Stage 5 Clarification Questions for ACP2014-04 – Inverness



Submission Document Name, Page/Para	Question/Issue	Tech/Conslt/ Env/Econ/ ATM/ General	Date	Response
ACP	With the introduction of PBN arrival procedures will the conventional direct arrivals remain in use? If so, do the altitudes/ levels proposed on the PBN arrivals and the current conventional direct arrivals need to be the same where applicable, especially as these procedures are very similar in their routings. Note, the current conventional IFPs being reviewed need to be aware of the new proposals to ensure consistency across all IFPs (PBN and conventional) as applicable.	ATM		Initially yes, however it is planned that the VOR will eventually be withdrawn subject to approval of PBN approaches. The current direct arrivals are designed to commence from within Class G at or above the MSA for the sector and therefore do not have the same descent profiles as the proposed PBN approaches. The PBN arrival transitions commence from levels that are contained within the extant route structure and aim to achieve CDA resulting in different descent profiles to the conventional direct arrivals. The APDO conducting the IFP review has been notified of the note and will be provided with sufficient information to be able to ensure consistency.
MATS Pt2	It is noted in MATS P2 the HRA require a/c to be "not below 5200" until D16 INS. Would it be prudent to incorporate this requirement into the applicable arrival procedures both conventional and PBN? Or is the MATS P2 to be amended?	ATM		The descent restrictions for the conventional direct arrival procedures in MATS 2 relates to arrivals along Y906 or clockwise between radial 300 – 325. The proposed arrival transition through GARVA requires the aircraft to be level at GARVA at FL100 and leaving the lateral limits of the HRA at a point (PEW03) not below FL95. The conventional charts that contain routings from that segment all state not below 5200 . Note. The HRA has rarely been activated in recent years.

ACP	As PC use GUSSI, GARVA and BONBY as CLP holds,	ATM	ATS Route COP Level Allocation Special conditions
7.01	what are the levels (min and max) of these holds? These holds could be published on the chart/coding	,	N560 south 10NM north of INBAS Descending to agreed level FL130, Clearance limit GUSSI unless otherwise co- ordinated
	tables, currently the details are only in the ENR 3.4		N560 north 10NM north east of CHINN CHINN Descending to agreed level FL120, to be level by CHINN Clearance limit BONBY unless otherwise coordinated
			Y906 10NM south east of ULLAP Descending to agreed level FL110 Clearance limit GARVA unless otherwise co- GARVA Clearance limit GARVA unless otherwise co- ordinated
			When GUSSI GARVA or BONBY holds are in use by Inverness they are contained wholly within airspace within which ATS is delegated to Inverness. The LoA requires Inverness to notify PC at the commencement and cessation of holding in those areas. The holds are at or below FL100 to the lowest available FL at or above the highest minimum sector altitude. The lowest available holding level will be predicated on the extant airways structure at BONBY and GARVA (FL100) and at GUSSI FL80 would be available. These can be included on either the chart or the coding tables.
ACP	GUSSI, GARVA and BONBY are the proposed STAR commencement points and the SID termination points. How are the SIDs and STARs to be managed in the vertical profile, e.g. will this be procedurally or ATC managed via vectors? Are the proposed STAR/SID altitude/levels correct from an ATC perspective?	ATM	It is expected that initial clearances will include a vertical limit to provide separation, when required. When providing approach services, the ATCO will ensure separation utilising the most expeditious method and that will most likely be vectors. Procedures will achieve separation between arriving and departing aircraft until another form of separation can be applied. The proposed levels of the SIDS and Approach transitions are dictated by the extant airspace structure and the geographical limitations of the surrounding environment. It would always be preferrable to have the commencement of an approach transition and the termination of a SID at a different point and/or level, however, within the Inverness ACP it has always been acknowledged, from the very first design, that ATC intervention would be required to maintain the traffic flow. This is currently what occurs in Class G. The levels are correct for the environment that surrounds Inverness.

Safety Case/ACP	How do ATC intend to manage arrivals ie Procedures vs vectoring/conventional procedures; suggest a high level review of the safety case and plans to be shared with ATM Inspector. ie Do the proposed procedures allow for aircraft to stay on a departure and arrival concurrently?	ATM	HIAL will trial the procedures in a simulator, and this will provide the data required to feed into the amendments to the associated documentation e.g. MATS 2. The ATM inspector has been recorded as a stakeholder on the project and will, of course, be consulted throughout. The safety case has been prepared and was submitted as Enclosure 6 in the ACP. The transitional risk assessment identified the following hazard: Hazard 15: inadequate procedures for CAS operation A Safety Requirement to mitigate the hazard was defined: ATC procedures for CAS operation (for aircraft transiting between Class E+TMZ to Class D CAS) discussed and agreed with CAA Stirling and incorporated into ATCO training (including simulator) package (SR12)
			These activities are planned and included as a project deliverable.