

Introduction

In conjunction with the analysis of *ex-post* package adjustment contained in Deliverable 3, this discussion document concludes OPTIC Task 3.4 and is intended to support subsequent work in WP6. Specifically, it builds upon some of the real-world policy packaging examples discussed extensively in WP4 and addresses the effectiveness of *ex-post* package optimization, unpacking the different *ex-post* options that policy actors have taken and illustrating how these actors have sought to ‘optimise’ (or otherwise improve) the effectiveness and/or efficiency of certain policy interventions. The principle cases drawn upon from WP4 are the London congestion charge and EU rail interoperability legislation.¹ The note is structured around four key types of *ex-post* ‘adjustments’ which appear to have been variously undertaken across the two cases: adjustments of policy ‘intensity’; policy ‘character’; policy ‘compliance’; and policy ‘scope’. In places, these adjustments correspond closely with the theoretical remedial action framework presented in OPTIC D3, concerned with addressing two significant sources of package sub-optimality—‘epistemic’ limitations and ‘communicative’ limitations. Where these overlaps are most acute, links between the theoretical contributions in D3 and their practical manifestation in these real-world cases are probed further.

‘Intensity’ adjustments

Perhaps the most widely-recognised form of *ex-post* adjustment that can be applied to a policy intervention—packaged or otherwise—concerns altering interventions’ *intensity*. Simply put, policy intensity refers to the strength and depth to which interventions seek to impact upon their corresponding policy target(s). In certain situations, adjusting this intensity may prove to be an expedient means of improving an intervention’s effectiveness and/or efficiency. Importantly, although our overriding concern here is with policy packaging, such intensity adjustments are not necessarily characterised by the incorporation of additional measures in the package. Indeed, it may well be the case that such undertakings are limited to *ex-post* adjustments to the intervention while retaining its original orientation and structure—reflecting a quantitative alteration to, rather than qualitative shift in, its nature. In other words, analysts’ *ex-post* optimisation efforts are focussed upon ‘calibrating’ the existing intervention rather than altering its fundamental constituent elements (cf. ‘character’ adjustments).

Returning to the material set out in D3, it may be argued that *ex-post* intensity adjustments represent an instrumentally-rational form of remedial action—responding to the presence of newly-recognised ‘epistemic limitations’ in the underlying observational and/or conceptual basis of the package. For example, *ex-post* monitoring activities may indicate that a particular measure in the package is not performing to the standard expected. As a result, the intensity of a more successful measure may be increased in order to compensate for this inadequacy and maintain the net effectiveness/efficiency of the package. Alternatively, as implied above, intensity adjustments may be suitable in situations where the underlying model(s) governing package design have proved broadly competent, but where slight calibrations might be required

¹ In addition to being the subjects of comprehensive analysis in WP4, these cases are further expanded upon in WP5 where in-depth interviews with key actors are conducted in order to provide a fuller picture of key barriers to package formulation and/or implementation.

to increase or maximise its impact. The pricing strategy employed by Transport for London (TfL) for the London congestion charge is particularly illustrative here. When the scheme was launched in 2003, the basic fee for motorists entering the central charging zone was £5. In 2007, the basic fee was raised to £8 (£7 for fleet vehicles; £10 for next-day payment). From January 2011, the basic fee will again be raised to £10 (£9 for fleet vehicles; £12 for next-day payment). According to TfL (2010, p. 10), these periodic fee increases are justified on the grounds of maintaining policy effectiveness. Specifically, they are portrayed as a natural *ex-post* response to (1) background inflation and (2) inter-modal competitiveness:

‘The proposed increase in the daily charge will ensure that it remains effective in controlling traffic levels in central London...If the level of the charge were not from time to time adjusted, the deterrent effect of Congestion Charging would tend to be eroded over time. The proposed increase also ensures that the Congestion Charge maintains its relative deterrent effect with respect to public transport fares which have increased since 2005.’

In addition to effectiveness, such intensity adjustments may also be interpreted with regard to package acceptability. For example, it may be the case that a theoretically-optimal level of package intensity is identified *ex-ante* as being highly effective, yet politically and/or socially unacceptable. In such instances, *ex-post* intensity adjustments may then be less reflective of a ‘rectification strategy’, and more appropriately interpreted as indicative of a medium- to long-term risk-mitigation strategy. To take the London congestion charge as an example, one could easily imagine that *ex-ante* econometric analyses made prior to 2003 would conclude that an £8 charge would be more effective—*ceteris paribus*—than a £5 charge in terms of reducing traffic congestion. However, given the sensitivity of road pricing to acceptability concerns, launching the scheme at £8 could well have proved a risk-prone, strategic mistake.

Intensity adjustments can also be seen in the case of recent EU rail interoperability legalisation. In 2009, for example, in order to increase policy effectiveness, the European Rail Traffic Management System (ERTMS)—which had originally just been used as an optional system—became mandatory for key rail corridors (see *Directive 2008/57/EC*). As with the periodic fee increases for the London congestion charge, this is not rectification of a ‘mistake’, rather it illustrates the natural progression and evolution of the policy package and neatly demonstrates how *ex-post* optimisation efforts are not necessarily always ‘remedial’ in character. Rather, they illustrate how emergent practices that appear to contribute positively to packages’ effectiveness and/or efficiency can be integrated into the package more concretely, thereby serving to intensify packages’ overall impact.

‘Compliance’ adjustments

As with intensity adjustments, we can point to another set of *ex-post* optimisation efforts—compliance adjustments—that seek to increase package effectiveness and/or efficiency whilst broadly retaining its original character. Indeed, such compliance adjustments function as a means of *indirectly* supporting a package’s ability to bring about intended effects through ensuring relevant actors adhere to the demands of the intervention *per se*. In this context, such adjustments can perhaps be best understood as a form of remedial action, a ‘tightening’ of the original package following a recognition that the *ex-ante* assumptions underpinning the intervention are somehow inadequate. Drawing on the cases from WP4, we can point to two kinds of situation where such compliance adjustments may be necessary for *ex-post* package optimisation.

First, there are situations where certain actors or stakeholders exhibit what may be termed ‘deliberate evasion’. Simply put, this refers to situations where policy ‘loopholes’—resulting from observational and/or conceptual limitations in the package’s *ex-ante* causal model—are

exploited, thereby enabling certain actors to evade being subjected to the intended effects of the intervention. Where significant, this can pose a problem for effectiveness—because the loophole affects the extent to which the package can address the policy target(s)—and it can pose a problem for efficiency—because loopholes may enable actors to avoid compulsory financial contributions and this means that feasibility of the package can be jeopardised. The London congestion charge provides two interesting examples of loopholes that adversely affected the viability of the scheme in this manner. In both cases *ex-post* compliance adjustments made in response to their presence. The first of these relates to the long-standing concession for commercial fleet vehicles that is built into the scheme. As noted in the previous section, fleet vehicles receive a £1 discount on the charge and, more importantly, are offered more a flexible charge and fine payment system than standard motorists. In 2005, exploiting this concession, a London businessman set up a dedicated company—‘fivepounds.co.uk’—which enabled private motorists to ‘join’ and thereby benefit from fleet status. As 37% of the revenue raised through the congestion charge in 2005 was attributable to fines, this posed a problem for TfL as it jeopardised the feasibility of the package and, ergo, its long-term efficiency. After monitoring activity indicated the presence of this loophole, TfL acted to close it by requiring all such fleet vehicles to provide comprehensive insurance details (Williams, 2005). The second loophole, somewhat similar, concerns the extent to which drivers of private cars registered their vehicles as minicabs to avoid the charge. *Ex-post* compliance adjustments undertaken here included a revision of taxi registrations and stricter licensing controls to ensure that all vehicles registered as taxis were indeed functioning as such (Sky News, 2007).

Besides ‘deliberative evasion’, however, there are other situations where *ex-post* compliance adjustments may be required. Some of are those characterised by the presence of ‘communicative limitations’ (D3) in the package design and/or implementation processes.² Rather than acting to regulate evasive actors, *ex-post* efforts here instead tend to focus upon improving the clarity and direction of actors’ duties and responsibilities in order to enhance package effectiveness. A good example of such communication-orientated compliance adjustments can be found in the case of EU rail interoperability, where *Decision 2001/260/EC* and *Recommendation 2001/290/EC* sought to clarify and simplify the guidance accompanying the Technical Standards for Interoperability (TSIs) first set out in *Directive 96/48/EC* in order to facilitate their adoption within member states. Previously, the complexity and rigidity of the TSIs had proved a barrier to the uptake of specific interoperability measures as the TSI guidance was difficult to interpret consistently across member states and thus compromised the effectiveness of the overall interoperability package.

‘Character’ adjustments

Third we can identify *ex-post* adjustments that entail a qualitative shift in the character or nature of the package *per se*. Here, where monitoring activities indicate a degree of sub-optimality, adjustments typically involved the significant alteration or removal of original measures in the package and/or the incorporation of new measures. Again, the London congestion charge provides a couple of examples where such adjustments have been undertaken. First, acting on the basis of feedback from motorists, TfL will be launching an automated payment system for the congestion charge from January 2011. Currently, motorists entering the charging zone must pay

² Communicative limitations can be said to exist where, regardless of the quality of *ex-ante* knowledge, the degree to which such knowledge is shared amongst relevant policy actors is somehow inadequate. This may be characterised by the presence of overly-narrow discourses, lack of sufficient discussion between politicians, analysts, stakeholders and the public, misunderstandings amongst such actors with regard to their respective perceptions, priorities, capacities, or responsibilities, and incompatibilities amongst actors’ tools.

the fee manually. Although this can be accomplished in a variety of ways—online, by telephone or in person—it still requires one manual payment per trip inside the charging zone, made either on the day of travel or the day before travel. The new automated system will enable motorists to instead receive a monthly bill, thereby making the process more efficient and reducing the administrative burden to the operator. Second, and more significantly, a major character adjustment to the congestion charging scheme by TfL concerns the removal of the ‘alternative fuel discount’ (AFD) and its wholesale replacement with a ‘greener vehicle discount’ from January 2011.

The reason for this change stems from an epistemic limitation in the package design. Although the primary objective of the London congestion charge is to reduce traffic congestion in the central area, it is also sensitive to broader environmental objectives (cf. scope adjustments). Reflecting this concern, the current scheme design incorporates the AFD in order to reward (or, more appropriately, to avoid penalising) motorists who drive vehicles which ostensibly have a less environmental impact. However, the original observational basis and/or conceptual rationale underpinning this exemption failed to sufficiently acknowledge the fact that technological developments in conventional vehicles might outpace the environmental benefits of alternative fuel technologies. As a result, a perverse situation resulted whereby motorists could claim an exemption for a relatively high-emitting alternative fuel vehicle whilst those driving energy-efficient standard vehicles which actually emitted less CO₂/km still had to pay the charge. In recognising this problematic situation, the GVD removes the techno-centric emphasis on alternative fuel and instead evaluates the environmental credentials of vehicles on the basis of their absolute tailpipe emissions—a standards-based appraisal—with those emitting less than 100gCO₂/km becoming exempt (TfL, 2010).

‘Scope’ adjustments

Finally, we can point to various forms of what might be termed ‘scope adjustments’ which policy-makers may seek to undertake as a means of *ex-post* package optimisation. In the context of the two cases focussed upon here, three forms of such adjustments may be identified. Firstly, and most obviously, ‘scope’ can simply refer to the *geographic range* of packages’ intentional effects. In the case of the London congestion charge, for example, this would pertain to the Western extension of the scheme that was introduced in 2007 (and, indeed, its subsequent abolition in late 2010). Second, ‘scope’ can refer to what we might term packages’ *target article*—the actors and/or objects that the measures included in a package are designed to have an ‘operative influence’ upon (cf. D1). In the case of EU rail interoperability legislation, for example, we can point to the fact that the measures were initially directed at the high-speed rail network (as delineated in *Directive 96/48/EC*), but later extended to the wider, conventional rail network (*Directive 2001/16/EC*). This example illustrates once again that *ex-post* adjustments don’t necessarily have to be remedial actions designed to ‘repair’ a faulty package. Rather, they can reflect a natural concern for iterative, learning-orientated policy-making typified by the phased roll-out of interventions. Indeed, as noted in *Directive 2004/50/EC*, attempts to implement interoperability measures in the EU high-speed rail network were certainly a valuable source of information for subsequent efforts concerned with the conventional network.

In practice, of course, these two concerns—‘remedial repair’ and ‘natural evolution’—can be intertwined. The case of relatively novel interventions—and their associated ‘teething troubles’—may be particularly illustrative here. The presence of such troubles, if not their exact nature, may well be anticipated by analysts *ex-ante*, and thus an element of flexibility may be built into the packaging/implementation process in order to accommodate them. In such circumstances, policy makers can here take advantage of natural breaks in the formulation/implementation/ evaluation process. For example, TfL have slightly delayed opening the

recently-launched Barclays Cycle Hire scheme in central London to causal ‘turn up and pay’ users while small problems in the system—only recognised as a result of the initial usage by registered members—are rectified (BBC News, 2010).

Third, ‘scope’ adjustments may pertain to changes made to packages’ *policy objectives and/or targets*. Importantly, it is this focus on objectives that distinguishes such adjustments from ‘character’ adjustments, as the latter are primarily characterised by a change in measures. A useful example of this concerns a proposal to introduce new environmental objectives into the London congestion charging scheme that explicitly relate to CO2 emissions, with more polluting cars charged higher fees rates based on their VED band. This was resisted by vehicle manufacturers such as Land Rover, Porsche and others, who commissioned studies into the likely effects of the change (BBC News, 2008a). Interestingly, from the perspective of OPTIC, this illustrates how *ex-post* attempts to make use of a package’s functionality/infrastructure for different objectives can run into acceptability problems and potentially affect overall effectiveness. For instance, the Mayor of London, Boris Johnson, argued that this VED band based charge would lead to more journeys by smaller cars, conflicting with the original scheme objective to alleviate congestion in the central area (BBC News, 2008b).

Conclusions

Policy packages are rarely ‘finished’ and are often subject to *ex-post* adjustments. On the one hand, these may be deliberate and instrumentally-rational adjustments made in the light of comprehensive monitoring activities. Alternatively, they can be less coherent adjustments made in the light of shifting priorities or secondary decisions made elsewhere. Rational policy revisions can be undertaken with a range of intentions: to increase effectiveness, acceptability or feasibility. However, in some contexts, modest adjustments may be made in order to clarify objectives or requirements. It is important to think again here about our ‘packaging’ focus. We are primarily concerned with collections of measures that have been *categorically designed* to function effectively and efficiently together. We are not concerned with *ad-hoc* packages which merely represent a collection of co-present measures. However, as WP4 stresses, rarely will ‘real world’ packages be best characterised by one of these extremes; in practice, most will fall in a continuum between the two. Clearly this has implications for the viability of efforts aimed at assessing the socio-economic impacts of *ex-post* optimisation in WP6, not least with regard to the meaningful identification of cause-effect relationships. This also highlights the need to ensure that the parameters of quantitative modelling are informed by thorough qualitative analysis and expert input.

References

- BBC News (2010) ‘London tourists cycle hire postponed until end of 2010’, 2nd September
- BBC News (2008a) ‘Porsche challenges C-charge rise’, 19th February
- BBC News (2008b) ‘Mayor quashes £25 C-charge hike’, 8th July
- Sky News (2007) ‘Minicab Scam to Avoid Congestion Charge’, 5th November
- TfL (2010) ‘Congestion charge consulting leaflet’, July 2010. London: TfL
- Williams, D. (2005) ‘TfL changes rules to stop C-charge ‘fleet’ scheme’, *London Evening Standard*, 9th May