

Annex 1

Answers to the concerns brought forward by Colette Bonner, Irish MB member, point by point below:

- **Joint AHSP 1st July,"this document does not allude to the risk of importation of cases of SARS-CoV-2 into European countries many of which had just emerged from a period of severe public health restrictions.**
- **ECDC and EASA have just published an addendum to this protocol which appears to ignore the significance of international travel as a potential amplifier of infection, esp in those countries that have achieved a low level of SARS-CoV-2 infection.**

It had not been intended that the purpose of the EASA-ECDC COVID-19 Aviation Health Safety Protocol¹, and the recent addendum² to those guidelines, would be to recommend for or against air travel. The purpose was rather to set out options for proportionate measures, based on a review of the available evidence and modelling studies on the likely impact of such measures on national or regional transmission levels, to manage the risks associated with air travel for those who need or want to travel. As noted above, we recognise that as this document is being used as a 'stand-alone' guidance, and we are now proposing to include a clear reference to our current risk assessment advice, on avoiding unnecessary travel, within the joint document.

The guidelines have been developed in recognition of the fact that there are no internationally binding restrictions on air travel in relation to COVID-19, and therefore it is important that those who travel by air or who work in the air industry are protected and that the risks of travel-related spread of infection are mitigated.

ECDC believes that its advice to travel only if necessary is clear in its Rapid Risk Assessment document "Risk of COVID-19 transmission related to the end-of-year festive season " (4 December 2020), wherein a range of options for response are framed within the context of an assessment of all risks associated with end-of-year festivities. The joint document with EASA was to provide advice on what to do when someone has/wants to travel. Hence we do not see inconsistency, other than that this link between and the purpose of the two documents has not been made clear in each of them. It that document ECDC recommends that people should be encouraged to "*reduce travel and social activities, and only engage in those that are genuinely important*". In addition ECDC advises that "*People travelling during the end-of-year festive season should be made aware that travel in shared transport may increase their own risk of COVID-19, and the risk for their co-passengers if they are travelling when unaware of being infected, and make the decision to travel or postpone the travel according to an assessment of the personal risk, risk for co-passengers and the risk of family and friends they plan to meet*".

- **There are inconsistencies in the guidelines which acknowledge that travel related virus introduction and tourism related spread of COVID-19 within the EU contributed substantially to transmission across and within countries in the early phase of COVID-19 pandemic and a significant proportion of imported cases during the summer holidays when the total number of cases was low. However, it goes on to say that imported COVID-19 cases had little to do with the resurgence of COVID-19 in the summer of 2020.**

In both documents, ECDC does not maintain that COVID-19 is not transmitted via travellers or that global travel does not contribute to the spread of emerging pathogens, quite the contrary. ECDC also does not say at any point in the documents that "imported COVID-19 cases had little to do with the resurgence of COVID-19 in the summer". In fact, it is clearly stated that "*an increase of imported cases in the EU/EEA and the UK was observed during weeks 31-34, representing a relatively important proportion of imported cases during the summer holidays when the total number of cases was low*". We note, however, that interpretation of the proportion of imported cases over the summer must be made with caution, as it is likely that testing policy at that time would have overestimated the proportion (due to priority being given to testing of travellers in many countries). It was also the case, that at the time of the peak in the proportion of cases reported as imported, measures had been relaxed in many countries and were far less stringent than in the last few weeks, increasing the likelihood of transmission-prone behaviour. Of particular relevance is that current levels of COVID-19 within the EU/EEA are considerably higher than they were in the summer, and as such the likely contribution of imported cases in the

¹ European Centre for Disease Prevention and Control and European Union Aviation Safety Agency. COVID-19 Aviation Health Safety Protocol - Operational guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic. 30 June 2020. ECDC: Stockholm; 2020/EASA: Cologne; 2020.

https://www.ecdc.europa.eu/sites/default/files/documents/EASA-ECDC_COVID-19_Operational-guidelines-for-management-of-passengers-issue-2.pdf

² European Centre for Disease Prevention and Control and European Union Aviation Safety Agency. Guidelines for COVID-19 testing and quarantine of air travellers – Addendum to the Aviation Health Safety Protocol. 2 December 2020. ECDC: Stockholm; 2020/EASA: Cologne; 2020. https://www.ecdc.europa.eu/sites/default/files/documents/Guidelines_for_COVID-19_testing_and_quarantine_of_air_travellers-12-2020.pdf

current epidemiological situation in most parts of the EU/EEA is highly unlikely to be the same as it was in the summer.

We accept that the empirical data to support the clear and consistent conclusions of modelling studies is constrained by the quality of information reported to us. The analysis that we used for creating Figure 1 in the Joint EASA-ECDC guidelines is constrained by the completeness of data reported to TESSy. Only a limited number of countries were included in the pooled analysis (Czechia, Estonia, Finland, Ireland, Italy, Malta, Norway, and Slovakia). Data were included from countries that had:

- a) $\geq 70\%$ completeness of TESSy data, when compared with data retrieved by ECDC epidemic intelligence for the same period (weeks 23 to 45),
- b) maximum 35% of missing data in relation to imported cases.

Cases where the variable "imported" was not reported, were excluded from the analysis.

The following table shows the percentage of imported cases disaggregated by country for the most recent weeks (42-45).

	Czechia	Estonia	Finland	Ireland	Italy	Malta	Norway	Slovakia	Pooled across included countries
% imported week 42-45	0.56	11.77	7.19	0.21	0.53	0.00	14.32	0.94	0.71
14-day notification rate as of 8 November 2020 per 100 000 persons	1506	119	49.5	178	659	333	112	603	651

In most of the analysed countries, the proportion of imported cases was indeed low and these were mostly countries with higher levels of transmission. In these circumstances, screening and quarantine of travellers as a measure for impacting on SARS-CoV-2 transmission at the population level would not be an effective use of public health resources. However, we accept that the overall headline figures quoted in the report do not reflect the apparent variation between countries, and that for some countries, or regions therein, incidence is so low that it satisfies the criteria proposed elsewhere in the report for quarantine and testing being a much more effective public health response.

Although this analysis showed pooled data, *ECDC states in the document that testing/quarantine can be effective for countries or regions that have achieved sustained control of the virus.* In these situations, it would also be expected that the proportion of imported cases would be higher. This has also been a consistent message in our technical documents on testing strategies^{3, 4} and in the guidelines for the implementation of non-pharmaceutical interventions.⁵ A recent modelling paper cited in its earlier preprint version in the document⁶, based on estimated incidence and prevalence in source and destination countries, and taking into account travel patterns reached similar conclusions: *'that strict untargeted travel restrictions [they also refer to quarantine measures in this context] are probably unjustified in many countries, other than those that have both good international travel connections and very low local COVID-19 incidence.'*

We would note that interpretation of the data on imported cases in all countries is dependent upon local testing strategies and volumes, both with regards to testing of travellers and testing of the local population. If travellers

³ European Centre for Disease Prevention and Control. Population-wide testing of SARS-CoV-2: country experiences and potential approaches in the EU/EEA and the UK Stockholm: ECDC; 2020.

<https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-population-wide-testing-country-experiences.pdf>

⁴ European Centre for Disease Prevention and Control. [COVID-19 testing strategies and objectives](#)

⁵ European Centre for Disease Prevention and Control. Guidelines for the implementation of nonpharmaceutical interventions against COVID-19 [updated 24 September 2020]. <https://www.ecdc.europa.eu/en/publications-data/covid-19-guidelines-non-pharmaceutical-interventions>

⁶ Russel T, Wu J, Clifford S et al, Effect of internationally imported cases on internal spread of COVID-19: a mathematical modelling study. <https://www.thelancet.com/action/showPdf?pii=S2468-2667%2820%2930263-2>

are tested at higher rates than the local population, more cases would be identified among travellers. ECDC is unfortunately not able to analyse the positivity rate and testing rates among travellers compared to the general population as the data are not available to us. If you have testing data disaggregated by setting, we would be very interested in reviewing these data to enable a more precise analysis of the situation.

- **The document makes an assumption that 1% of travellers are likely to test positive. The citation provided for this assertion includes no mention of such estimate. That notwithstanding given the volumes of travel expected 1% represents a significant volume of importation.**
- **The document also states that the prevalence of SARS-CoV-2 in travellers is estimated likely to be lower than the prevalence in the general population. We would welcome underlying data/studies/modelling to understand how EASA/ECDC came to this conclusion.**

The 1% estimate for rates of infection among air travellers was an initial estimate based on this model, dealing with the underreporting and estimated prevalence of COVID-19 around the world until early September 2020: https://cmmid.github.io/topics/covid19/global_cfr_estimates.html and we acknowledge that it may not apply in all situations. However, in the published document, this statement is followed by: "*in areas of intense widespread transmission of SARS-CoV-2, the prevalence among travellers could be higher*" meaning closer to that of the general population, which is estimated as explained above. It is worth noting that during the most recent meeting of the ECDC Advisory Forum (15/12/2020), it was reported by the members from those countries that had recently undertaken screening of returning travellers that on average the COVID-19 positivity rate was around 1% (or less), although substantially higher positivity rates had been identified on a few flights.

In general, all models cited in our document^{7,8,9} make the logic assumption that with the ongoing risk communication advising against travel especially if sick, and the administrative and other controls in place, air travellers are currently a selected population. This may not apply to travellers by rail, bus or car due to the different socioeconomic characteristics and different regulations applied to these transportation modes.

- **The guidance also makes reference to Member States admitting their own nationals and EU Citizens and facilitating swift transit through their territories. We believe that member states should be allowed the discretion of providing guidance to international travel to our citizens in accordance with our epidemiological situation.**

This is of course for the Member States to decide.

This phrase is a direct quote from the Council Recommendation¹⁰ adopted on 13 October on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic.

- **In addition, the publication Risk of COVID-19 related to the end of year festive season again underlays the significance of international travel as a potential amplifier for transmission of SARS-CoV-2 particularly in relation to leisure travel over the coming season.**

We respectfully disagree in this point, because the latest ECDC RRA on "Risk of COVID-19 transmission related to the end-of-year festive season"¹¹ published on 4 December 2020 sets out ECDC's position regarding the advisability of travel. ECDC clearly recommends in the RRA that people should be encouraged to "*reduce travel and social activities, and only engage in those that are genuinely important*". In addition ECDC advises that "*People travelling during the end-of-year festive season should be made aware that travel in shared transport may increase their own risk of COVID-19, and the risk for their co-passengers if they are travelling when*

⁷ Clifford S, Quilty BJ, Russell TW, Liu Y, Chan Y-WD, Pearson CA, et al. Strategies to reduce the risk of SARSCoV-2 re-introduction from international travellers. medRxiv [Preprint] 25 July 2020. Available at: <https://doi.org/10.1101/2020.07.24.20161281>

⁸ Russell TW, Hellewell J, Abbott S, Golding N, Gibbs H, Jarvis CI, et al. Using a delay-adjusted case fatality ratio to estimate under-reporting [cited 23 November 2020]. Available at: https://cmmid.github.io/topics/covid19/global_cfr_estimates.html

⁹ Ashcroft P, Lehtinen S, Bonhoeffer S. Quantifying the impact of quarantine duration on COVID-19 transmission. medRxiv [Preprint] 5 October 2020. Available at: <https://doi.org/10.1101/2020.09.24.20201061>

¹⁰ Council Recommendation 2020/1475 of 13 October 2020 on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic, at: <https://data.consilium.europa.eu/doc/document/ST-11689-2020-REV-1/en/pdf>

¹¹ European Centre for Disease Prevention and Control. Risk of COVID-19 transmission related to the end-of year festive season – 4 December 2020. ECDC: Stockholm; 2020. <https://www.ecdc.europa.eu/sites/default/files/documents/Risk-assessment-COVID-19-transmission-related-the-end-of-year-festive-season.pdf>

unaware of being infected, and make the decision to travel or postpone the travel according to an assessment of the personal risk, risk for co-passengers and the risk of family and friends they plan to meet".