



Department
for Business
Innovation & Skills

**RESULTS OF BIS CONSULTATION
ON THE USES OF CONSTRUCTION
PRICE AND COST INDICES**

APRIL 2013

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BIS Consultation on the uses of construction price and cost indices

Construction price and cost indices

Construction Price and Cost Indices (PCIs) are used in estimating, cost checking and fee negotiation on public sector building works. They are produced by the Building Cost Information Service (BCIS) of the Royal Institution of Chartered Surveyors on contract to the Department for Business, Innovation and Skills (BIS).

Construction PCIs comprise:

- Tender Price Indices (TPIs), which measure the movement in the price of tenders for construction projects of different types;
- Resource Cost Indices (RCIs), giving a measure of the notional trend of input costs to a contractor in terms of increases in the costs of labour, plant and materials;
- Output Price Indices (OPIs), which measure changes in the final cost of construction products and are used by the Office for National Statistics (ONS) to deflate construction output values.

In addition, location and function studies provide conversion factors to enable indices to be calculated for different regions and types of work.

Indices are updated quarterly using data collected from surveys of construction projects. The indices¹ and supporting documentation^{2,3} are published on the BIS website.

The current contract ends later this year. As part of preparation for retendering, BIS conducted a user consultation survey. The purpose of the consultation was to update our knowledge of users and their needs following the Davis Langdon report⁴, and inform the process of retendering when the current contract ends in 2013.

¹ <https://www.gov.uk/government/organisations/department-for-business-innovation-skills/series/price-and-cost-indices>

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/36866/resource-cost-indices-methodology-and-revision-policy.pdf

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/36867/tender-price-indices-methodology-and-revision-policy.pdf

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/16480/Davis_Langdon_report_-_BERR_final_revised_260310.doc

Consultation approach

Data were collected through an online questionnaire. The consultation was advertised on the BIS PCI web page and through the Construction Statistics Community on the Royal Statistical Society's Statistics User Net. BCIS also e-mailed contacts with a link inviting them to participate. The consultation primarily contained multiple-choice questions, alongside three open questions and a couple of partially open questions (which included space for free text for an 'other (please specify)' answer). The questions asked were similar to a consultation on the Monthly Statistics of Building Materials and Components, which had been developed following a pilot.

Characteristics of respondents

In total seventy-five submissions were provided, representing 1,140 users. The users reported values on just over nine thousand projects representing an annual work total of £5.1 billion. The average value of projects was about £567,000.

Respondents represented a range of organisations across both the public and private sectors, with the largest group representing consultants, as shown in Table 1. Central government and Other public sector together represented as many respondents as consultancy. These two groupings covered around half of those responding.

There were no responses from subcontracting firms, utility providers, supply firms or academic institutions.

Table 1. Response to the consultation by organisation type

Organisation type	Number of respondents
Consultancy	19
Central government	9
Other public sector	10
Construction firm – main contractor	5
Private sector procuring firm	2
Regulator	2
Trade association	1
Private individual	1
Other	1
No reply	25

Use of PCIs

Respondents were asked what use they made of the indices. The question allowed respondents to select as many options as applied.

As shown in Table 2, although contractual uses – pre-contract estimating and pricing of contracts – figured highly in the list, forecasting was the most chosen option. Monitoring uses also figured highly, if Market information and Industry trend are taken together.

Table 2. Main use of PCIs

Main use	Frequency
Forecasting	41
Pre-contract estimates	36
Contract pricing	24
Industry trend	19
Market information	19
Contract management (variation of price, etc.)	16
Programme management	13
Other	8
Policy development	6
Regulation	4
Academic research	3
Total number of contributors	50

Respondents revealed more detail on their usage in an open question about how they use the indices. Uses included:

- Informing decision making
- Comparison and benchmarking
- Estimating and setting costs
- Life cycle costing analysis

- Budgeting
- Feasibility studies
- Checking historical trends
- Converting between new and old prices
- Deflating current price series to constant price series

Patterns of usage

The majority (63%) of those responding to a question regarding how frequently they use the PCIs said they used them monthly. Around 16 per cent of respondents (16%) used the data daily and the same proportion use them quarterly, with 4% using them annually and none using them less than once and year.

Forty respondents provided estimates of the value of work annually that makes use of the indices. Excluding outliers (one nominal annual value of work at £1 and one totalling £1.2 billion), estimates ranged from £10,000 to £1 billion. Of these respondents, 13% estimated that the indices were used in work valued at £500 million or more, annually. Only 4 respondents estimated the annual value of work that makes use of these indices at below £1 million.

Of the £5.2 billion total project value, just over £1 billion was directly accounted for by central government. The mean value of central government projects was £2.5 million.

Figure 1 presents an overview of the inter-relationships between usage of each of the main three PCIs (TPI, RCI & OPI). The majority of respondents used at least one Tender Price Index (n=69). Thirty-eight respondents used at least one Output Price Index, while 30 used at least one Resource Cost Index.

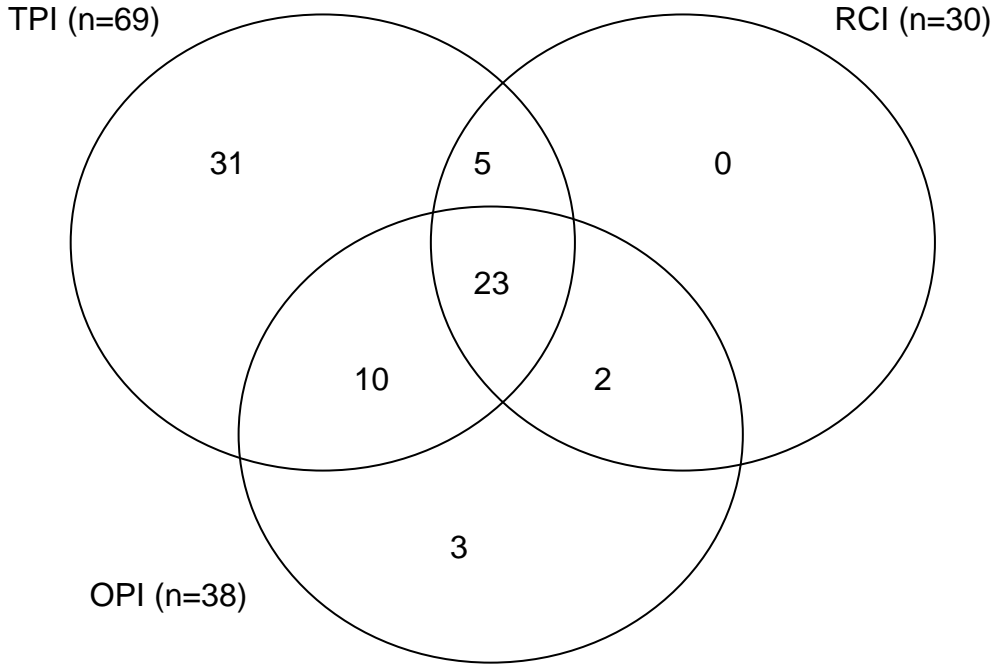
Indices tend to be used in combination, so that while 31 respondents used TPIs exclusively, only 3 respondents reported using OPIs without using other indices and no respondent used RCIs exclusively. Just over half of respondents (51%) reported that they use regional indices.

The most commonly used TPIs were All New Construction (55 users) and All Construction (51 users). The least commonly used were TPISH Derived Rehab (5 users), ROADCON Road type study (4 users), ROADCON Location study (5 users) and ROADCON Value study (4 users).

The most commonly used RCIs were All New Work (25 users) and All work (25 users). The least used were ROCOS Labour & plant (3 users), ROCOS Material (3 users), NOMACOS Mechanical (3 users), NOMACOS Electrical (3 users), NOMACOS Labour & Plant (3 users) and NOMACOS Material (3 users).

The most used OPI was All New Construction (28 users). The least used OPIs were Direct Labour public housing new construction (4 users), OPI Direct Labour public non-housing new construction (4 users) and OPI Direct Labour Public Non-housing R+M (4 users).

Figure 1. Patterns of PCI usage

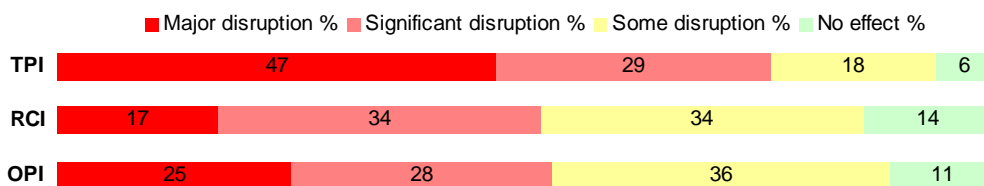


Disruption to work

Users were asked if the cessation of PCIs would cause disruption to their work. They were asked to categorise the likely disruption as “Major” (e.g. no other sources were available), “Significant” (e.g. other sources were available but were not as good), “Some disruption” (e.g. adequate alternatives could be found with some effort) or “No effect”.

As figure 2 shows, of those who indicated that they were users of at least one TPI (69 users), and who answered this question (51), 39 (76.5%) felt there would be major or significant disruption to their work if the indices were no longer available. Among users of RCIs who answered the question (29), 15 (51.7%) reported major or significant disruption. For OPI users (36 of whom answered the question) the figure was 19 (52.8%).

Figure 2. Percentage distribution of disruption given cessation



Users were also asked what they would do if the indices they used were no longer available. Table 3 summarises the responses to this question. Most users said they would

use an alternative (29 users), whilst 12 said they would devise their own indices and 5 would carry on without the indices.

Nine users said they would do something else. Of these, five were unsure of the alternatives, with one expressing concern that any indices they devised would “likely be prohibitively expensive, furthermore this would suffer from small sample sizes and carries the risk of being unrepresentative of the wider industry.” Another proposed that they would refer to the Retail Price Index or use indices published by Davis Langdon and EC Harris.

Table 3. What respondents would do if the indices they use were no longer available

Response	Frequency
No reply	20
Use alternatives	29
Devise your own indices	12
Carry on without indices	5
Do something else	9

Users also said the following:

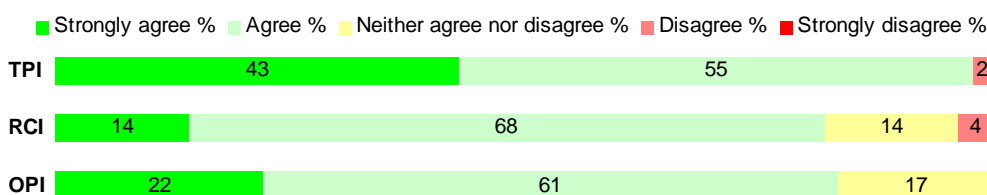
“Coming from an authoritative body it [the indices] carries weight. It exists and everyone knows it exists so no one can start trying to distort the truth on past and current cost levels.”

PCIs are *“written in to a number of our contractual arrangements”*

Suitability and timeliness

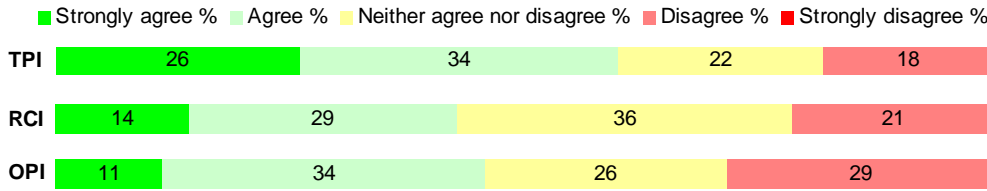
Users were asked about their satisfaction with the areas covered by the indices that are suited to their work. Figure 3 gives results from those respondents that had indicated that they used each index. The most frequent response for each of the three PCIs was that the user “agreed” that they were satisfied that the indices were suited to their work. None said they “strongly disagreed”.

Figure 3. Whether users were satisfied that the indices were suited to their work



Users were also asked about their satisfaction with how quickly the indices are updated and published. Figure 4 gives results from those respondents that had indicated that they used each index. For all the indices there was a sizable proportion who expressed dissatisfaction with how quickly the indices are updated, about one in 5 for both the TPI and RCI and 29% of those who use the OPI.

Figure 4. Whether users were satisfied with how quickly the indices are published and updated

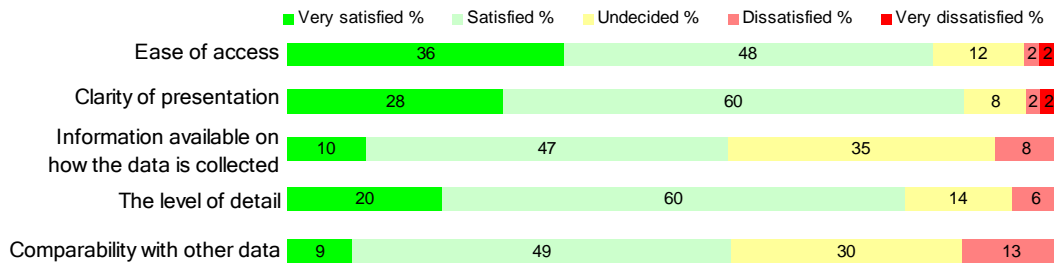


Satisfaction with access, clarity, information, detail, comparability

Asked to think about the BIS construction PCIs overall, respondents’ satisfaction with ease of access and clarity of presentation was overall very good, as shown in Figure 5. The modal response was 2 (“satisfied”) (on a scale of 1 to 5, with 1 representing “very satisfied” and 5 “very dissatisfied”).

Respondents were less satisfied with the information available on data collection, the level of detail and comparability with other datasets. Although the modal response was still 2 (“satisfied”) for these questions, there was a tendency to choose 3 (“undecided”) over 1 (“very satisfied”) for the information and comparability questions.

Figure 5. Satisfaction with various aspects of the PCIs



Future requirements

An open question was asked about any additional indices required. Responses included:

- Site and land values / indices
- Major projects only indices
- Non-roads output index (which was stopped)
- index specifically for office and retail fit out tenders

Other requirements mentioned in response to this question included:

- OPI series forecasts
- An annual sector analysis to compare tender/contract values with final account values broken down into procurement methods - complete design/specification tendered, design and build tendered, negotiated design and priced contract.
- Increase sample sizes

Conclusions

The consultation indicates that construction PCIs are used primarily among construction consultants and the public sector (including central government). Primary uses are contractual (pre-contract pricing, contract estimates, contract management) and market information/forecasting. There is comparatively little evidence from responses to this consultation of secondary use such as in academic research or policy development.

Users rely very much on the indices to carry out their day to day business. Most reported that there would be major or significant disruption to their work in that alternatives were either not available or would not be as suitable. Even where respondents said that they would use alternatives if pressed, it was not clear what those alternatives would be, with comments suggesting that any alternatives would be prohibitively expensive and/or of lower quality.

Although users are satisfied with most aspects of the PCIs, including their suitability and fitness for purpose, the survey has identified some room for improvement. BIS and BCIS have taken steps to improve the information available about how the indices are constructed following recommendations by the UK Statistics Authority, but this is one area where users are still relatively dissatisfied. Lack of sufficient information about the data may explain the relative dissatisfaction over comparability with other data series - if users are not aware of the detail, they will be unable to decide if one series is comparable with another.

BIS consults regularly with users through the Consultative Committee on Construction Industry Statistics, which has been the main forum in recent years for discussion of the

OPIs (since they are used in the compilation of construction output figures by ONS). There would be an advantage in extending discussions with users through a PCI steering group, which could then follow through some of the ideas - both for additional indices and for improving the user experience - emerging from this consultation exercise.

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