

Producing organisation: INSEE

- [Read the “Informations Rapides” related to this indicator.](#)

Warning

Past indices have been stopped, but, as for any rebasing, INSEE systematically proposes a “corresponding series” in front of each “stopped series”, with following rules:

- Before rebasing, i.e. until September 2014 included, the “stopped series” is directly accessible and is authoritative;
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Introduction

The civil engineering (TP) indices are production cost indices of different activities in the construction sector: division [42 – Constructions and construction works for civil engineering](#) and the first branches of division [43 – Specialised construction works](#). These indices are mainly used for contract escalation. From 1975 to 2013, these indices were published and calculated by the [Ministry of Ecology, Sustainable Development and Energy](#). In 2014, these tasks were transferred to INSEE, temporarily keeping the same general methodology, weightings and reference year. In the same way as for all short-term indicators produced by INSEE, a change of base - which updates all methodological aspects - takes place every 5 years. Thus, from January 2015 onwards, the civil engineering indices are published in base year 2010, with indices of October 2014 as first definitive indices available in base 2010 only. In order to use the new indices (in base 2010) in existing contracts that make reference to the old indices, which were stopped in September 2014, users can refer to the correspondance table (Correspondance entre les nouveaux et les anciens index TP - pdf) which contains connecting coefficients for each index.

From the release of the indices for February 2017, on 12 May 2017, INSEE publishes a new index within civil engineering indices, TP12d “Fiber optic networks”

Goals

These indices allow businesses, local authorities and public organisations to escalate contracts.

Businesses and local authorities can use these official indices for construction work bids, by selecting the activity that is closest to the subject of their bid. These “indices” consist of parametric formulae representing changes in costs for different inputs, as recommended in [the guide](#) (pdf file) *Le prix dans les marchés publics* (“Prices in public procurement”) published by the legal department of the Ministry of Economy and Finances in April 2013 (version 1.1). However, other better adapted parametric formulae are also permissible, such as using the “miscellaneous costs” and “transport” headings published under “various indices in the construction industry”.

Legal basis

Decree N° 2014-114 of February 7, 2014 and the [circular of May 16, 2014 relative to building indices \(BT\), civil engineering indices \(TP\) and various construction indices](#) (pdf file) transferred the responsibility of these indices from the Ministry of Ecology, Sustainable Development and

Energy to INSEE.

Scope and list of TP indices

Even though the TP indices were not originally coordinated with the [NAF 2008](#), they are calculated by branches of the divisions 42 and 43, and their articulation with the official classification NAF 2008 can be summed up as follows:

NAF / CPF 2008, rev. 2	Civil Engineering Index	
42.11Z	TP08	Roads development works and maintenance
	TP09	Making and implementation of mixes
42.13A	TP02	New civil engineering and structure works, or renovation
	TP13	Carpentry and metal art works
42.13B	TP05a	Traditional underground works
	TP05b	Underground works in tunnel boring machines
42.21Z	TP10a	Pipeworks, sanitation and water supply, with supply of pipes
	TP10b	Pipeworks, with no supply of pipes
	TP10c	Rehabilitation of non-visitable pipes
	TP11	Long-distance transport / transfer pipelines, pipes supplied
42.22Z	TP12a	Energy and communication networking except fiber optics
	TP12d	Fiber optic networks
42.91Z	TP06a	Large-scale marine dredging
	TP06b	River dredging and small marine dredging
	TP07b	Civil works, concrete and steel for maritime works
	TP14	Underwater works by divers
42.99Z	TP01	All works General index
43.12A	TP03b	Blasting works
43.12B	TP03a	Large-scale excavation works
43.13Z	TP04	Foundations and geotechnical works
43.21B	TP12b	Public lighting - Installation works
	TP12c	Public lighting - Maintenance works

Technical characteristics

Methodology

The civil engineering (TP) indices are costs indices, which are derived from 7 line-items in an analytical accounting process similar to the “KLEMST” approach used by economists in relation to productivity (where $K = capital$ for “assets”, $L = labour$, $E = energy$, $M = materials$, $S = services$ for “miscellaneous costs”, $T = transport$).

The articulation between the items in the indices and the lines in the general accounting plan are as follows, considering that the item “transport” has been given priority over all the other items, subcontracting has been removed from production, the heading “miscellaneous costs” has been capped, and only costs that can be linked to a specific construction site are assumed to be taken into account:

Item	General financial accounting	
K Capital	605	Purchase of capital assets, equipment and work
	606 \ 6061	Purchases not stored (small items)
	612 \ partial	Leasing excluding transport equipment
	6131 \ partial	Equipment hire excluding transport equipment
	615 \ partial	Maintenance and repairs excluding transport equipment
	68 \ partial	Depreciation and amortisation of fixed assets excluding transport equipment
L Labour	604	Purchases of services
	621	Temporary staff
	6311	Payroll tax
	64	Personnel expenses
E Energy	60221 \ partial	Combustibles excluding fuels
	6061	Non-stockable supplies (water, energy, electricity)
M Materials	601	Stored purchases
	602 \ 60221	Other supplies
	609	Rebates and allowances on purchases
S Services	61	External services minus 611 “general subcontracting”, minus 612 “leasing”, minus 6131 “Equipment hire”, minus 615 “maintenance and repairs”, minus 6163 “transport insurance”
	622	Remuneration of intermediaries and professional fees
	623	Advertising, public relations
	625	Travel and entertaining
	626	Postal and telecommunication charges
	68 \ partial	Depreciation and amortisation of fixed assets
T Transport	60221 \ partial	Fuel
	Part du 612	Leasing transport equipment
	Part du 6135	Hire of trucks without drivers
	Part du 6155	Maintenance and repair of transport equipment
	6163	Transport insurance
	624	Transport of goods and employee transport
	68 \ partial	Depreciation and amortisation of transport equipment

The weighting of each item in each index is determined by the account analysis of the involved businesses (or the involved construction works). Similarly, each item is broken up into basic indices (of cost or price) derived from public statistics, with a weighting.

The weightings of the items and basic indices are normally fixed for the duration of the base. However, considering the adopted calculation formula, the modification of these parameters throughout the duration of the base would only affect the changes starting from a certain date.

Weightings

As shown in the table below:

- first, for each civil engineering indices, the weightings of each of the seven item “KLEMSTD”
- then, the weightings of all the civil engineering indices entering into the composition of the index TP01 “All works General index”.

Weightings (in %)

Weightings of base 2010 TP indice by item

Weighting for TP01	TP Index		Items						
			K Capital	L Labour	E Energy	M Materials	S Services	T Transport	D Waste
10.0	TP02	New civil engineering and structure works, or renovation	15	55	1	27	1	1	
19.0	TP03a	Large-scale excavation works	27	33	8	22	2	5	3
0.2	TP03b	Blasting works	23	27	7	40	3		
4.0	TP04	Foundations and geotechnical works	16	44	5	27	2	3	3
1.5	TP05a	Traditional underground works	17	39	2	33	5	1	3
1.5	TP05b	Underground works in tunnel boring machines	27	33	3	25	6	1	5
0.9	TP06a	Large-scale marine dredging	54	20	19		7		
0.5	TP06b	River dredging and small marine dredging	47	38	12		3		
0.2	TP07b	Civil works, concrete and steel for maritime works	13	20	3	57	5	2	
12.5	TP08	Roads development works and maintenance	12	22	8	36	7	15	
12.5	TP09	Making and implementation of mixes	11	14	9	50	1	15	
16.0	TP10a	Pipeworks, sanitation and water supply, with supply of pipes	22	37	3	29	2	5	2
2.0	TP10b	Pipeworks, with	25	43	4	16	2	5	5

		no supply of pipes							
1.4	TP10c	Rehabilitation of non-visitable pipes	22	35	3	34	1	5	
0.6	TP11	Long-distance transport / transfer pipelines, pipes supplied	11	21	3	58	2	3	2
9.25	TP12a	Energy and communication networking except fiber optics	10	45	4	34	7		
1.6	TP12b	Public lighting - Installation works	8	24	3	57	8		
2.4	TP12c	Public lighting - Maintenance works	13	62	3	13	9		
2.75	TP12d	Fiber optic networks	8	56	2	32	2		
1.0	TP13	Carpentry and metal art works	11	47	3	35	1	3	
0.2	TP14	Underwater works by divers	17	60	6	4	10	3	

More details, see: Composition detaillee des index TP en base 2010 (pdf).

Aggregation and reference

The TP indices base 2010 are Laspeyres-chained indices in reference year 2010.

The items are obtained by the aggregation of the elementary indices:

$$P(t) = P(t-1) * \frac{\sum_j \text{weights}(j, p) * J(t)}{\sum_j \text{weights}(j, p) * J(t-1)}$$

where p is the item, j the elementary index.

Then the indexes are obtained by the aggregation of the items:

$$I_i(t) = I_i(t-1) * \frac{\sum_p \text{weights}(p, i) * P(t)}{\sum_p \text{weights}(p, i) * P(t-1)}$$

where i is the TP index, p the item.

Finally, the TP01 index is obtained by the aggregation of the other indices:

$$TP01(t) = TP01(t-1) \cdot \frac{\sum_i \text{weights}(TP01) \cdot I_i(t)}{\sum_i \text{weights}(i, TP01) \cdot I_i(t-1)}$$

where i is the TP01 index.

Sources of information

The item “wages and charges” is generally made up from the hourly labour cost index in the construction sector, produced by INSEE, with a lag of 3 months. The elementary indices for the other items are made up for the most part from producer price indices, and in particular the [Producer price indices of French industry for the French market \(base 2010\) - Purchaser's price for contract escalation](#), produced by INSEE. All the other indices are derived from public statistics.

Statistical units

There is no specific survey for the TP indices ; they use existing public statistics, and especially the OPISE survey, to make up the elementary indices. Conceptually, the unit observed in relation to costs is a branch, or a sub-branch, of activity in French construction companies.

Frequency of the operation

Monthly.

Dissemination

The TP indices are disseminated around the 15th of the third month following the month under review ($m+75$), on the BDM, under the topic [Prices and price indices](#), heading “Producer price or cost indices and import price indices”, sub-headings “Construction” then “Building (BT) indices”. They are also published in the *Journal Officiel*.

Rules for connection between the old and the new Civil engineering (TP) indices

Producer cost indices for construction of October 2014, which have been published on 15th of January 2015, have shifted at the same time to base 2010. Past Building indices (BT), Current Civil Engineering indices (TP) and various indices for construction have then been stopped, but, as for any rebasing, INSEE systematically proposes a “corresponding series” in front of each “stopped series”, with following rules:

- Before rebasing, i.e. until September 2014 included, the “stopped series” is directly accessible and is authoritative;
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As list of Building indices (BT), Civil Engineering indices (TP) and of various indices for construction has changed, several points are worthy of attention:

- Some current TP indices have two or three “corresponding series” in base 2010. It is case of current TP02, TP03, TP06, TP10a and TP12 indices. Normally, nature of works involved allow to determine the good “corresponding series” to use for extension of the “stopped series” in the context of a given contract;
- Some current TP indices “without supplies” have corresponding series “with supplies”. Such contracts are rare. It is not possible to suggest more adapted indexation formulas.

As [Direction des Affaires Juridiques des ministères économiques et financiers](#), reminds it in a [questions and answers](#) (pdf file, in French only) dedicated to this rebasing of Producer cost indices for construction:

Il n'est pas nécessaire de rédiger un avenant pour prolonger une ancienne série par une série correspondante (nouvelle) et un coefficient de raccordement publiés par l'Insee quand la série correspondante est unique : l'information du comptable suffit. En revanche, quand plusieurs séries correspondantes sont proposées, le choix de la série correspondante doit faire l'objet d'un avenant, sauf si en raison de l'objet même du marché, l'index nouveau s'impose à l'évidence et dans la mesure où le libellé de l'index (notamment son numéro de référence BTxx ou TPxx) n'est pas substantiellement modifié. Si l'objet du marché justifie l'utilisation de plus d'un index dans la nouvelle série par rapport à la série ancienne, un avenant est également nécessaire.

More details, see: Correspondance entre les nouveaux et les anciens index TP (pdf).