**NPS Re-Consultation: Note On Net Present Value, Etc**

To assess whether a big, complex project such as a new runway is worthwhile, it is necessary to look at the stream of costs and benefits over many years and then balance all these costs and benefits. The recognised method is to calculate a ‘Net Present Value’ or NPV. This takes all the costs and all the benefits each year up to some point well in future and then converts them all back to the present time using a ‘discount’ value. These discounted values are then summed to give a single figure – the Net Present Value (NPV).

The great advantage of NPVs is that they take account of all costs and benefits into the future for everyone, not just financial costs and benefits for some of the parties. For this reason NPVs are the standard measure for large infrastructure projects where the overall cost/benefit to society needs to be assessed.

The key figures for NPV, shown in Table 9.2 (page 44) of ‘Updated appraisal report airport capacity in the south east’, are:   
Gatwick £1.0 to £2.4 billion (bn)  
Heathrow extended northern runway -£1.8 to £2.7 bn  
Heathrow northwest runway (HNW) -£2.2 to £3.3 bn

The ranges are due to alternative estimates being made for the costs of surface access and ‘wider economic impacts’. A number of other figures are also presented in Table 9.2 (see also Box 9.1):

‘Total benefits to passengers and the wider economy’. This is a straightforward summation of benefits while – crucially - ignoring all costs to all parties. For HNW the value is £72.8 to £74.2 bn.

‘Net social benefit’. This is summation of the benefits with costs to airlines and environmental costs (but not cost of the scheme or resultant surface access) subtracted. For HNW the value is £16.2 to £17.5 bn.

‘Net public value’. This is a summation of the benefits with costs of surface access and environmental costs included (but not cost to airport or airlines). For HNW the value is to £67.8 to £72.6 bn.

These 3 measures have undoubtedly been presented because they suggest there would be large economic benefits from a third runway. But they are bogus and misleading because they all leave out major costs. Only the Net Present Value (NPV) gives an honest and balanced assessment of all costs and benefits.

An attempt is made in these measures to distinguish between public, social and, by implication, private costs. But such distinctions are extremely dubious. Passenger benefits are called “public” or “social” when they are in fact private benefits to individuals. Airport and airline benefits are considered “private” when in fact they reflect back into the public realm of air fares, wages, profits, dividends, taxes, subsidies, etc.

Even the upper NPV of £3.3 bn is negligible. It may sound a lot, but it is a benefit over 60 years. When compared with our Gross Domestic Product (GDP) of nearly £2 trillion per annum, it is infinitesimal.

Finally, it should be noted that Heathrow is still claiming ‘wider economic benefits’ of £211 or £147 bn from a third runway and is using these to claim large economic benefits for the English regions. These figures were not accepted by the Airports Commission or the DfT. The DfT’s latest figure for ‘wider economic impacts’ is £1.8 to £3.2 bn (Table 9.2). A far cry indeed from £211 bn !

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