None of these comments have been addressed by the Applicants response particularly the DEFRA EIP targets. LLA currently emits an estimated 2.2 million tones of CO2 annually [Source: Earthbound] plus other greenhouse gasses [GHG] including PM2.5 & expansion will significantly increase this pollution.

The HarpendenSky opposition to the LR expansion proposal & Development Consent Order [DCO] TR020001 is based primarily upon the LR document Volume 5 Environmental Statement, Volume 5.01 Chapter 7: Air Quality & Chapter 13: Health & Community; in particular "increased population exposure to air pollutants". The items challenged below are listed according to the LR document references. For clarification therefore, HarpendenSky believes that the LR DCO application should be rejected based upon the CCC statement on no airport expansion & this summary.

[Item One] LR Environmental Statement 13.2 Legislation, Policy & Guidance [LPG]

The following legislation requirements, including interim emission targets, are not represented in LR Volume 5.01 Chapter 7: Air Quality nor Chapter 13: Health & Community documents yet are material to the environmental case against the LR DCO for expansion.

[a] The Environment Act [EA] & DEFRA Environmental Improvement Plan 2023 [EIP].

Air quality is now enshrined in interim legal targets which are not included in either of the LR documents & therefore there is no indication, or risk assessment, on how LLA expansion to 32m passengers can possibly support these targets being met by Luton Borough Council [LBC] or LR. As the largest polluter in the region, LR/LBC has an even greater duty-of-care to demonstrate how these issues will be resolved in the context of the DCO.

According to the DEFRA Environmental Improvement Plan [EIP] 2023:

"A DEFRA legal target to reduce population exposure to PM2.5 by 35% in 2040 compared to 2018 levels, with a new interim target to reduce by 22% by the end of January 2028.

A DEFRA legal target to require a maximum annual mean concentration of 10 micrograms of PM2.5 per cubic metre [¼g/m3] by 2040, with a new interim target of 12 ¼g/m3 by the end of January Elegal emission reduction targets for five damaging pollutants by 2030 relative to 2005 levels including: Reduce emissions of nitrogen oxides by 73% [compliance with a 40¼g/m3 limit] & reduce emission Source: HMG DEFRA Environmental Improvement Plan [EIP] 2023.

The LR Environmental Statement Volume 5.01 Chapter 7: Air Quality, table 7.2 Air Quality Standards, is not up-to-date insofar as the DEFA EIP interim targets for PM2.5 therefore there are no mitigation actions which must be defined in the DCO. This requirement is underlined by the Government Aviation Strategy which states "The government aims to "achieve a safe, secure and sustainable aviation sector...provided that growth takes place in a sustainable way, with actions to mitigate the environmental impacts".

According to the LBC 2022 Air Quality Annual Status Report [ASR] there are already multiple Luton area air quality measurement sites where the PM2.5 measurements are either above the DEFRA target levels or very close such that they would undoubtedly be exceeded by the 32million passenger expansion. The ASR does not include the DEFRA PIM2.5 interim target levels.

As a further point of detail, the Herts & Beds HB007 air quality monitor on the Luton Dunstable Road East shows already a disturbing upward trend for PM2.5 over the past 12months & where 3 of 7 measurements are in already excess of the 10micro gram objective & either above or close to 12micro gram objective for 2028. And HB007 monitoring point is not near the airport so the actual figure will be far worse.

[b] Climate Change & Sixth Carbon Budget

The Climate Change Act & policy, enshrined in the Business Energy Industrial Strategy [DfBEIS] Sixth Carbon Budget, contains a commitment to reduce emissions by at least 78% by 2035, which now includes aviation impact on CO2, NOx, NO2, PM2.5 emissions growth. LLA currently emits c2million tonnes of CO2 annually & there is no indication in the LPG documentation coverage on how 32million passenger operations will support compliance with this commitment by either LBC [owner of LR] or LR.

[c] Luton Borough Council [LBC] Climate Emergency

LBC declared a Climate Emergency in July 2019 with a carbon neutral target of 2040 & "clean air for all by 2030", which will be impossible to meet with LA growing to 32million passengers & there being no alternative to kerosene as aircraft fuel.

The EIP 2023 states: "Using the Air Quality Strategy to make clear that local authorities are key delivery partners in reaching our legal limits and targets. This will include a clear expectation, to which local authorities must have regard, that they should use their powers to reduce PM2.5 from sources within their control [eg Luton Airport flight operations]". [Item 2] LR Environmental Statement 13.7.48 Vulnerable Groups

As stated in DfT Transport Health & Wellbeing Review 2019 & the LR Environmental Statement Health & Community "the guidance highlights how vulnerable groups are disproportionately affected by the adverse impact impacts of transport". There are 84 care homes in the Luton area [Source: lottie.org] & a major hospital with 695 beds, yet this very substantial vulnerable grouping is not included in the LR document Chapter 13: Health & Community table 13.11 & must be considered in regard to the likely impact of LA expansion particularly on PM2.5 emissions.

Luton has already been established as one of the "top 4 areas for PM2.5 related deaths as a percentage of total deaths in the UK" Source: Centre for Cities report entitled "Where Is Air Pollution Worse" which has led to Luton PM2.5 emissions causing an estimated one in 16 deaths. In a corroborating statement, the LR Health & Community document 13.5.28 states "evidence shows associations between exposure to air pollutants and adverse health outcomes, most notably premature mortality and hospital admissions, linked to long term exposure to PM10, PM2.5 & NO2".

[Item 3] Hertfordshire County Council [HCC] Sustainable Hertfordshire Strategy [SHS] 2022

The HCC SHS policy mentioned in the LR Health & Community document, promises "clean air for all by 2030" & "net zero greenhouse gas [GHG] county by 2050". There is a high risk that neither of these objectives will be met with LR increasing GHG emissions by c75% as a consequence of raising the LA passenger limit to 32million plus the impact of AD6 LA arrivals airspace change including aircraft in a holding pattern over North East Herts.

The HCC SHS policy is listed under Table 13.2 but no mention of how it will be affected as a consequence of the LR proposal, and similarly in Section 13.12. At the very least there must be a risk assessment relating to the policy objectives being achieved.

Background: HarpendenSky is an environmental campaign group focused upon reducing the impact of Luton Airport emissions in the local community. The group is supported by the membership plus Bim Afolami MP, Teresa Heritage Councillor, Harpenden Town Council, & Hertfordshire County Council. End of report.