the end of the year										Track length at the end of the year	
			Lines not electrified			Electrified lines				Total length of lines col. 5+10			Total	of which electrified
			single track	AC current	DC current	Supplied by direct-current contact rail	Total col. 7 to 9	double track or more						
in kilometres														
Ländercode	Infrastrukturbetreiber	Spurweite	Streckenlänge am Jahresende										Gleislänge am Jahresende	
			Nicht elektrifizierte Strecken			Elektrifizierte Strecken				Betriebslänge Sp. 5+10			Summe	darunter elektrifiziert
			Summe	einleisig	Wechselstrom	Gleichstrom	Strom-schiene mit Gleichstrom	Summe Sp. 7 bis 9	zwei- und mehrgleisig					
in Kilometer														
Code Pays	Gestionnaire d'infrastructure	Ecartement des rails	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
			Total	à voie unique	courant alternatif	courant continu	Alimentées par caténaire	Alimentées par rail de contact en courant continu	Total col. 7 à 9	à double voie et plus				
en kilomètres														
Var ID			1105	1106	1107	1108	1109	1110	1111	1112	1113	1114		
EU / UE	TOTAL		91	91			0				91	91		
AT	GKB	2015	N	91	91			0			91	91		
			TOTAL	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	TOTAL							3 607				
BG	NRIC	2015	E	125	125	0	0	0	0	125	138	0		
			L	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		

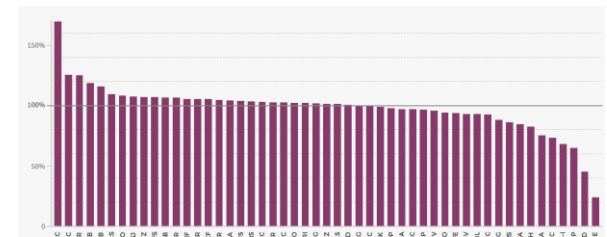


## Financial indicators

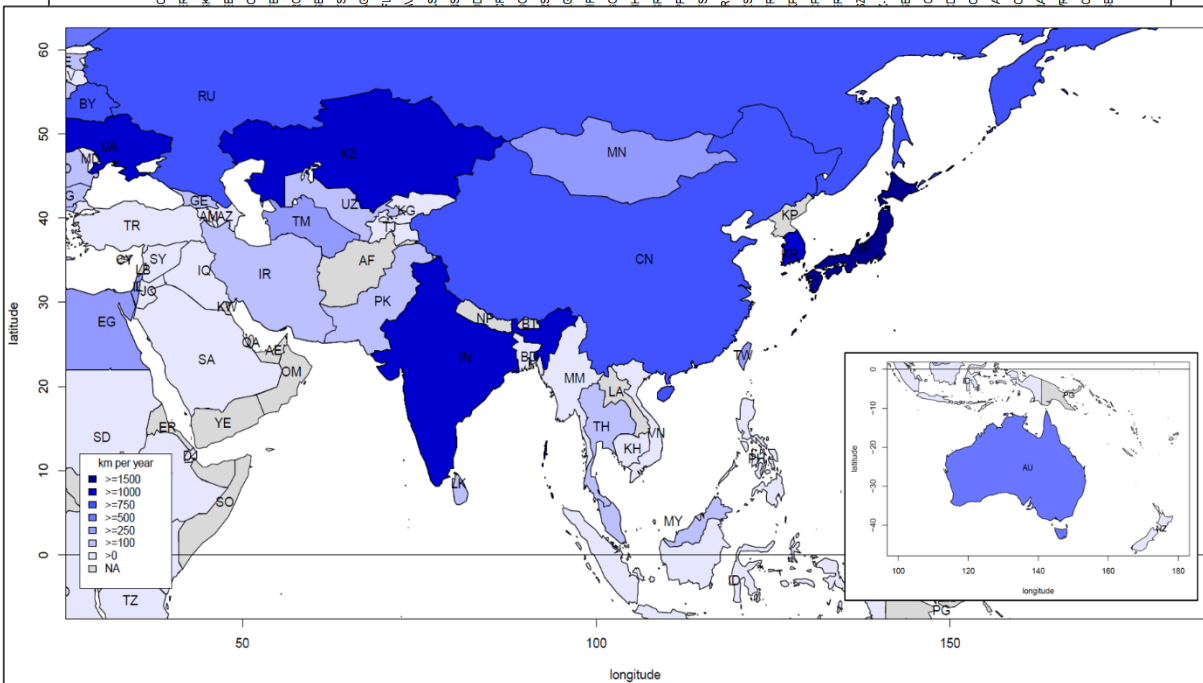
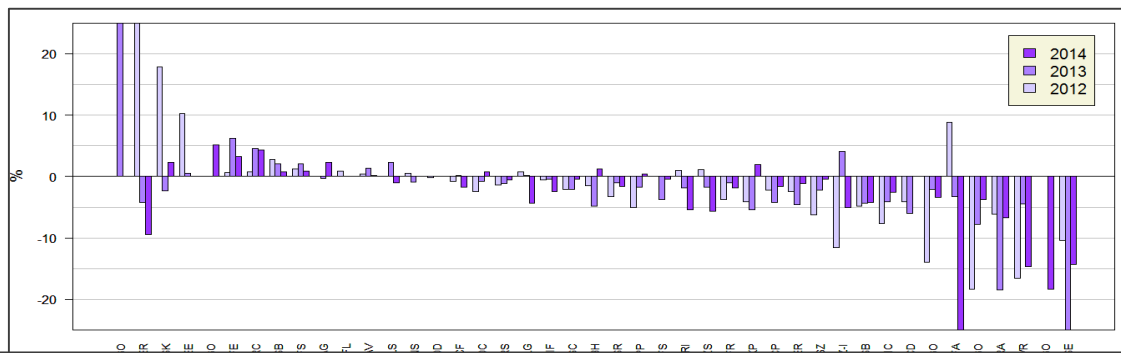
### 3. Viability Ratio (%)

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.

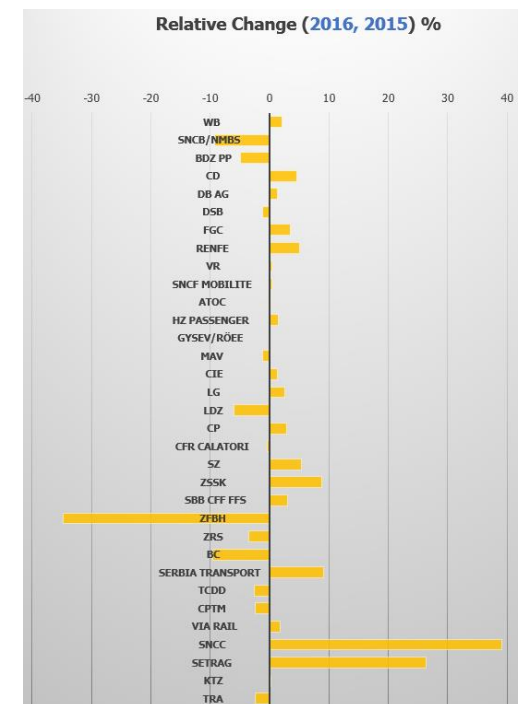
$$\text{Viability} = \frac{\text{Total Operating Income}}{\text{Total Operating Expenses}} = \frac{72.9}{77.1}$$



## 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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