Introduction and Background

1. Mobile UK is the trade association for the UK’s main four mobile operators EE, Three, Virgin Media O2 and Vodafone and we welcome the opportunity to respond to the Department of Energy Security and Net Zero’s consultation on “Strategy and Policy Statement for energy Policy in Great Britain”.

2. Mobile UK’s members operate Critical National Infrastructure (CNI) and are large users of electricity in the UK – particularly green energy; as such, Mobile UK is responding from the perspective of a large corporate user of electricity.

3. As such, and having no expert input on the respective roles of Ofgem and the Future System Operator, we are focusing on Question 1 of the consultation.

Consultation Question 1

*Does the strategy and policy statement identify the most important strategic priorities and policy outcomes for government in formulating policy for the energy sector in Great Britain? If not, please provide details of the priorities that you think should be included.*

The Government has set out the strategic priorities as follows:

- Enabling clean energy and net zero infrastructure
- Ensuring energy security and protecting consumers
- Ensuring the energy system is fit for the future.

4. Mobile UK supports the overarching strategic objectives. We make the following observations and comments and set out the context in which we make them below:

   - The term ‘consumers’ should specifically call out ‘household and business’ consumers. Energy policy should be taking equal account of the needs of household consumers and businesses, some of which are very large users of power. The energy costs borne by businesses ultimately flow through to households and energy policy must work to the benefit of the whole UK economy and society.

   - Businesses must be able to increase the proportion of green energy they use, and this will need access to the relevant infrastructure.

   - We agree it is necessary to have an energy system which is secure and resilient. ‘Resilient’ should encompass both reliability and speed of recovery. Currently
insufficient attention is given to the speed and process of power restoration (however resilient and reliable, power networks will be subjected to adverse weather events from time to time.)

- The Strategy is seeking to balance many [potentially competing] objectives: cost, carbon neutrality, capacity, security, and resilience. The Review of Energy Market Arrangements is thus unavoidably complex and multi-faceted. Complexity notwithstanding, it is necessary to maintain strong momentum. The longer REMA takes, the longer regulatory uncertainty will hang over the energy market, uncertainty that can drive up cost, compromise energy security and cause delays in reaching the UK’s net zero targets. We urge that the REMA work continues to make progress towards delivering the Government’s strategic objectives.

- Mobile UK would also like to highlight a potential pinch point in the system: the planning process. It is estimated that the transition to net zero will require a tripling of the amount of electricity generated, with knock-on impacts on transmission, and distribution networks. The experience of the mobile sector is that local authority planning offices in many regions are very under-resourced, lack specialist knowledge and face many competing calls on their time from energy, telecoms, housing and other infrastructure. This issue is a systemic threat to much infrastructure investment.

Energy and the mobile sector

5. The mobile sector is now regarded as Critical National Infrastructure and is a heavy user of electricity. We are very reliant on it to maintain mobile services; the 40k or so mobile masts have very limited, if any, self-provided back-up power. We also have our own net zero targets.

6. Our main concerns in the electricity market therefore centre around:
   - cost,
   - capacity & security of supply,
   - resilience & recovery,
   - de-carbonisation

Cost

7. Telecoms networks, including mobile networks, are very large consumers of power. For example, BT has stated it consumes around 1% of all electricity in the UK. Other operators are also high users. The recent rise in energy prices has put huge pressure on telecom providers. In a highly competitive market, any additional costs are difficult to pass on to consumers. Moreover, there is huge pressure to ensure that telecoms services are affordable to all consumers.

8. This pressure is aggravated by the fact mobile networks are carrying 20 times the data traffic they carried ten years ago and traffic is forecast by Ofcom to grow 20 times further in the next ten years. High energy costs have a very negative impact on cashflow and the sector’s capacity to invest in much needed new capacity.
9. Telecoms providers are not part of the Energy Intensive Industry scheme and so do not qualify for enhanced support in times of very high energy costs.

10. Energy market reform must lead to high availability of green, secure energy produced at a competitive price.

**Capacity and security of supply**

11. In the run-up to the winter of 2022/23, the telecoms operators, as providers of ‘Critical National Infrastructure’ were very concerned by the power industry’s warnings that the grid may have insufficient peak capacity during cold weather events.

12. We understood that rolling regional shutdowns to lighten the peak load were being considered. While some core network infrastructure could cope with this, there are around 40k masts in the UK, many or even most of which would not have remained active for the whole of a three-hour shutdown, leaving customers without mobile phone coverage.

13. Operators encountered a number of issues with this, such having easy access to the information about rolling shutdowns and being able to map the impact on mobile coverage.

14. In the event, no shutdowns were needed, but the administrative and communications cost to our mobile operators and their customers would have been considerable, if they had been. Strategically, the correct approach is for adequate capacity to be centrally procured rather than individual industries have to invest in their own reserve capacity.

15. In addition, Mobile UK would also like to highlight a potential pinch point in maintaining security of supply over the long term – the planning system.

16. It is estimated that the transition to net zero will require a tripling of the amount of electricity generated, with knock-on impacts on transmission, and distribution networks. The experience of the mobile sector is that local authority planning offices in many regions are very under-resourced, lack specialist knowledge and face many competing calls on their time from energy, telecoms, housing and other infrastructure. This issue is a systemic threat and, if left unaddressed, will lead to failure in major areas of Government policy.

**Resilience and recovery**

17. In wake of the severe storms of winter 2021/22 (such as Storm Arwen), there has been increased focus on the the resilience of our critical national infrastructure, including the power distribution networks and the telecoms networks, where the power networks were out of service for several days in some areas following the most severe storms (and, as a consequence, mobile networks also).

18. Following these incidents, Ofgem has published its five-year plan for improving network resilience in the power distribution networks.

19. Ofgem’s £20bn programme is very welcome. From a strategic UK plc perspective, therefore, it is much more effective that the power industry bears the responsibility
for ensuring there is a resilient source of power, as opposed to each sector making separate arrangements to self-provide power when the grid goes down.

20. That said, it is unavoidable that power networks will fail at some point - heavy storms, lightning strike, fire, or some other cause.

21. It is therefore important that there is more regulatory focus on the power networks improving resilience through better restoration and recovery plans.

22. In remote areas, for example, it may be tactically expedient to restore power to a mobile phone tower before it is possible to restore power to a village or hamlet. Thus at least communications would be restored to that population, even if not full power.

23. Where appropriate the DNOs could prioritise the restoration of power mobile networks. Our understanding is that there is no regulatory barrier to prevent this.

24. Mobile UK welcomes the trials that will take place in North East Scotland and Cornwall to test this hypothesis.

Access to green energy

25. All Mobile UK’s members have made public statements about their respective paths to net zero.¹

26. Mobile UK thus supports policies that increase the generation of green energy.

27. Mobile UK’s members have increasingly turned to Power Purchasing Agreements (PPAs) to secure their long-term green energy needs, as operators have committed to achieving net zero in the coming years.

28. Our overall impression, though, is that it is more difficult to secure PPAs with green generators at an acceptable price than it should be. Not only is it counter-intuitive (& counter-productive) that charges for green energy include green energy uplifts but it also appears this difficulty arises principally because of the following:

   - An unstable policy/regulatory environment (and so we would encourage the Review of Electricity Market Arrangements to proceed at pace)
   - The Government’s award of CFDs, being the primary marketplace for new green energy capacity, taking too great a share of the green energy generation and leaving insufficient capacity for companies to enter into PPAs. The scarcity of corporate PPAs is driving up the price.

29. Taking these background comments as our overall context, Mobile UK’s high-level views on green energy policy are as follows:

   - Mobile UK strongly supports measures that will increase green energy capacity and generation in the UK; this will enable the UK’s transition to net zero, increase energy security and help apply downward pressure on energy prices.
   - This will not involve ensuring the National Grid has capacity for and connections

¹ https://www.mobileuk.org/connectivity-and-climate-change (p 11)
to renewable energy sources which will make it possible for businesses to realise the opportunities of clean energy but also having financing schemes that support Government net zero objectives.

• We recognise that the CfD scheme is important in promoting the increased generation of green energy. We are concerned, though, that the balance of price certainty versus market exposure for the generators leans too heavily towards the former.

• We would like to see the removal of a green energy uplift on green energy and also greater availability of PPAs in the market and believe the CfD scheme could be soaking up too large a portion of production currently.

• There is now sufficient demand from the corporate sector for green energy generation for the role of the Government to transition from being the prime market driver towards being more of a purchase safety net mechanism in the event there is excess supply and insufficient market demand for corporate PPAs.

• This would lead to better value for taxpayers/energy consumers and more accessible green energy for large corporate users while still underpinning the future of green energy capacity and generation.