



# The Google Search Case: Implementing and Monitoring a Non-Discrimination Remedy

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31 March, 2017

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## 1 The Abuse

The Commission's [public statements](#) make clear that its April 2015 Google Search SO and July 2016 SSO uphold both halves of Foundem's November 2009 competition complaint. That is, the Commission's allegations that Google has been anti-competitively "favouring" its own price comparison service encompass both Universal Search (which artificially *promotes* Google's own specialised services) and anti-competitive penalties (which artificially *demote or exclude* competing services).

## 2 The Even-Handed Principle

Since March 2013, there has been a broad consensus among [complainants](#) and [consumer groups](#) that the most appropriate remedy in the Google Search case would be one based on the *Even-Handed* principle (aka Non-Discrimination, Search Neutrality, or Equal-Treatment). This principle states that:

*"Google must hold all services, including its own, to exactly the same standards, using exactly the same crawling, indexing, ranking, display, and penalty algorithms."*

In its [public statements](#) following the adoption of the Google Search SO in April 2015, the Commission declared its preference for a remedy based on this principle. The Commission also made clear that it intends to seek to apply this non-discrimination remedy beyond the confines of price comparison to also include travel search, local search, and, presumably, any other existing or future vertical where Google might otherwise deploy its search manipulation practices to anti-competitively advantage its own services.

## 3 Implementation Options

Among the many advantages of a principle-based remedy are that it is future-proofed and non-prescriptive, which leaves Google free to innovate and to decide exactly how best to implement the remedy. From our November 2013 [Analysis of Google's Second Proposals](#):

*"What the Even-Handed principle would look like in practice would be entirely up to Google. Google would be left free to pursue any and all developments that improve the quality of its search results or enrich or enhance their display. The only difference would be that, under a non-discrimination remedy, the search results afforded these enhancements would be based on their relevance to the users' query rather than Google's financial interests."*

As things currently stand, Google has a range of implementation options available to it, which fall into two broad categories: (i) *inside the box* and (ii) *outside the box*. An *inside the box* implementation would preserve Universal Search but find a way to incorporate competing services alongside Google's own. An *outside the box* implementation would abandon Universal Search and entrust the selection and ranking of appropriate specialised services (including Google's own) to Google's core crawling, indexing, and ranking algorithms (minus anti-competitive penalties—see Section 5).

An outside the box solution is by far the more straightforward option and could easily replicate all of the functionality and appearance of Universal Search but in a way that is both pro-competitive and substantially more desirable for users. As we pointed out in our June 2012 [Remedy Proposals Paper](#):

*"If Google sees a benefit in providing enhanced, context-specific result-formats that include 'rich snippets' like thumbnail images, star-ratings, price-ranges and so on...this would be relatively straightforward to implement through the use of mark-up-based meta-tags..."*

As it happens, in the several years since Foundem first proposed this meta-tag-based solution, Google has developed, published, and tentatively started using just such a [meta-tag schema](#)—one that allows Google’s web crawlers to collect all of the structured data required to replicate its Universal Search display formats for competitors’ services as well as its own:

```
<div itemscope itemtype="http://schema.org/Product">
  <span itemprop="brand">ACME</span> <span itemprop="name">Executive Anvil</span>
  

  <span itemprop="aggregateRating" itemscope itemtype="http://schema.org/AggregateRating">
    Average rating: <span itemprop="ratingValue">4.4</span>, based on
    <span itemprop="ratingCount">89</span> reviews
  </span>

  <span itemprop="offers" itemscope itemtype="http://schema.org/AggregateOffer">
    from $<span itemprop="lowPrice">119.99</span> to
    $<span itemprop="highPrice">199.99</span>
    <meta itemprop="priceCurrency" content="USD" />
  </span>
</div>
```

Figure 1: An example of Google's HTML Meta-Tag Schema for Comparison Shopping pages (from [developers.google.com/structured-data/rich-snippets/products](https://developers.google.com/structured-data/rich-snippets/products))

Given that this solution relies on Google’s core ranking algorithms and on a meta-tag schema that Google has already developed, it should be possible for Google to implement such a remedy in a matter of weeks.

## 4 Important Background

The following are some important, but often overlooked, points that have significant implications for remedies.

### 4.1 There are Different Kinds of Search Results

When thinking about remedies, it is important to consider the differences between:

- something that is *an answer* versus something that is *a click away from an answer*;
- something that is *one of many possible answers* versus something that is *the answer*; and
- something that is *relevant* versus something that is *the most relevant*.

For example, an up-to-date stock price for Apple Inc. returned in response to a search for “AAPL” is certainly *an answer* and arguably *the answer*. Whereas, a link that delivers a user to Google’s price comparison service in response to a search for “digital cameras” is (a) a click away from an answer, and (b) just one of many possible, and possibly better, answers. Similarly, just because Google only places its own services at the top of search results for queries where there is a reasonable expectation that they might be relevant does nothing to address the more important question of whether someone else’s service might be *more* relevant than Google’s.

Throughout the Commission’s investigation, Google’s public messaging has often conflated these important points.

## 4.2 There are Different Kinds of Search Queries

When thinking about remedies, it is also important to consider the differences between:

- queries where the user's intent is clear versus queries where the user's intent is unclear or ambiguous;
- general queries versus specific queries;
- commercial queries (i.e., queries likely to result in a transaction) versus purely informational queries; and
- popular, high-volume queries versus obscure, long-tail queries.

Clearly, the financial incentives for the search engine may be quite different for these different kinds of query. More importantly, these different kinds of query often require different kinds of search results. For example, the probability that a user is looking for a price comparison service will be higher for a query like "compare digital camera prices" than for a less specific query like "digital cameras". And, even when it is reasonably clear that a user is looking for a price comparison service, their expectation about exactly where a click on the search results will take them will vary depending on the query: a user entering a general query like "compare prices digital cameras", for instance, would probably expect to be taken to a price comparison service's category page for digital cameras, whereas a user entering a more specific query like "compare prices nikon d7100" would probably expect to be taken to the price comparison service's product price comparison page for that specific camera.

Note that in neither of these two cases would a user necessarily expect to be presented with a row of links to particular merchant offers for particular models of camera—especially when these links are advertisements, where the overriding factor determining which merchant offers are featured is often the amount the merchant is willing to pay the search engine rather than anything that might benefit the user, such as the lowest price. Yet, since Google introduced a pay-for-placement model for its price comparison service (in February 2013), the Universal Search inserts that Google places at or near the top of search results for all queries for which a product price comparison service might be relevant, consist primarily of these kinds of merchant-offer-specific, pay-for-placement ads derived from Google's price comparison service.

This is bad enough for queries for a specific make and model (such as "compare nikon d7100 prices"), where the featured offers will rarely be the lowest prices, but it is even worse for more general queries (such as "compare digital camera prices"), where the featured offers will rarely be for a specific product the user is interested in, let alone ends up buying.

For example, Figure 2 below is a recent screenshot of Google's Universal Search insert for the query "compare prices Nikon d7100", and Figure 3 that follows is the Google Shopping product page that users are taken to when they click on the "shop for compare prices nikon d7... on Google" link at the top of the Universal Search insert:

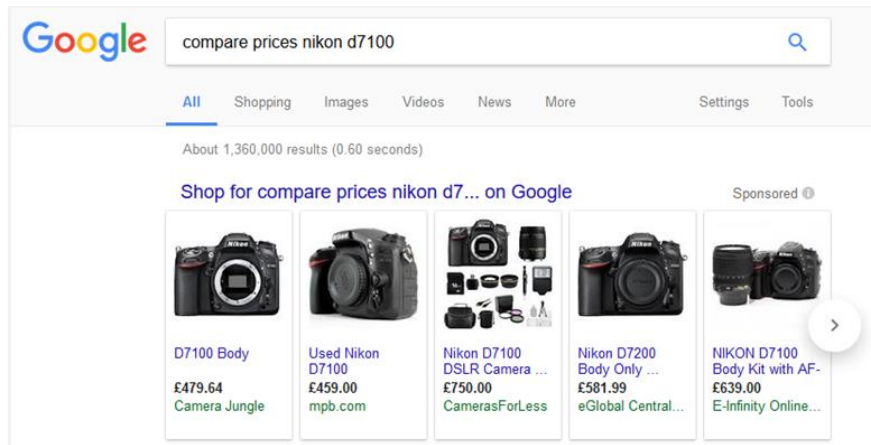


Figure 2: A screenshot showing the Universal Search insert (Commercial Unit) for the query "compare prices Nikon d7100" (captured 24 March 2017)

**Online shops** Your location

☐ Free shipping ☐ Refurbished / used

Sponsored ⓘ

Sellers ▾	Seller Rating	Details   Special Offers	Base Price	Total Price	
eGlobal Central UK	★★★★★ (584)	Free shipping ♥ 1 special offer	£469.99	£469.99	Shop
Camera Jungle	★★★★★ (482)	Used	£479.64 +£4.99 shipping	£484.63	Shop
mpb.com + Show all 9	No rating	Used	£459.00 +£5.95 shipping	£464.95	Shop
slr hut	No rating	Free shipping	£505.00	£505.00	Shop
Clifton Cameras	★★★★★ (1,299)	Free shipping	£699.00	£699.00	Shop
Park Cameras	★★★★★ (321)	Free shipping	£699.00	£699.00	Shop
E-Infinity Online Camera Store	No rating	Free shipping	£485.00	£485.00	Shop
DigitalRev Store	No rating	Free shipping	£569.00	£569.00	Shop
Wex Photographic + Show all 8	★★★★★ (15,356)	Free shipping	£699.00	£699.00	Shop
Techinthebasket.com	No rating	Free shipping	£462.00	£462.00	Shop

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1 - 10 of 28 < >

Figure 3: A screenshot of the underlying Google Shopping page/data from which the Universal Search insert's ads have been derived (captured 24 March 2017)

Note that the lowest price (for a non-used camera) featured in the Universal Search insert (in Figure 2) appears to be £479.64 (from a merchant called Camera Jungle). However, from the underlying data on Google Shopping (Figure 3), it is clear that (i) £479.64 is not the lowest price available on Google Shopping, (ii) the £479.64 does not include shipping, and (iii) the listed price turns out to be for a used camera rather than a new one. Note also that one of the five advertisements featured in the Universal Search insert is for the Nikon D7200—a different model from the one being searched for.

And, as illustrated by the following screenshots, the situation is even worse for more general queries, such as "compare prices digital cameras" or "digital cameras". For these more general



product-category queries, it is highly unlikely that the five featured, effectively random, merchant offers will be for the specific product the user might be looking for:

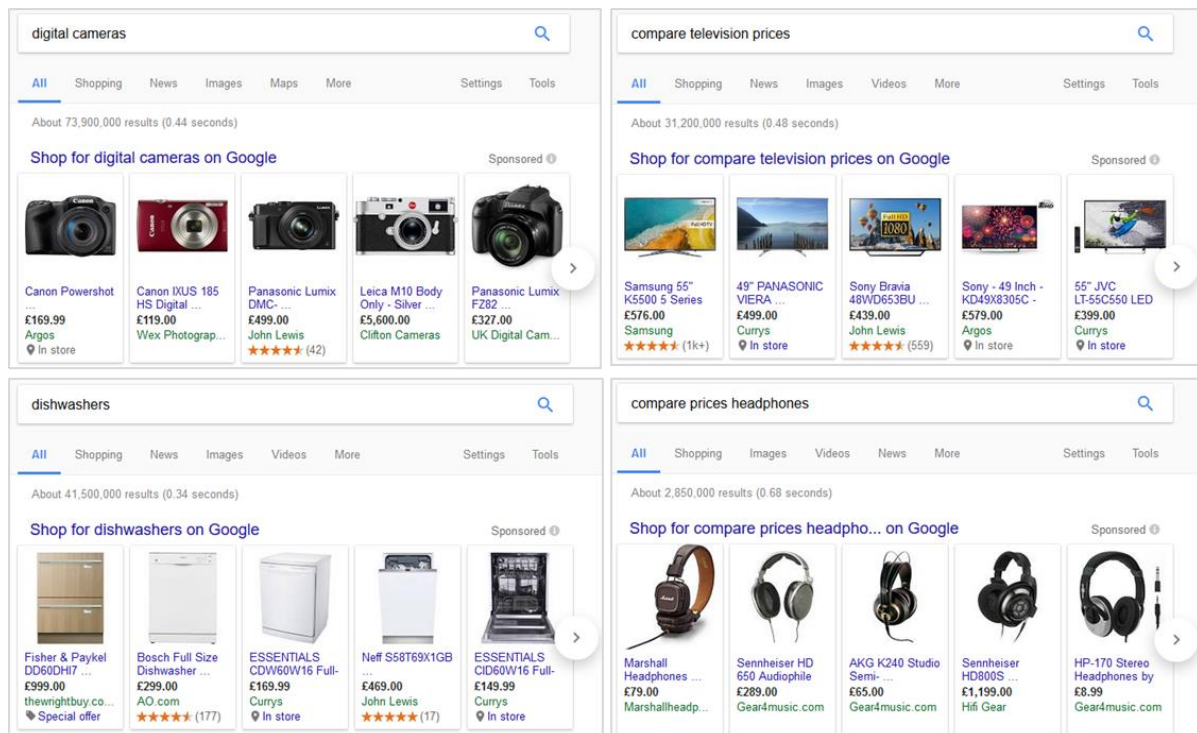


Figure 4: In these 24 March 2017 screenshots, what is the likelihood that the 5 featured pay-for-placement ads for 5 specific offers for 5 specific products are for a specific product the user is, or might eventually be, interested in?

It is relatively unlikely that any of the 5 specific merchant offers for the particular products featured in the above examples will be *an answer*, let alone *the answer*, to these general, presumably exploratory, queries for these popular categories of products. This is even more true for general, exploratory queries for less popular (long-tail) product categories, such as those illustrated below:

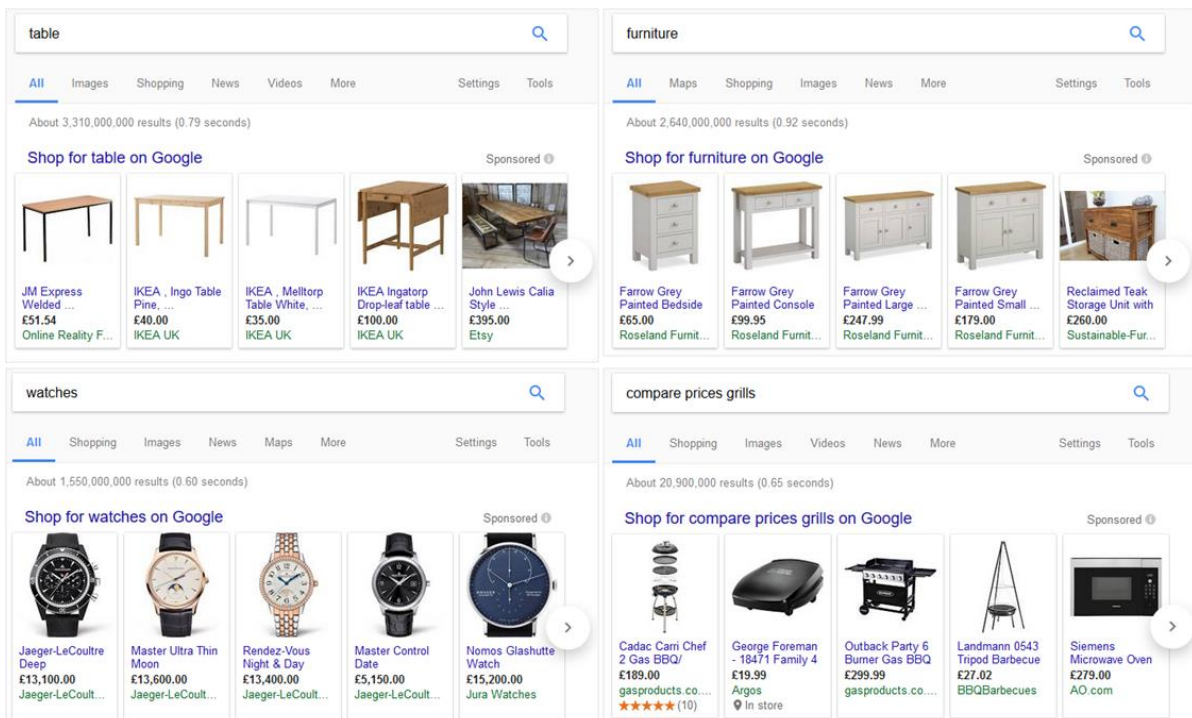


Figure 5: In these 24 March 2017 screenshots, the probability that any of the 5 featured pay-for-placement ads for 5 specific offers for 5 specific products are what the user is, or might eventually be, interested in is even lower.

### 4.3 The Implications for a Non-Discrimination Remedy

The above are examples of some of the issues that would need to be resolved by any *inside-the-box* implementation of the non-discrimination remedy.

By contrast, by entrusting the selection and ranking of appropriate search results to Google's core ranking algorithms, any *outside-the-box* implementation of the non-discrimination remedy resolves these issues at a stroke. This is because, left to its own devices, any competent and unbiased general search engine will tend to identify and return, not just the websites most likely to be relevant to a particular query, but also the pages within those websites most likely to be relevant. In other words, absent any anti-competitive bias, Google's ranking algorithms would naturally tend to return relevant product-category pages for product-category queries and relevant product-specific pages for product-specific queries. Moreover, when a user's price-comparison intent is clear, Google's ranking algorithms would naturally tend to return price comparison services. And, when a user's intent is not clear, Google's ranking algorithms would tend to return a diverse mix of alternatives, such as merchant sites, manufacturer sites, price comparison services, review sites, and so on. For example, as we wrote in our December 2016 [Rebuttal](#) to Google's public response to the Commission's SSO:

*"Before Google began anti-competitively demoting price comparison services within its search results, shopping via price comparison services was one of the most common ways that users shopped online. As with most online tasks, this process would usually begin with a suitable query on a general search engine (i.e., Google). This arrangement was great for consumers, because they didn't necessarily need to know which particular price comparison or other specialised search service might be best suited to the particular product they were looking for. Instead, they could rely on Google to identify any potentially relevant services and attempt to rank them in order (with those most likely to be relevant listed first). With just one click on one of these natural search results, users would be taken to the selected price comparison service and presented with a comprehensive survey of prices and availability for their chosen product from all or most of the leading online retailers (usually including Amazon and its various Marketplace Merchants). And, with just one more click, users would be delivered directly to the appropriate page on the website of their chosen merchant from where they could then complete a purchase.*

*In other words, prior to the introduction of Google's anti-competitive search manipulation practices, consumers were rarely more than two clicks away from buying their chosen product based on a comprehensive survey of the market. By contrast, following the introduction of Google's anti-competitive practices, consumers are now either several clicks away from a cursory survey of the market (which they must now conduct manually themselves) or just one click away from almost certainly paying more than they need to via one of Google's prominently positioned pay-for-placement, Google-Shopping-derived advertisements."*

## 5 Monitoring Anti-Competitive Penalties

A horizontal search engine like Google uses hundreds of different ranking signals, which it weights and combines to determine the relative placement (rank) of every matching (relevant) search result. A penalty is a powerful negative ranking signal that often effectively overrides all of the other ranking signals; a site that has been algorithmically or manually penalised will tend to rank significantly lower than it would have been ranked by the other ranking signals (often to the point of exclusion).

A question that tends to arise whenever a non-discrimination, search-neutrality-based remedy is discussed is how to distinguish between the legitimate penalties that all search engines require to combat spam and the illegitimate, *anti-competitive* penalties that Google increasingly uses to target competitors. Our January 2013 [Remedy White Paper](#) addressed this question head on:



*“When deciding whether or not a particular penalty or demotion is legitimate, two general factors must always be considered:*

- 1. The nature and purpose of the site being penalised, and*
- 2. The nature and intent of the queries it is being demoted or excluded for.*

*For example, the criteria for assessing the quality or efficacy of a particular website will vary significantly depending on whether that website is a content publisher (such as a newspaper or advice site), a service provider (such as a vertical search engine or digital mapping service), or an online retailer...*

*We suggest that the answers to the following questions allow a robust, reliable, and independently verifiable assessment to be made of the legitimacy of a given penalty or demotion when applied to a given site or class of sites for a given query or set of queries [without requiring access to Google’s source code]. Note that failing any one of these four tests would render the penalty illegitimate:*

- 1. Why is this page or site being penalised?*
  - a. Is it because of a feature of the page or a feature of the site?*
  - b. Is this reason justified within the context of the nature and purpose of the site, and given the nature and intent of the queries the site is being excluded or demoted from?*
  - c. Are the site’s peers/competitors being held to the same standard?*
- 2. What changes to the page or site would need to be made for the penalty to no longer apply?*
  - a. Is it reasonable (or even desirable) to require these changes given the nature and purpose of the site, and given the nature and intent of the queries the site is being excluded or demoted from?*
- 3. Does Google offer or have a financial interest in a similar service to the one being penalised?*
  - a. If so, why is Google’s similar service not being penalised in a similar way?*
  - b. What features, present or absent, have caused this site to be penalised while exempting Google’s similar service?*
  - c. Do these differences justify penalising this site and exempting Google’s similar service?*
- 4. Is the penalty likely to cause frustration or harm to any of Google’s users, for example, by preventing them from finding something they are legally and legitimately searching for?”*

## **5.1 Borrowing Some Text from Google’s April 2013 Commitment Proposals**

While we won’t re-examine any of the numerous reasons why Google’s three iterations of Commitment Proposals were all ultimately rejected, it is worth revisiting Google’s proposed methodology for maintaining and policing **non-discriminatory access** to the “Vertical Sites Pools” that were the centrepiece of these Commitment Proposals:

*“Subject to prior individual approval by the Commission upon advice from the Monitoring Trustee, Google reserves the right in exceptional cases beyond the harmful practices described in Section II.B to exclude from a Vertical Sites Pool sites that produce a materially inferior user experience compared to other sites in the pool, based on signals that users are significantly less satisfied with the results provided by a given site relative to its peers in the same pool. Google will promptly inform the Monitoring Trustee and the Commission prior to the application of any such measures. Google will promptly inform the excluded website and provide reasons for the exclusion. A website rejected on this basis may reapply for inclusion after three months following its rejection.”*

Annex 1 B4f of Google’s original, April 2013, [Commitment Proposals](#)

We suggest that Google could readily adapt this text to define a methodology for maintaining and policing **non-discriminatory access to Google's natural search results**, without constraining its ability to innovate and combat spam. For example:

*"Subject to ~~prior individual~~ approval by the Commission upon advice from the Monitoring Trustee, Google reserves the right in exceptional cases beyond the harmful practices described in Section II.B to exclude from or demote within its natural search results specialised search ~~a Vertical Sites Pool~~ sites that produce a materially inferior user experience compared to other specialised search sites in the pool, based on signals that users are significantly less satisfied with the results provided by a given site relative to its peers in the same pool. Google will promptly inform the Monitoring Trustee and the Commission prior to following the application of any such measures. Google will promptly ~~inform~~ respond to any enquiries from the excluded/demoted website and provide reasons for the exclusion/demotion. A website ~~rejected~~ excluded or demoted on this basis may ~~reapply for inclusion after three months following its rejection~~ apply for reconsideration at any time."*