

APPENDIX C

AFFORDABLE NEED AND THE OAN

Introduction

- 1 The National Planning Practice Guidance provides two separate methods for calculating housing needs, relating to overall need (the OAN) and affordable need respectively. This appendix aims clarify how the two measures can be used as complementary pieces of evidence to inform sound housing targets. It is necessary because the PG does not provide clear guidance on the matter, and therefore a several different approaches have been put forward, which produce very different results.

Two meanings of 'need'

- 2 A helpful starting point is previous national policy. Planning Policy Statement (PPS) 3, which has since been revoked, made a sharp distinction between:
 - Housing need: the quantity of housing required for households who are unable to access suitable housing without financial assistance.
 - Housing demand: the quantity of housing that households are willing and able to buy or rent.
- 3 The new planning system has left behind these definitions. The NPPF simply refers to 'housing need' (objectively assessed need, the OAN), noting that it has two components, market and affordable housing. Paragraphs 14 and 47 of the Framework require that local planning authorities provide enough land to meet both elements in full, unless they lack the sustainable capacity to do so.
- 4 The National Planning Practice Guidance (PG) recommends two methods for calculating housing need. The first method relates to 'overall need', and is at paragraphs 015-020 of the PG. It starts from official CLG household projections, which it then tests and adjusts to take into account factors that the projections do not capture. We refer to the result of this calculation as the 'calculated OAN' to distinguish it from 'true OAN', which is the underlying reality that the calculations seek to capture. The calculated OAN obviously covers both the market and affordable sectors, but the split between the two is not known, because the demographic data and projections on which the calculation is based do not show housing tenure.
- 5 The second method relates to 'affordable need' and is set out, at paragraphs 022-029 of the PG. It is quite different to the first method, being an estimate of numbers of households who do not or will not have access to suitable housing, as defined by a set of standards (not overcrowded, not too expensive etc). We call the number resulting from that method 'the calculated affordable need'.
- 6 The PG does not say which of those methods produces the objectively assessed need (true OAN) referred to in the NPPF. Superficially it seems that they both do, because one is a component of the other. But a closer reading shows that this is not the case. The calculated OAN and the calculated affordable need relate to quite different

meanings of the word 'need'. One aspect of this difference is the distinction between fact (or expectation) and aspiration. The calculated OAN (overall need) is Thus overall need is close to what PPS3 called 'demand':

- Being primarily based on trend-based projections, the overall need calculation rolls forward (projects) past demand – the reality of what housing people wanted, and either they or the government (including through developer contributions) were able to pay for. (For some places that past also reflected supply constraints – because planning did not provide enough land to meet demand – but in line with the PG the calculation of overall need should adjust away such constraints.)
- So the assessment of overall need uses past reality as an indicator of what is *expected* to happen in the future (on condition that the planning authority provides enough land). In the projected future, people who cannot pay for a new home, or have their new homes paid for, do not form households or do not move house.

7 In contrast, the calculated affordable need is exactly what PPS3 called 'need':

- It is housing that people are entitled to (qualify for, ought to have), according to a set of standards that together define 'suitable housing' (e.g. not overcrowded, basic facilities, not too expensive compared to disposable income). Unlike overall need, the calculation takes no account of past realities or what is realistically expected to happen in the future, given the availability of money to pay for affordable housing.
- Affordable need takes no account of what is expected to happen. Rather, it assesses what *ought* to happen, according to the norms that define 'suitable housing'. In the future described by the affordable need calculation, everyone who on the PG definition qualifies for an affordable home accedes to one. In reality this has not happened in the past, due to financial constraints.
- The method for assessing affordable need closely follows the 2007 Practice Guidance, which is very clearly about need-as-aspiration, as defined in PPS3).

8 A second major difference between the two measurements is that the calculated OAN relates to net new dwellings, which correspond to net new households (household growth). In contrast, much of the assessed affordable need relates to existing households¹ that are or will be entitled to affordable housing over the plan period. These households comprise the 'backlog' who at the plan's base date are in unsuitable housing, plus those who will 'fall into need' in the plan period – i.e. their housing will become unsuitable for them.

9 For the most part the needs of these existing households are not for net new dwellings. Except for those who currently have no home at all, if they move into suitable housing

¹ By existing households we mean households living in the subject area at the Local Plan's base date. New households are those who will either be formed by existing residents or move into the subject area over the plan period.

they will free an equivalent number of market dwellings, to be occupied by people for whom they *are* suitable.

- 10 To sum up, the calculated OAN and the calculated affordable need measure different kinds of need, in two main ways. Firstly the calculated OAN measures expected facts while the calculated affordable need measures aspiration. Secondly, the calculated OAN relates to net new dwellings only, while the calculated affordable need can also be met from the existing housing stock. For both these reasons, the calculated affordable need is likely to be a considerably greater number than the affordable element of the calculated OAN.
- 11 In practical terms, bearing in mind the above there is no arithmetical way of combining the two calculations set out in the NPPG to produce a joined-up assessment of overall housing need. We cannot add the calculated OAN and the calculated affordable need, because they overlap. Nor can we use the calculated affordable need to verify or adjust the affordable component of the calculated OAN, for two reasons: as demonstrated earlier the affordable component of the calculated OAN is not known, and in any case the calculated OAN is relates to a much large concept of need.

So how should the calculated affordable need be used to help determine housing needs and housing targets? The PG advises on this at the end of paragraph 29, after it has set out the calculation method:

'The total affordable housing need should then be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes.'

A third meaning?

- 12 In some quarters the above is interpreted as a third method of assessing housing need, based on yet another meaning of the term. In this interpretation, affordable need equals the result of the calculation at para 22-29 of the PG (the calculated affordable need). But the need for market housing is redefined as the amount of market housing that will pay for the calculated affordable need through developers' contributions.
- 13 To illustrate by example, consider an area where:
- Overall housing need, primarily based on demographic projections as per paras 015-020 of the PG, equals 800 new dwellings per annum (dpa).
 - Affordable need, as per paras 022-029, equals 600 dpa.
 - S106 agreements are delivering 30% affordable housing (and there is no other funding to support affordable housing development).
- 14 This example is not untypical: in many areas affordable need is a very high proportion of the overall need, sometimes over 100%. As discussed earlier, this is largely due to double-counting of the affordable backlog, but also because affordable need reflects a theoretical ideal while overall need rolls forward past reality. The affordable-led view

holds that the OAN is $600 / 0.3 = 2,000$ dpa – much more than the overall need derived from demographic projections.

- 15 This cannot be a reasonable way to assess overall housing need, because in relation to the market sector the number it produces bears no relation to the housing that people want or can afford. In our example, if the overall need of 800 dpa is a reasonable estimate of total demand but the plan allocates enough land for 2,000 dpa. Similarly in real life, in most cases this approach will mean providing land for market housing far in excess of likely demand. The practical implications include:
- Much of that allocated land will not be taken up;
 - And / or oversupply may affect viability, so less affordable housing can be delivered as a percentage of the total;
 - Hence the plan will not be deliverable, contrary to the NPPF.
 - If the area does deliver 2,000 dpa, it will be diverting demand from neighbouring and competing areas, who will find that *their* plans are not deliverable.
- 16 In our example, the only circumstance in which 2,000 dpa, including 600 affordable units, will be deliverable is if the assessed overall need of 800 dpa is a gross underestimate; so the true demand for market housing is 1,400 dpa or more, with enough viability to pay for 600 dpa of affordable dwellings as well. This may be the case in particular places, where planning has been severely undersupplying demand, and the adjustments that are part of the overall need calculation do not properly correct for that undersupply. But it must be the exception rather than the rule. If demographic projections for the country as a whole were a gross underestimate of the true demand for housing, then national policy and guidance would not point to these projections as the starting point in assessing housing need.
- 17 In summary, the affordable-led approach, as described above, is not a logical or practical way of arriving at objectively assessed housing need. We must look for a better way of building affordable housing need into the development plan.

A more robust approach

- 18 For this we go back to paragraph 029 of the PG, quoted earlier. A more reasonable interpretation of this advice, taking account of the discussion above, suggests that the plan-maker should proceed in six steps as follows:
- i Assess overall housing need as per paragraphs 015-020 of the PG, starting from demographic projections and adjusting them for factors that the projections do not capture, including market signals. The resulting number is the OAN.
 - ii Estimate how much of that total need could be delivered as new affordable housing, given the affordable housing contribution that can be viably generated from market housing developments.
 - iii Assess affordable need as per paras 022-029 of the PG.

- iv Compare this with the estimated affordable supply at stage ii, to see if providing land in line with the OAN would meet a reasonable proportion of the affordable need over a reasonable period of time.
 - v If not, consider raising the plan target above the OAN, so that more of the affordable need is met.
 - vi But avoid oversupplying land against the likely demand. Do not set a target so high that your plan, or those of neighbouring authorities, become undeliverable.
- 19 At the first step in the calculation, plan-makers or objectors sometimes make manual adjustments to add elements of affordable need, such as homeless households or 'concealed households' in affordable need. This is invalid, because it double-counts elements which are already accounted for in other parts of the assessment, such as the demographic projections or the affordable need assessment.

The approach recommended above is supported by Inspectors' advice. One example, which provides a detailed discussion of affordable need, is the Inspector's Preliminary Conclusions following the Eastleigh Local Plan examination (November 2014). The Eastleigh Inspector found that the Council had not done enough to address the area's affordable need. He advises that part of the solution is to provide market housing over and above the demographically projected need. But that extra provision should be no more than is required to compensate for supply shortfalls against demographic need in the rest of the housing market area. The Inspector notes that this shortfall is '*an opportunity for Eastleigh to deliver more housing with no adverse impact on delivery in the rest of the HMA*'.

- 20 He adds that providing more market housing (and thus increasing the total target) is not the only way to secure more affordable housing:

There may be other policy responses open to the Council in addition to some increase in market provision. At the hearing, the Council indicated that it was not relying on other provision to deliver affordable housing, but it may wish to review that approach bearing in mind its significant ownership of development land, the significance of the need identified and any difficulties in achieving substantial additional provision through the allocation of more market housing.'

- 21 Finally the Eastleigh Inspector notes:

'I regard increasing market housing to deliver more needed affordable housing as a policy response to the need, not itself part of the objectively assessed needs.'

- 22 This is an important principle. It says that affordable need, as per paras 022-029, is not part of the OAN:
- The OAN equals the PG's 'overall need', as discussed in paras 015-020.
 - That overall need already contains an affordable housing component, albeit it is not quantified separately, and generally not as large the affordable need at paras 022-029.

- The requirement at paras 14 and 47 of the NPPF, that planning should meet the OAN in full, applies to the OAN including that affordable element. It does not apply to the para 022-029 affordable need.
 - Rather, affordable need is a 'below-the-line' factor, which authorities should take into account when translating the OAN into a plan target (other such factors include cross-boundary unmet need and supply constraints).
- 23 The same conclusion is confirmed by the PG's advice above, that '*an increase in the total housing figures included in the local plan should be considered*' when it can help meet the affordable need. It seems clear that in this context 'figure' refers to provision targets rather than the OAN, because the OAN as its name indicates is objective evidence, which authorities cannot consider increasing (or indeed reducing). But they can, and do, consider increasing or reducing policy targets, because policy targets are matter for decision and judgment.

Satnam Millennium Ltd v Warrington Borough Council

- 24 The relationship between affordable need and the OAN was the subject of a recent High Court challenge against the Warrington Local Plan (Core Strategy), adopted in August 2014. The challenge was granted, one of the reasons being that that the Council had failed to identify the assessed need for affordable housing as the NPPF requires. The key part of the judgment, issued on 19 February 2015², reads:
- '43. The question is whether there has been compliance with [national] policy. I find that there has not been compliance. The reasons are as follows:*
- (i) The assessed need for affordable housing was 477 dpa.*
 - (ii) This assessed need was never expressed or included as part of the OAN.*
 - (iii) Under the "Housing Requirements" section of the Report the Inspector does not deal with affordable housing...*
 - (iv) Nor is there anything in Mr Bell's statement which suggests that the proper exercise was undertaken. This exercise is:*
 - (a) Having identified the OAN for affordable housing, that should then be considered in the context of its likely delivery as a proportion of mixed market/affordable housing development; an increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes [22];*
 - (b) the Local Plan should then meet the OAN for affordable housing, subject only to the constraints referred to in NPPF, paragraphs 14 and 47.'*
- 25 This finding comprises two main points. Firstly it says that the Council should have considered the affordable need in line with paragraph 029 of the PG. This is entirely consistent with our advice at paragraph 18. Secondly, through point (ii) above and phrase 'the OAN for affordable housing' at point (iv), it suggests – though does not state clearly – that the calculated affordable need is a constituent part of the OAN. We

² Satnam Millenium Ltd v Warrington Borough Council, [2015] EWHC 370 (Admin)

still believe that this cannot logically be the case, for the reasons given at paragraphs 8-**Error! Reference source not found.** below. Therefore in our opinion this aspect of the Satnam v Warrington judgment is an anomaly, which is likely to be resolved by new guidance or future judicial decisions.

Summary

- 26 The PG provides two alternative methods for assessing housing needs. The first method is described at paragraphs 15-20 of the document. It produces an objective assessment of overall need, covering both the market and affordable sectors, known as **objectively assessed need (the OAN)**. The second method is described at paragraphs 22-29 and produces an assessment of **affordable need**. The two methods are quite different. The OAN calculation starts from demographic projections, which are then adjusted to take account of factors which the projections do not capture, such as market signals. The affordable calculation counts people who do not have suitable housing and cannot obtain it in the market sector.
- 27 As a matter of principle the two measures are not directly comparable. As measured in the PG, they relate to different concepts of need:
- The OAN, as calculated at paragraphs 15-20, aims to measure reality - *what is likely to happen*, judging largely from past experience (demographic projections are the past rolled forward). By contrast, affordable need measures entitlement, or aspiration – *what ought to happen* if certain standards (suitable housing for everyone) are met. In relation to affordable housing past reality has mostly fallen short of entitlement / aspiration, due to financial constraints.
 - The OAN can only be met by adding net new homes to the housing stock. By contrast, affordable housing can be met at least in (large) part within the existing housing stock, because when existing households in unsuitable housing are transferred to suitable housing in the affordable sector the resulting vacant dwellings can be re-occupied by other households for whom they *are* suitable.
- 28 As a matter of practice there is no arithmetical way of combining the two measures. They cannot be added together to produce a measure of total need, because the OAN calculation in the PG already includes affordable housing – though this affordable component is unknown, because demographic projections cannot differentiate between the market and affordable sectors. Nor is affordable need a component of the OAN, because as noted earlier it can be met from the existing stock, not only net additional dwellings.
- 29 So affordable need cannot be arithmetically combined with the OAN calculated earlier in the PG. As an alternative approach, it has been suggested that the OAN equals the total housing development that would be required to pay for meeting the calculated affordable need through S106 contributions. In this view the demography-based calculation at paras 15-20 of the PG should be set aside, unless (improbably) it produces a smaller number than the S106 calculation. This view cannot be correct, because the resulting ‘need’ for market housing will bear no relation to what

households in that sector want or can pay for. Hence the calculation in general will greatly overstate the need or demand for market housing.

- 30 A more reasonable way to build affordable need into the development plan, based on paragraph 029 of the PG and consistent with our analysis above, is as follows:
- i Assess overall housing need as per paragraphs 015-020 of the PG. The resulting number is the OAN.
 - ii Estimate how much of that total need could be delivered as new affordable housing, given the affordable housing contribution that can be viably generated from market housing developments.
 - iii Assess affordable need as per paras 022-029.
 - iv Compare this with the estimated affordable supply at stage ii, to see if providing land in line with the OAN would meet a reasonable proportion of the affordable need over a reasonable period of time.
 - v If not, consider raising the plan target above the OAN, so that more of the affordable need is met.
 - vi But avoid oversupplying land against the likely demand. Do not set a target so high that your plan, or those of neighbouring authorities, become undeliverable. Also consider alternative options for providing more affordable housing, other than providing more land for market housing.
- 31 The above approach is used in this report to assess housing needs and advice on housing targets for Telford & Wrekin. In our view it is in line with paragraph 29 of the PG, as interpreted by planning inspectors in Eastleigh and elsewhere. However it may not sit easily with the recent *Satnam v Warrington* judgment, which appears to suggest that affordable need is a component of the OAN. Secondly, through point (ii) above and phrase ‘the OAN for affordable housing’ at point (iv), it suggests – though does not state clearly – that the calculated affordable need is a constituent part of the OAN. We believe that this cannot logically be the case, for reasons summarised at paragraphs 27-28 above. Therefore in our opinion this aspect of the *Satnam v Warrington* judgment is an anomaly, which is likely to be resolved by new guidance or future judicial decisions.

APPENDIX A

ECONOMIC FORECASTS

APPENDIX B
SECTOR-TO-LAND-USE MAPPING

To translate jobs by economic sector to jobs by land use, we make assumptions about which sectors (industries) are based in different types of employment space. The lists below show the industries which we associate with industrial space, warehouses and offices respectively. Economic sectors are defined by the Standard Industrial Classification (SIC) 2007.

Industrial sectors

- 10110 : Processing and preserving of meat
- 10120 : Processing and preserving of poultry meat
- 10130 : Production of meat and poultry meat products
- 10200 : Processing and preserving of fish, crustaceans and molluscs
- 10310 : Processing and preserving of potatoes
- 10320 : Manufacture of fruit and vegetable juice
- 10390 : Other processing and preserving of fruit and vegetables
- 10410 : Manufacture of oils and fats
- 10420 : Manufacture of margarine and similar edible fats
- 10511 : Liquid milk and cream production
- 10512 : Butter and cheese production
- 10519 : Manufacture of milk products (other than liquid milk and cream, butter, cheese) not elsewhere classified
- 10520 : Manufacture of ice cream
- 10611 : Grain milling
- 10612 : Manufacture of breakfast cereals and cereals-based foods
- 10620 : Manufacture of starches and starch products
- 10710 : Manufacture of bread; manufacture of fresh pastry goods and cakes
- 10720 : Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes
- 10730 : Manufacture of macaroni, noodles, couscous and similar farinaceous products
- 10810 : Manufacture of sugar
- 10821 : Manufacture of cocoa, and chocolate confectionery
- 10822 : Manufacture of sugar confectionery
- 10831 : Tea processing
- 10832 : Production of coffee and coffee substitutes
- 10840 : Manufacture of condiments and seasonings
- 10850 : Manufacture of prepared meals and dishes
- 10860 : Manufacture of homogenised food preparations and dietetic food

10890 : Manufacture of other food products not elsewhere classified

10910 : Manufacture of prepared feeds for farm animals

10920 : Manufacture of prepared pet foods

11010 : Distilling, rectifying and blending of spirits

11020 : Manufacture of wine from grape

11030 : Manufacture of cider and other fruit wines

11040 : Manufacture of other non-distilled fermented beverages

11050 : Manufacture of beer

11060 : Manufacture of malt

11070 : Manufacture of soft drinks; production of mineral waters and other bottled waters

12000 : Manufacture of tobacco products

13100 : Preparation and spinning of textile fibres

13200 : Weaving of textiles

13300 : Finishing of textiles

13910 : Manufacture of knitted and crocheted fabrics

13921 : Manufacture of soft furnishings

13922 : Manufacture of canvas goods, sacks etc

13923 : Manufacture of household textiles (other than soft furnishings of 13921)

13931 : Manufacture of woven or tufted carpets and rugs

13939 : Manufacture of carpets and rugs (other than woven or tufted) not elsewhere classified

13940 : Manufacture of cordage, rope, twine and netting

13950 : Manufacture of non-wovens and articles made from non-wovens, except apparel

13960 : Manufacture of other technical and industrial textiles

13990 : Manufacture of other textiles not elsewhere classified

14110 : Manufacture of leather clothes

14120 : Manufacture of workwear

14131 : Manufacture of men's outerwear, other than leather clothes and workwear

14132 : Manufacture of women's outerwear, other than leather clothes and workwear

14141 : Manufacture of men's underwear

14142 : Manufacture of women's underwear

14190 : Manufacture of other wearing apparel and accessories

14200 : Manufacture of articles of fur

14310 : Manufacture of knitted and crocheted hosiery

14390 : Manufacture of other knitted and crocheted apparel

15110 : Tanning and dressing of leather; dressing and dyeing of fur

15120 : Manufacture of luggage, handbags and the like, saddlery and harness

15200 : Manufacture of footwear

16100 : Sawmilling and planing of wood

16210 : Manufacture of veneer sheets and wood-based panels

16220 : Manufacture of assembled parquet floors

16230 : Manufacture of other builders' carpentry and joinery

16240 : Manufacture of wooden containers

16290 : Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials

17110 : Manufacture of pulp

17120 : Manufacture of paper and paperboard

17211 : Manufacture of corrugated paper and paperboard; manufacture of sacks and bags of paper

17219 : Manufacture of paper and paperboard containers other than sacks and bags

17220 : Manufacture of household and sanitary goods and of toilet requisites

17230 : Manufacture of paper stationery

17240 : Manufacture of wallpaper

17290 : Manufacture of other articles of paper and paperboard

18110 : Printing of newspapers

18121 : Manufacture of printed labels

18129 : Printing (other than printing of newspapers and printing on labels and tags) not elsewhere classified

18130 : Pre-press and pre-media services

18140 : Binding and related services

18201 : Reproduction of sound recording

18202 : Reproduction of video recording

18203 : Reproduction of computer media

19100 : Manufacture of coke oven products

19201 : Mineral oil refining

19209 : Other treatment of petroleum products (excluding mineral oil refining and petrochemicals manufacture)

20110 : Manufacture of industrial gases
20120 : Manufacture of dyes and pigments
20130 : Manufacture of other inorganic basic chemicals
20140 : Manufacture of other organic basic chemicals
20150 : Manufacture of fertilisers and nitrogen compounds
20160 : Manufacture of plastics in primary forms
20170 : Manufacture of synthetic rubber in primary forms
20200 : Manufacture of pesticides and other agrochemical products
20301 : Manufacture of paints, varnishes and similar coatings, mastics and sealants
20302 : Manufacture of printing ink
20411 : Manufacture of soap and detergents
20412 : Manufacture of cleaning and polishing preparations
20420 : Manufacture of perfumes and toilet preparations
20510 : Manufacture of explosives
20520 : Manufacture of glues
20530 : Manufacture of essential oils
20590 : Manufacture of other chemical products not elsewhere classified
20600 : Manufacture of man-made fibres
21100 : Manufacture of basic pharmaceutical products
21200 : Manufacture of pharmaceutical preparations
22110 : Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
22190 : Manufacture of other rubber products
22210 : Manufacture of plastic plates, sheets, tubes and profiles
22220 : Manufacture of plastic packing goods
22230 : Manufacture of builders' ware of plastic
22290 : Manufacture of other plastic products
23110 : Manufacture of flat glass
23120 : Shaping and processing of flat glass
23130 : Manufacture of hollow glass
23140 : Manufacture of glass fibres
23190 : Manufacture and processing of other glass, including technical glassware
23200 : Manufacture of refractory products
23310 : Manufacture of ceramic tiles and flags

23320 : Manufacture of bricks, tiles and construction products, in baked clay
23410 : Manufacture of ceramic household and ornamental articles
23420 : Manufacture of ceramic sanitary fixtures
23430 : Manufacture of ceramic insulators and insulating fittings
23440 : Manufacture of other technical ceramic products
23490 : Manufacture of other ceramic products
23510 : Manufacture of cement
23520 : Manufacture of lime and plaster
23610 : Manufacture of concrete products for construction purposes
23620 : Manufacture of plaster products for construction purposes
23630 : Manufacture of ready-mixed concrete
23640 : Manufacture of mortars
23650 : Manufacture of fibre cement
23690 : Manufacture of other articles of concrete, plaster and cement
23700 : Cutting, shaping and finishing of stone
23910 : Production of abrasive products
23990 : Manufacture of other non-metallic mineral products not elsewhere classified
24100 : Manufacture of basic iron and steel and of ferro-alloys
24200 : Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
24310 : Cold drawing of bars
24320 : Cold rolling of narrow strip
24330 : Cold forming or folding
24340 : Cold drawing of wire
24410 : Precious metals production
24420 : Aluminium production
24430 : Lead, zinc and tin production
24440 : Copper production
24450 : Other non-ferrous metal production
24460 : Processing of nuclear fuel
24510 : Casting of iron
24520 : Casting of steel
24530 : Casting of light metals
24540 : Casting of other non-ferrous metals

25110 : Manufacture of metal structures and parts of structures
25120 : Manufacture of doors and windows of metal
25210 : Manufacture of central heating radiators and boilers
25290 : Manufacture of other tanks, reservoirs and containers of metal
25300 : Manufacture of steam generators, except central heating hot water boilers
25400 : Manufacture of weapons and ammunition
25500 : Forging, pressing, stamping and roll-forming of metal; powder metallurgy
25610 : Treatment and coating of metals
25620 : Machining
25710 : Manufacture of cutlery
25720 : Manufacture of locks and hinges
25730 : Manufacture of tools
25910 : Manufacture of steel drums and similar containers
25920 : Manufacture of light metal packaging
25930 : Manufacture of wire products, chain and springs
25940 : Manufacture of fasteners and screw machine products
25990 : Manufacture of other fabricated metal products not elsewhere classified
26110 : Manufacture of electronic components
26120 : Manufacture of loaded electronic boards
26200 : Manufacture of computers and peripheral equipment
26301 : Manufacture of telegraph and telephone apparatus and equipment
26309 : Manufacture of communication equipment (other than telegraph and telephone apparatus and equipment)
26400 : Manufacture of consumer electronics
26511 : Manufacture of electronic instruments and appliances for measuring, testing, and navigation, except industrial process control equipment
26512 : Manufacture of electronic industrial process control equipment
26513 : Manufacture of non-electronic instruments and appliances for measuring, testing and navigation, except industrial process control equipment
26514 : Manufacture of non-electronic industrial process control equipment
26520 : Manufacture of watches and clocks
26600 : Manufacture of irradiation, electromedical and electrotherapeutic equipment
26701 : Manufacture of optical precision instruments

26702 : Manufacture of photographic and cinematographic equipment
26800 : Manufacture of magnetic and optical media
27110 : Manufacture of electric motors, generators and transformers
27120 : Manufacture of electricity distribution and control apparatus
27200 : Manufacture of batteries and accumulators
27310 : Manufacture of fibre optic cables
27320 : Manufacture of other electronic and electric wires and cables
27330 : Manufacture of wiring devices
27400 : Manufacture of electric lighting equipment
27510 : Manufacture of electric domestic appliances
27520 : Manufacture of non-electric domestic appliances
27900 : Manufacture of other electrical equipment
28110 : Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
28120 : Manufacture of fluid power equipment
28131 : Manufacture of pumps
28132 : Manufacture of compressors
28140 : Manufacture of other taps and valves
28150 : Manufacture of bearings, gears, gearing and driving elements
28210 : Manufacture of ovens, furnaces and furnace burners
28220 : Manufacture of lifting and handling equipment
28230 : Manufacture of office machinery and equipment (except computers and peripheral equipment)
28240 : Manufacture of power-driven hand tools
28250 : Manufacture of non-domestic cooling and ventilation equipment
28290 : Manufacture of other general-purpose machinery not elsewhere classified
28301 : Manufacture of agricultural tractors
28302 : Manufacture of agricultural and forestry machinery (other than agricultural tractors)
28410 : Manufacture of metal forming machinery
28490 : Manufacture of other machine tools
28910 : Manufacture of machinery for metallurgy
28921 : Manufacture of machinery for mining
28922 : Manufacture of earthmoving equipment
28923 : Manufacture of equipment for concrete crushing and screening roadworks

28930 : Manufacture of machinery for food, beverage and tobacco processing
28940 : Manufacture of machinery for textile, apparel and leather production
28950 : Manufacture of machinery for paper and paperboard production
28960 : Manufacture of plastics and rubber machinery
28990 : Manufacture of other special-purpose machinery not elsewhere classified
29100 : Manufacture of motor vehicles
29201 : Manufacture of bodies (coachwork) for motor vehicles (except caravans)
29202 : Manufacture of trailers and semi-trailers
29203 : Manufacture of caravans
29310 : Manufacture of electrical and electronic equipment for motor vehicles
29320 : Manufacture of other parts and accessories for motor vehicles
30110 : Building of ships and floating structures
30120 : Building of pleasure and sporting boats
30200 : Manufacture of railway locomotives and rolling stock
30300 : Manufacture of air and spacecraft and related machinery
30400 : Manufacture of military fighting vehicles
30910 : Manufacture of motorcycles
30920 : Manufacture of bicycles and invalid carriages
30990 : Manufacture of other transport equipment not elsewhere classified
31010 : Manufacture of office and shop furniture
31020 : Manufacture of kitchen furniture
31030 : Manufacture of mattresses
31090 : Manufacture of other furniture
32110 : Striking of coins
32120 : Manufacture of jewellery and related articles
32130 : Manufacture of imitation jewellery and related articles
32200 : Manufacture of musical instruments
32300 : Manufacture of sports goods
32401 : Manufacture of professional and arcade games and toys
32409 : Manufacture of games and toys (other than professional and arcade games and toys) not elsewhere classified
32500 : Manufacture of medical and dental instruments and supplies
32910 : Manufacture of brooms and brushes

32990 : Other manufacturing not elsewhere classified

33110 : Repair of fabricated metal products

33120 : Repair of machinery

33130 : Repair of electronic and optical equipment

33140 : Repair of electrical equipment

33150 : Repair and maintenance of ships and boats

33160 : Repair and maintenance of aircraft and spacecraft

33170 : Repair and maintenance of other transport equipment

33190 : Repair of other equipment

33200 : Installation of industrial machinery and equipment

37000 : Sewerage

38110 : Collection of non-hazardous waste

38120 : Collection of hazardous waste

38210 : Treatment and disposal of non-hazardous waste

38220 : Treatment and disposal of hazardous waste

38310 : Dismantling of wrecks

38320 : Recovery of sorted materials

43210 : Electrical installation

43220 : Plumbing, heat and air-conditioning installation

43290 : Other construction installation

43310 : Plastering

43320 : Joinery installation

43330 : Floor and wall covering

43341 : Painting

43342 : Glazing

43390 : Other building completion and finishing

43910 : Roofing activities

43991 : Scaffold erection

43999 : Specialised construction activities (other than scaffold erection) not elsewhere classified

45200 : Maintenance and repair of motor vehicles

45400 : Sale, maintenance and repair of motorcycles and related parts and accessories

95110 : Repair of computers and peripheral equipment

95120 : Repair of communication equipment

95210 : Repair of consumer electronics

95220 : Repair of household appliances and home and garden equipment

95230 : Repair of footwear and leather goods

95240 : Repair of furniture and home furnishings

95250 : Repair of watches, clocks and jewellery

95290 : Repair of other personal and household goods

Warehouse sectors

46110 : Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods

46120 : Agents involved in the sale of fuels, ores, metals and industrial chemicals

46130 : Agents involved in the sale of timber and building materials

46140 : Agents involved in the sale of machinery, industrial equipment, ships and aircraft

46150 : Agents involved in the sale of furniture, household goods, hardware and ironmongery

46160 : Agents involved in the sale of textiles, clothing, fur, footwear and leather goods

46170 : Agents involved in the sale of food, beverages and tobacco

46180 : Agents specialised in the sale of other particular products

46190 : Agents involved in the sale of a variety of goods

46210 : Wholesale of grain, unmanufactured tobacco, seeds and animal feeds

46220 : Wholesale of flowers and plants

46230 : Wholesale of live animals

46240 : Wholesale of hides, skins and leather

46310 : Wholesale of fruit and vegetables

46320 : Wholesale of meat and meat products

46330 : Wholesale of dairy products, eggs and edible oils and fats

46341 : Wholesale of fruit and vegetable juices, mineral waters and soft drinks

46342 : Wholesale of wine, beer, spirits and other alcoholic beverages

46350 : Wholesale of tobacco products

46360 : Wholesale of sugar and chocolate and sugar confectionery

46370 : Wholesale of coffee, tea, cocoa and spices

46380 : Wholesale of other food, including fish, crustaceans and molluscs

46390 : Non-specialised wholesale of food, beverages and tobacco

- 46410 : Wholesale of textiles
- 46420 : Wholesale of clothing and footwear
- 46431 : Wholesale of gramophone records, audio tapes, compact discs and video tapes and of the equipment on which these are played
- 46439 : Wholesale of radio and television goods and of electrical household appliances (other than of gramophone records, audio tapes, compact discs and video tapes and the equipment on which these are played) n.e.c.
- 46440 : Wholesale of china and glassware and cleaning materials
- 46450 : Wholesale of perfume and cosmetics
- 46460 : Wholesale of pharmaceutical goods
- 46470 : Wholesale of furniture, carpets and lighting equipment
- 46480 : Wholesale of watches and jewellery
- 46491 : Wholesale of musical instruments
- 46499 : Wholesale of household goods (other than musical instruments) not elsewhere classified
- 46510 : Wholesale of computers, computer peripheral equipment and software
- 46520 : Wholesale of electronic and telecommunications equipment and parts
- 46610 : Wholesale of agricultural machinery, equipment and supplies
- 46620 : Wholesale of machine tools
- 46630 : Wholesale of mining, construction and civil engineering machinery
- 46640 : Wholesale of machinery for the textile industry and of sewing and knitting machines
- 46650 : Wholesale of office furniture
- 46660 : Wholesale of other office machinery and equipment
- 46690 : Wholesale of other machinery and equipment
- 46711 : Wholesale of petroleum and petroleum products
- 46719 : Wholesale of fuels and related products (other than petroleum and petroleum products)
- 46720 : Wholesale of metals and metal ores
- 46730 : Wholesale of wood, construction materials and sanitary equipment
- 46740 : Wholesale of hardware, plumbing and heating equipment and supplies
- 46750 : Wholesale of chemical products
- 46760 : Wholesale of other intermediate products
- 46770 : Wholesale of waste and scrap
- 46900 : Non-specialised wholesale trade

49410 : Freight transport by road

49420 : Removal services

52101 : Operation of warehousing and storage facilities for water transport activities of division 50

52102 : Operation of warehousing and storage facilities for air transport activities of division 51

52103 : Operation of warehousing and storage facilities for land transport activities of division 49

52211 : Operation of rail freight terminals

52212 : Operation of rail passenger facilities at railway stations

52213 : Operation of bus and coach passenger facilities at bus and coach stations

52219 : Other service activities incidental to land transportation, not elsewhere classified (not including operation of rail freight terminals, passenger facilities at railway stations or passenger facilities at bus and coach stations)

52241 : Cargo handling for water transport activities of division 50

52242 : Cargo handling for air transport activities of division 51

52243 : Cargo handling for land transport activities of division 49

53100 : Postal activities under universal service obligation

53201 : Licensed Carriers

53202 : Unlicensed Carriers

82920 : Packaging activities

Office sectors

58110 : Book publishing

58120 : Publishing of directories and mailing lists

58130 : Publishing of newspapers

58141 : Publishing of learned journals

58142 : Publishing of consumer, business and professional journals and periodicals

58190 : Other publishing activities

59111 : Motion picture production activities

59112 : Video production activities

59113 : Television programme production activities

59120 : Motion picture, video and television programme post-production activities

59131 : Motion picture distribution activities

59132 : Video distribution activities

59133 : Television programme distribution activities
59200 : Sound recording and music publishing activities
60100 : Radio broadcasting
60200 : Television programming and broadcasting activities
62011 : Ready-made interactive leisure and entertainment software development
62012 : Business and domestic software development
62020 : Computer consultancy activities
62030 : Computer facilities management activities
62090 : Other information technology and computer service activities
63110 : Data processing, hosting and related activities
63120 : Web portals
63910 : News agency activities
63990 : Other information service activities not elsewhere classified
64110 : Central banking
64191 : Banks
64192 : Building societies
64201 : Activities of agricultural holding companies
64202 : Activities of production holding companies
64203 : Activities of construction holding companies
64204 : Activities of distribution holding companies
64205 : Activities of financial services holding companies
64209 : Activities of other holding companies (not including agricultural, production, construction, distribution and financial services holding companies) n.e.c
64301 : Activities of investment trusts
64302 : Activities of unit trusts
64303 : Activities of venture and development capital companies
64304 : Activities of open-ended investment companies
64305 : Activities of property unit trusts
64306 : Activities of real estate investment trusts
64910 : Financial leasing
64921 : Credit granting by non-deposit taking finance houses and other specialist consumer credit grantors
64922 : Activities of mortgage finance companies

64929 : Other credit granting (not including credit granting by non-deposit taking finance houses and other specialist consumer credit grantors and activities of mortgage finance companies) n.e.c.

64991 : Security dealing on own account

64992 : Factoring

64999 : Other financial service activities, except insurance and pension funding, (not including security dealing on own account and factoring) n.e.c.

65110 : Life insurance

65120 : Non-life insurance

65201 : Life reinsurance

65202 : Non-life reinsurance

65300 : Pension funding

66110 : Administration of financial markets

66120 : Security and commodity contracts brokerage

66190 : Other activities auxiliary to financial services, except insurance and pension funding

66210 : Risk and damage evaluation

66220 : Activities of insurance agents and brokers

66290 : Other activities auxiliary to insurance and pension funding

66300 : Fund management activities

68100 : Buying and selling of own real estate

68201 : Renting and operating of Housing Association real estate

68202 : Letting and operating of conference and exhibition centres

68209 : Letting and operating of own or leased real estate (other than Housing Association real estate and conference and exhibition services) n.e.c.

68310 : Real estate agencies

68320 : Management of real estate on a fee or contract basis

69101 : Barristers at law

69102 : Solicitors

69109 : Activities of patent and copyright agents; other legal activities (other than those of barristers and solicitors) not elsewhere classified

69201 : Accounting, and auditing activities

69202 : Bookkeeping activities

69203 : Tax consultancy

70100 : Activities of head offices

70210 : Public relations and communication activities
70221 : Financial management
70229 : Management consultancy activities (other than financial management)
71111 : Architectural activities
71112 : Urban planning and landscape architectural activities
71121 : Engineering design activities for industrial process and production
71122 : Engineering related scientific and technical consulting activities
71129 : Other engineering activities (not including engineering design for industrial process and production or engineering related scientific and technical consulting activities)
71200 : Technical testing and analysis
72110 : Research and experimental development on biotechnology
72190 : Other research and experimental development on natural sciences and engineering
72200 : Research and experimental development on social sciences and humanities
73110 : Advertising agencies
73120 : Media representation
73200 : Market research and public opinion polling
74300 : Translation and interpretation activities
74901 : Environmental consulting activities
74902 : Quantity surveying activities
74909 : Other professional, scientific and technical activities (not including environmental consultancy or quantity surveying)
77400 : Leasing of intellectual property and similar products, except copyrighted works
78101 : Motion picture, television and other theatrical casting
78109 : Activities of employment placement agencies (other than motion picture, television and other theatrical casting) not elsewhere classified
78200 : Temporary employment agency activities
78300 : Other human resources provision
80100 : Private security activities
80200 : Security systems service activities
80300 : Investigation activities
82110 : Combined office administrative service activities
82190 : Photocopying, document preparation and other specialised office support activities
82200 : Activities of call centres

- 82301 : Activities of exhibition and fair organizers
- 82302 : Activities of conference organizers
- 82911 : Activities of collection agencies
- 82912 : Activities of credit bureaus
- 82990 : Other business support service activities not elsewhere classified
- 84110 : General public administration activities
- 84120 : Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
- 84130 : Regulation of and contribution to more efficient operation of businesses
- 84210 : Foreign affairs
- 84300 : Compulsory social security activities
- 94110 : Activities of business and employers membership organisations
- 94120 : Activities of professional membership organisations
- 94200 : Activities of trade unions
- 94910 : Activities of religious organisations
- 94920 : Activities of political organisations
- 94990 : Activities of other membership organisations not elsewhere classified

APPENDIX C

YORKSHIRE FORWARD REPORT

