South of Scotland Alliance, as a co-operative group of public sector bodies, has no interest in acquisition or diect use of the proposed spectrum allocations. We are however keenly interested in the potential for 4G applications to address some the NGA deficiences that the large rural area we represent suffers, and for the licence award conditions to mandate equitable service delivery under the UK Government's Digital Britain proposals for at least a Universal Service Commitment if not Obligation. In this response we use the term "Open Access" to mean an obligation at the wholesale level to accept and carry and transfer other retail operator data traffic on competitive terms, and / or permit shared access to and use of mast site infrastructure in a manner comparable to BT's Open Reach undertakings and proposals for PIA sharing in fixed line systems.

Question 4.1: What use, if any, would you make of the top 2x10 MHz of the 800 MHz band in the second half of 2012 if it were available for use? What would be the benefits for citizen and consumers of such availability?:

No comment

Question 4.2: If we were to offer shared access low-power licences in some way, do you have any comments on the appropriate technical licence conditions which would apply for the different options?:

No comment

Question 5.1: Do you agree that national wholesalers need a reasonable overall portfolio of spectrum to be credible providers of higher quality data services? In particular, do you agree that national wholesalers need some sub-1 GHz in order credibly to be able to offer higher quality data services? Please state the reasons for your views.:

Yes. The auction should be aligned with the Government's proposals to deliver the Digital Britain ambition, which recognises the importance of mobile network coverage to higher quality broadband services, particularly in rural areas. We understand larger contiguous blocks of spectrum will be required to realise the higher quality data services of LTE than was required to support older mobile standards. There will also be a trade off between the sub 1GHz spectrum advantages for signal range propagation in rural areas (as well as building penetration in built up areas) and the higher data carrying capacity of 2.6Ghz spectrum. The goal should be to support maximisation of the potential of LTE for higher quality data servivces, not simply to ensure the minimum USC service level. Having regard to the relative values of the indicative reserve prices we do not think it is clear cut how operators would choose to deploy networks, in pursuit of higher quality data throughput, between the two bands, and therefore feel a reasonable overall portfolio of spectrum is essential for national wholesale service provision.

Question 5.2: Do you agree there is a material risk of a significant reduction in the competitive pressures, at least to provide higher quality data services, in

retail and wholesale markets without measures in the auction to promote competition? Please state the reasons for your views.:

No. We disagree that competition should be the predominant objective at the wholesale level. It is more important to ensure that adequate operators of scale with sufficient spectrum bandwidth have the ability (and financial confidence) to build out sufficient RAN infrastructure to offer ubiquitous coverage and future proofed network capacity. Competition at the retail level in the market can be maintained by mandatory licence conditions compelling an Open Access policy towards reciprocal access arrangements between MNOs and accepting wholesale traffic from MVNOs onto the wholesale network in a similar principle to the arrangement with BT on the fixed line network. This may mean there is a need for the regulator to maintain a more pro-active approach to monitoring and managing market behaviour but we consider that an appropriate alternative strategy.

Question 5.3: Do you agree there is a risk of potentially beneficial sub-national RAN uses not developing without measures to promote competition? Please state the reasons for your views.:

No. Spectrum is a scarce national asset which the Regulator is tasked with ensuring is used in the national interest. While it is preferable for the market to be self regulating through competion, if the market fails to operate optimally, the regulator has the power (and duty) to regulate and should impose licence conditions that allow for the effective exercise of that power if necessary.

Question 5.4: Do you agree with the analysis that at least four competitors are necessary to promote competition?:

No. Elsewhere in the consultation the Regulator proposes that only one licence may carry a near universal coverage obligation, which of itself compromises the proposition that competition is the essential or predominant objective. Equally, recent market evidence points to continuing market consolidation between operators. We consider it more important to ensure that there is ubquitous and equitable coverage provided at the infrastructure and wholesale levels and that other market mechanisms are possible to retain competition at the retail level to protect consumer interests. To avoid excluding rural businesses and consumers from 4G (as many have been from 3G) it would be better to have fewer networks nationally but with a greater licence obligation to achieve high coverage and a licence regime which encourages/incentivises open access arrangements for other operators at the wholesale market level.

Question 5.5: Do you agree that the specific measures we propose to take to ensure there are at least four holders of such spectrum portfolios are appropriate and proportionate?:

We would concur with the proposals for Spectrum Caps to protect against over-consolidation of market power but are not persuded by the argument around Spectrum Floors to ensure a minimum number of competitors enter the market. As the current 4 operator model in the UK market does not preserve the same level of competition uniformly throughout the country and results in sub-optimal coverage and competition levels in the sub-prime market areas we do not consider that number of operators in the new spectrum allocation would result in any

better outcome. We believe more ubiquitous and equitable coverage is more important than more competition.

Question 5.6: Given the measures we propose to take to ensure four holders of spectrum portfolios sufficient credibly to provide higher speed data services, do you agree that it would not be appropriate or proportionate to introduce a regulated access condition into the mobile spectrum licences to be awarded in the combined award?:

No. Having an explicit and live access obligation in any licence conditions gives operators clarity over expected service and performance obligations, allowing them to factor investment cost effects into their auction price valuation calculations. It may reduce the cash premium operators may be prepared to pay for licences but it would give greater certainty over the civic and citizen benefits realisable for the wider national interest.

Question 5.7: Do you consider that we should take measures to design the auction to assist low-power shared use of 2.6 GHz? If so, what specific measures do you consider we should take?:

No comment

Question 6.1: Do you have any comments on the proposal to include in one of the 800 MHz licences an obligation to serve by the end of 2017 an area in which 95% of the UK population lives, while providing a sustained downlink speed of 2Mbps with a 90% probability of indoor reception? Do you think there is another way of specifying a coverage obligation that would be preferable?:

Given the anticipated use of the combined spectrum and the recognition of the critical importance of mobile networks to the achievement of the Government's Digital Britain ambition, it seems inconceivable that the auction arrangements should not be constructed to maximise the coverage and service quality potential of the spectrum asset, particularly for areas of the country where mobile represents a far more cost effective option than fixed line deployments of fibre networks. If a balance needs to be struck between competition (in market areas that will sustain it and those that will not) and coverage then we would propose that one national "safeguard" licence could be offered with a trade off between low or no licence price premium (as with Public Service Broadcast) and stringent obligations to deliver universal service coverage at target Superfast broadband speeds rather than the current minimal USC data rate.

We also regard the target of 2017 as unambitious and too vague. Whilst we regocnise that delivery will be gradual, we would wish to see significant progress being made in the rollout of 4G by 2015, which is in line with the Scottish Government's Digital Strategy, published on 3 March 2011. We would like to see the license obligation(s) contain clear milestones for coverage targets for the years to 2017.

Question 6.2: We would welcome views and evidence on the costs and benefits of imposing an additional coverage obligation focussed on particular

geographical areas, and if such an obligation were to be imposed what might be the appropriate specification of geographic areas?:

Evidence recently supplied to us by SQW consulting points to both the rural South of Scotland and the Highlands and Islands area having experienced economic (GVA) growth outcomes ahead of historical trend forecast since the deployment of first generation broadband, and that approximately 60% of that extra growth is directly attributable to broadband availability. Licence conditions therefore need to ensure that population coverage is maximised and dispersed equitably for next generation service. If a target level of less than 100% coverage is to be set then it must carry some granularity parameter to ensure that (say) 95% coverage is achieved within regional boundaries and not just the UK as a whole, since the evidence of existing licence arrangements is that coverage patterns are not uniform. Local Unitory Authority boundaries would seem to offer an appropriate administrative framework if the obligation is to be as low as 95%.

This may not be too difficult to realise as data from the 2001 census shows that, up to the 90th percentile, the population of Scotland is geographically more densly concentrated than in England (reference: p.53 in Digital Scotland, The Royal Society of Edinburgh).

Question 6.3: Do you have any comments or evidence on whether an additional obligation should be imposed to require coverage on specific roads?:

From the point of view of supporting the mobile worker and freight and distribution sectors of the economy, full coverage of all A class roads and main line rail routes, as a minimum would seem reasonable. For the avoidance of doubt, this ambition is in addition to and not instead of, as close to 100% population coverage as possible.

Question 6.4: Do you have any comments on our proposal not to use the combined award to address existing not-spots?:

If conditions were attached to at least one licence to mandate a universal service cover, or granularity targets were sufficiently ambitious on a regional basis as well as national population coverage basis, then this may be not be much of an issue. Otherwise, given the extensive presence of not spots in our region we would ask that this issue is revisited and a more effective option to redress the problem is incorporated into the auction conditions.

Question 6.5: Do you have any comments on our proposal not to impose ?use it or sell it? obligations but to consider including an additional power to revoke during the initial term of the licences?:

If licence conditions were imposed at the wholesale level to mandate Open Access obligations on licence holders then the possibility would exist for operators to sub-licence spectrum they could not make a commercial case for operating themselves in parts of the country, to local operators. The safeguard of a power to revoke is sensible if a licence holder fails to make substantive use of their spectrum allocation (as with the example cited of the 28GHz bands in 2000).

Question 7.1: Do you have any comments on the proposals relating to the duration of the initial licence period, our rights to revoke the licence during this period, the charging of licence fees after the end of the initial period and our additional revocation powers following the initial period?:

No comment

Question 7.2: Do you have any comments on the proposal to amend the spectrum Trading Regulations to apply to the auctioned licences in the 800 MHz and 2.6 GHz bands, to include a competition check before we consent to a spectrum trade of mobile spectrum and not to allow transfers that would increase the number of 2.6 GHz low-power licensees?:

No comment

Question 7.3: We welcome views on the merits of the proposed approach to information provision, in particular concerning the type of information that may be helpful and any impacts that publication of information might have both on licence holders and the wider spectrum market.:

Our understanding is that Ofcom currently has the power to oblige providers to provide it with data pertaining to their networks (e.g. mapping or similar information), and that this is an opportunity which is currently being missed. Whilst we appreciate the commercially sensitive nature of such data, we believe that it is in the interests of national governments and other policy makers to have access to this information. Ascertaining the extent of both existing and planned fixed and mobile networks would greatly enhance the Scottish Government's ability to focus its future interventions, and indeed this features as an action in our Digital Strategy. Therefore we would encourage Ofcom to make the provision of mapping data relating to planned and actual 4G networks an integral part of the licence conditions.

Question 8.1: Do you agree with the way in which we are taking account of the main factors relevant to spectrum packaging and why?:

No comment

Question 8.2: Are there other factors that we should consider to develop our approach to packaging? If so which ones and why?:

No comment

Question 8.3: Do you agree with our packaging proposals for the 800 MHz band? Please give reasons for your answer.:

No comment

Question 8.4: Do you agree with our proposal not to allow relinquishment of 900 MHz spectrum and why? Do you have any other comments regarding our packaging proposals for the 900 MHz band?:

No comment

Question 8.5: Do you agree with our proposal not to allow relinquishment of 1800 MHz spectrum and why? Do you have any other comments regarding our packaging proposals for the 1800 MHz band?:

No comment

Question 8.6: Do you agree with our proposal not to make provisions to include 2.1 GHz spectrum in this auction and why?:

No comment

Question 8.7: Which aspects of our packaging proposals for the 2.6 GHz band do you agree with and why?:

No comment

Question 8.8: Do you agree with our proposed approach for eligibility points and why?:

No comment

Question 8.9: Which approach to reserve prices do you think would be most appropriate to secure optimal spectrum use in the interests of citizens and consumers, and why?:

We recognise that our proposals in favour of coverage obligations could compromise the levels of reserve prices that may be obtainable. Since Ofcom has repeatedly assured that revenue generation from auctions is not their primary purpose, we believe that the national interest, from both economic development and social inclusion perspectives, would be better served by consideration of least one spectrum award being made on a comparable principle to Public Service Broadcasting, whereby spectrum use is favourably discounted in return for acceptance of marginally or non-commercial service obligations.

Question 9.1: Do you agree with our proposals for the auction design and why?:

No comment

Question 9.2: Do you have any comments on the proposed auction rules as explained in section 9, Annex 9 and Annex 10?:

No comment

Question 9.3: Do you have any comments on how we should approach the payment of deposits and licence fees?:

No comment

Question 10.1: Do you have any comments on our proposal to use 800 MHz price information as derived from the auction to estimate the full market value of 900 MHz spectrum?:

No comment

Question 10.2: Do you have any comments on our proposal to use an average of 800 MHz and 2.6 GHz price information as derived from the auction to estimate the full market value of 1800 MHz spectrum?:

No comment

Question 10.3: Do you have any comments on the proposed approach to convert lump sum amounts into annual payment?:

No comment