EUROCONTROL Safety Alert

Request For Support Message:

IFR Aircraft Operations Below RVR Minima - 3 March 2010

Full Summary of Responses for SKYbrary Bookshelf

1. A total of 24 responses were received; 8 from ANSPs, 13 from Aircraft Operators/Associations and 3 from National/Regulatory Aviation Authorities. The responses also included detailed extracts from one national AIP and one aircraft operator’s operations manuals dealing with RVR Minima.

2. The responses are shown by matching elements of the responses from each stakeholder group to the corresponding question and/or consideration raised in the RFS message. Some responses appear in more than one question/consideration.

3. For de-identification purposes the names of countries, companies, airports, places etc have been removed. In addition, minor editorial changes have been made to the original responses to improve readability but without changing the sense of the comments.
Summary of Responses by Question/Consideration

Q1. What should controllers do when a commander indicates that he/she intends to commence an approach when the reported RVR is below the lowest minima for that aerodrome/approach?

EUROCONTROL Notes:

- All respondents agreed that the Assumptions in the RFS were correct; it is clear that the division of responsibility between the cockpit and control room is well understood.

- There was unanimous agreement amongst the aircraft operator respondents that the controller’s responsibilities vis-a-vis the decision of a pilot to continue an approach (or take-off) should be limited to providing the RVR values and ensuring that the runway surface is clear of obstructions.

ANSPs

- The final decision to commence an approach in specific weather conditions rests solely with the commander of the aircraft.

- It is the Pilot in Command’s (PIC) responsibility to decide, based on the company regulations etc., whether to land or not if the RVR is below the minima.

- The normative reflects that it is a pilot responsibility to comply with EU OPS, and follow the EU OPS limits.

- Pilots are responsible for knowing and sticking to their minima and ATC does not check the adherence to these minima.

- Controllers are not responsible for determining, passing or enforcing commanders’ mandatory aerodrome operating minima.

- ATCOs are not responsible if a pilot decides to land (or depart) with an RVR lower than the minima; their responsibility is the usual one: authorise a landing if the runway is free, and authorise a departure maintaining wake turbulence minima. During LVP you perform a lot of work to keep the runway free, and the radio beacons (mainly ILS) undisturbed, but in essence it is business as usual for a Tower ATCO.

- Controllers are not permitted nor obliged to prohibit a pilot from making an instrument approach other than for traffic reasons.

- The controller’s responsibility in LVP is no different from nominal condition; only the status of vital radio aids such as ILS is mandatory to be updated to the pilots by ATCOs as soon as they are informed.
- It is clear what the ATCO should do: Issue approach instructions and landing clearance and, if necessary, assist the pilot during his manoeuvre.

- It is impossible to require ATCOs to know the individual DH and corresponding RVR / CMV / VIS minima, which depends on the speed category and company regulations as well. It is simply not possible nor feasible to put such an extra load (and to some extend also extra responsibility) on the controllers.

- I would like to strongly emphasise that the idea of enforcing (by ATC) any condition which lies in the responsibility of the air crews is unacceptable!

- Adequate information should be given to the commander about the current reported and observed weather. If deemed necessary, additional information could be given e.g. “remember your minima”.

- Weather information is the responsibility of the airport, and ATIS (if available) must be updated with any variation in the visual condition of the runway. In the rest of the situation, ATCOs must provide weather condition (as in normal procedures).

- ATCOs must provide weather condition (as in normal procedures).

- The responsibilities of operating an aircraft cannot be shared.

- The responsibilities in this matter should not be mixed up.

- The issue of air crews approaching an airport without meeting all requirements extends well beyond low visibility issues. There are dozens of conditions, e.g. certification of aircraft, training and certification of air crew, availability of aircraft systems, tailwind limits, crosswind limits, runway contamination limits.....RVR is just one factor taken into consideration before starting and when flying an approach.

- For specific approaches there is an ‘approach ban’. When it is obvious that an approach is continued below the applicable minima, ATCOs should make sure the commander about the latest RVR.

**Aircraft Operators**

- You can always initiate an approach, irrespective of the measured RVR; the responsibility is with the captain.

- The captain is the authority to decide if the visibility on DA is sufficient, or not. Not the RVR-meter or the controller.

- It is proposed that if the PIC decides to continue his approach, ATC will not give clearance to land – at best he would give “clear to land at own discretion” upon which the detail of the event will be reported to the Authority and their HQ at ATNS.
- Advise the commander and continue normal procedures; there can be no other.
- In this case the controller should do nothing.
- Controllers state that EU OPS apply to us (pilots), not them, so “they should not apply that regulation, but us pilots”.
- ATCOs don’t feel responsible in any way, neither are they trained for it.
- ATCOs are not familiar with any applicable phraseology.
- The same problems apply to ceiling; should any operator land well below minima, ATCOs just look the other way.
- The controller has only the measured values, but that does not have to comply with what the pilot(s) see in the cockpit.
- Controllers should remind the aircraft commander of the aerodrome minima, if the commander intends to proceed, the controller should remind that they should not descent below DA, unless visual contact has been made with the runway.
- ATC is obliged to pass any significant change of RVR as soon as possible.
- Controllers should propose a valid diversion aerodrome to the commander.
- A controller should communicate the latest RVR values to the flight intending to start an approach. After that it is up to the Commander to decide if the approach should be commenced.
- It should be common practice to request the latest RVR before commencing takeoff.
- Controllers should ‘remind’ pilots that the ‘approach ban’ applies, and request his/her intentions if conditions do not improve at OM or equivalent.
- Controllers must have the commander intentions communicated before aircraft reaches the outer marker altitude, or in case of no OM, then before 1000ft AGL.

**Associations**

- Only the commander has a full picture.
- Inform the commander of the lowest State minima and let the commander decide what the next course of action will be (the commander will apply EU-OPS 1).

**National/Regulatory Aviation Authorities**

- We need to keep the ATCO out of the RVR Minima loop; they should just pass on relevant met info and control traffic as normal.
• ATC should inform the pilot of the current RVR, and if it is low, ask intentions of the pilot. If the pilot requests the approach, clear him for the approach. ATC can NOT climb into the cockpit and fly the airplane with the pilot. The decision rests only with the pilot in command.
Q2. What are your practices in dealing with this issue? (Note: Could also apply to take-off).

ANSPs

- The responsibility is left solely to the pilots.
- We believe that pilots are aware, by means of AIS, Jeppesen etc., of the operational minima at our international airports. The controllers may always give the pilots all relevant information upon request.
- We have had very few experiences of pilots operating below their own personal minima.
- Because of one known incident the State organisation responsible for incident and accident investigation recommended to include a suitable warning on the ATIS.
  - During low vis operations, the ATIS amongst other things reads: "Attention, crews of arriving traffic, check your landing minima."
- If meteorological conditions are below CATIIIb (=CAT IIIc) the pilot is given information concerning the new RVR & cloud base and continuation of the approach and landing is entirely up to him.
- If there is an equipment degradation (ILS, GP,...), then the pilot is promptly informed of that situation with a high likelihood that the approach will be cancelled.
- If the meteorological conditions are below CATII the airport is closed. But the agreement between ANSP and CAA is:
  - If the aircraft has already commenced an approach (is on the final) and RVR has suddenly dropped below CAT II the pilot is given notice of that and the landing is at him discretion. The aircraft approaching a FAF is instructed to hold or divert to an alternate airport. [as per EU OPS 1.405]
  - If the aircraft is just waiting at holding point and the RVR has suddenly dropped below CAT II the pilot is given new data and the take-off is at him discretion. No other aircraft is allowed to start up and taxi.
- When we started LVO CAT3B in the early nineties, TWR ATCOs were required to use the phraseology: “check your minima” until the day one pilot replied, “and what about yours?”
- ATC does not impose any limit during active LVP, related to RVR minima.
- There is an ultimate limit, but it is related with obstacles, not RVR.
- Depending of the category of the approach (CAT I, II or III) you have a different height and a different RVR, but it must be followed by the pilot, not the controller.

- Our LVP are active usually with 600 meters RVR (it depends on the airport).

- The ATCO on duty informs the aircraft of the situation, but no restriction is applied. It is a pilot decision to land depending on RVR. Indeed, you don’t know if the aircraft/pilot is certified to land in Cat I/II/III (it is a responsibility of our NSA), so you never know for sure if the airplane can land under these conditions.

- As soon as separation is provided and monitored, the runway is clear and the RVR values are passed to the pilot-in-command.

- For some airports where it is considered essential that pilots are very familiar with the procedures and minima and where higher than normal minima are applicable (except for operators holding permissions for low minima operation), ATC minima are established and ATC will not issue an approach (respectively departure) clearance when the weather is such that approaches may be expected to become successful with the use of a special approved lower minima only (approach ban). Operators holding a special approval are made responsible themselves again for the “commencement and continuation of approach” as per OPS 1.

- Controllers are aware of limitations to a certain extent, because already the application of low visibility procedures and all associated regulations need adequate knowledge about operating minima.

- Aircraft are dependant on visual aids to be allowed to depart. The allowed RVR is related with the visual aids (lights) active in the airport; the RVR can be reduced if the aircraft is using a radio beacon to assist the departure. The ultimate limit is an RVR of 75 meters.

- ATCOs allow every aircrew to do an approach or to take-off no matter what the conditions are. The responsibility lies solely with the pilot in command. We will never know if all regulations and conditions allowing an approach are met. Therefore there is no added value if ATC was to start to enforce just RVR.

- When met conditions are about to decrease below the applicable minima we change the landing runway.

- The RVR problem is pretty complex. For instance, we have two CAT II/III runways. For CAT II RVR minima are well defined in the AIP, but for CAT III ops PPR from the Authority is required. As the resulting values are different for different operators/aircraft and they are not known to us, we just provide the aircrews with the actual RVR values.

- Pilots requesting to land with RVR below 150m will be advised that they are below minimum, but will not be refused landing clearance.
National AIP Extract - IFR flights

- A pilot on IFR flight plan shall not take off when the reported RVR or visibility, as appropriate, is below the minimum value published in the AIP. ATC will issue the official weather report. Neither taxi instructions nor take-off clearance shall be issued.

- Phraseology: "RVR or visibility (as appropriate) ... meters. This is below published minima for take-off on runway ... (runway designation). ... (call sign) taxi instructions and take-off clearance not issued".

- ATC shall in no case refuse an approach clearance for reason that the official weather report indicates that the weather conditions are below the published AD minima.

- ATC will ensure that any information essential for the pilot's decision to continue or discontinue an approach such as:
  - application of special safeguards and procedures, when necessary
  - any known unserviceability of aids or facilities
  - official weather report including any significant changes transmitted to each ACFT
  - RVR information including any significant changes transmitted to each ACFT

- When the reported RVR and/or visibility, as appropriate, are/is below the published AD minima, ATC shall:
  - inform the pilot accordingly
  - request the pilot to state his intentions using the following phraseology:
    - "Reported RVR and/or visibility is .... This is below published minima. Advise your intentions".

- Unless holding for weather improvement or a diversion is requested or holding for implementation of special safeguards and procedures is imposed, ATC shall issue approach instructions and landing clearance and, if necessary, shall assist the pilot during his manoeuvre.

**Aircraft Operators**

- This is the “Approach Ban” concept / procedure.

- Advise the commander and continue normal procedures. There can be no other.

- The airline position is that the crew is responsible for ensuring the RVR for that approach is equal to, or better than, that required for the aircraft technical state, certification or crew qualification. There is no reliance on ATC informing crew that the approach is below any published minima.
Pilots are trained that planned continuation of an approach when the RVR is known to be below that for the category of approach must only be considered with respect to safety where undue delay in landing could have a significant safety implication. In such cases a mandatory report shall be filed by the captain.

The situation is not so clear, and we should like to know what we can do to avoid unsafe situations...UK AIC is a good point to start.

At one airport there is a RVR minima only for instrumental precision approach (ILS CAT 1). There are no absolute minima for the other procedures. It’s up to the pilot to perform a procedure, taking care about meteorological condition. If the reported minima is below the minima for the approach and the pilot indicates that he intends to commence the approach, the controllers advise the pilot and don’t give him the clearance to land.

We only conduct approaches to airfields with published minimum visibilities.

If the reported RVR values are way below the required minimum it is very unlikely the Commander will see the required visual references when he reaches the DH and therefore it is considered wise to not starting an approach and divert to a suitable airport.

Normal landing clearance will be given and nothing happens after that. Should a pilot land in below RVR conditions, nothing happens.

Normally ATC is NOT informed which minima is used by the particular operator and hence it is not possible to interfere with the pilot’s decision.

It is not a common practice to have the controller communicating RVR values during the approach without being asked for it.

Our company policy is that: quote: ‘the approach shall not be continued beyond the outer marker, or equivalent position, if the reported RVR / visibility is less than the applicable minima’ unquote.

Aircraft Operator’s Ops Manual:

Quote: ‘Before commencing take-off, a Commander shall verify that the RVR or visibility in the take-off direction of the aeroplane is equal to or better than the applicable minimum. When the reported meteorological visibility is below that required for take-off and RVR is not reported, a take-off may only be commenced if the Commander can determine that the RVR/visibility along the take-off runway is equal to or better than the required minimum. When no reported meteorological visibility or RVR is available, a take-off may only be commenced if the Commander can determine that the RVR / visibility along the take-off runway is equal to or better than the required minimum’ Unquote.

The controller gives the latest RVR values and then issues a take-off clearance leaving it to the subject flight to commence the take-off or not.
- Talking to controllers, they say UEOPS apply to us, not them, so “they should not apply that regulation, but us pilots”.

- The ATCOs don’t feel responsible in any way, neither are they trained for it.

- They (ATCOs) are not familiar with any applicable phraseology. And of course, they don’t feel they should report such an event.

- The same problems apply to ceiling; should any operator land well below minima, the ATCOs just look the other way (e.g. arrival of local commuter flights).

Associations

- Present rules are clear. Commanders will divert if the weather is below the applicable minima.

National/Regulatory Aviation Authorities

- It is up to the pilot to determine whether to execute the approach or to proceed to an alternate. The regulations governing visibility minima to determine commencement of an approach, or take-off, apply only to commercial operations. A general aviation aircraft operating IFR, can take-off or land under any minima.
Considerations

States’ requirement to establish and publish RVR Minima for all instrument approach procedures at aerodromes

ANSPs

- Our understanding is that the responsibility to comply with minima is up to the pilots, once they are published in National AIP and is contained on board SOAPS.

- The AIP shows Minimum RVR values on each approach chart, e.g. on the very bottom "Cat IIIA and CAT IIIIB (minimum RVR 75m) approved".

- The Approach Charts are published with the information/restrictions as required according ICAO PANS OPS DOC 8168 and the applicable charting document.

- Visibility, or CMV, or RVR values are normally not published, except for specific approach procedures valid for certain nominated airports. It is considered essential that pilots are very familiar with these procedures and the applicable minima and therefore it was deemed necessary to publish visibility minima for some of the approaches at these airports as well.

- For all other approaches we refer to the requirements according OPS 1, where it is clearly stated and defined that it is the responsibility of the operator to establish:
  - Aerodrome operating minima.
  - Minimum RVR, or CMV, or VIS – as applicable.

- We are questioning the idea to publish RVR Minima, because in EU OPS 1 there are so many possibilities to operate at very low RVR values, by use of CAT III, CAT II, other than standard CAT I, other than standard CAT II, use of HUD, use of EVS, and the associated RVR minima are so different that it could produce confusion. And finally it does not make sense to publish 75m RVR as lowest minimum RVR because CAT III B is possible – when only some of the operators are CAT II approved and most of them CAT I only?

- The RVR problem is pretty complex. We have two CAT II/III runways. For CAT II RVR minima are well defined in the AIP, but for CAT III ops PPR from the Authority is required. As the resulting values are different for different operators/aircraft and they are not known to us, we just provide the air crews with the actual RVR values.

- Furthermore, the RVR values for departures can, according to the AIP, be as low as 75m if certain conditions are met. This again is beyond our knowledge and lies in the sole responsibility of the operator.
AIP Extracts

- A controlled aerodrome will not be closed to IFR traffic for reason of low ceiling and/or bad visibility.

- 150m RVR has been fixed as minimum RVR value by the Authority.

Aircraft Operators

- It is a matter for discussion between an operator and its NAA.

- If a state is not publishing minima, it is a matter for operators (or third-party suppliers) to determine them. This could well lead to the situation where minima are lower than in Appendix 1 (Old) to Ops 1.430 - by using the provisions in Appendix 1 (New) to Ops 1.430 or pertinent national legislation.

- …minima established in accordance with Appendix 1 to Ops 1.430 are designed to permit an approach to continue below 1000ft. The decision to land or go around will then depend on a pilot's acquiring the required visual references at Decision Height.

- We requested to the State regulator to publish the absolute minima for the aerodrome. At the moment the main problem is with the non-precision approaches.

- There are no AERODROME/APPROACH minima anymore, there are only OPERATOR’S APPROVED MINIMA (EU OPS 1.430).

- We only conduct approaches to airfields with published minimum visibilities.

- It is suggested that the State in question publishes required minima so that if the visibility falls below that minima, controllers can issue an "approach ban" so commanders cannot conduct an approach beyond the outer marker.
Controller awareness and training regarding RVR Minima

ANSP

- ATCOs receive adequate information about the different possibilities on RVR minima (and other minima). During “Pre On Job” training on the simulator a verbal briefing about the different approach procedures and approach categories is included. Furthermore, ATCO students have the possibility to discuss such issues during the simulator sessions, because a lot of airline pilots are working as “ATC – simulator pilots” as well.

Aircraft Operators

- Controllers have limited awareness about RVR minima and it is quite possible that two operators will have different minima authorised for the same approach to the same runway in the same type of aeroplane.

- In general, ATC controllers do not know what a commander's landing or takeoff minima actually are, especially in AWOPS conditions.

- ATCOs do not feel responsible in any way, neither are they trained for it.

Associations

- ATC controllers cannot know the applicable weather minima for the crew/aircraft/airport operator combination that day. Only the commander has a full picture.
Controller responsibility/authorization regarding the issuing of landing clearance when the reported RVR is below the RVR Minima/Controller procedures and associated phraseology

ANSPs

- In case the State chooses the option when ATC is not to prohibit an instrument approach down to the DA/H or MDA/H if the RVR is below the minima, it would be worth to positively indicate in the ATC procedures what phraseology should be used with respect to potential landing: is it firm “Cleared to land” or something like “The runway is clear (and you do what you want)”.  

- For controllers “Cleared to land” in such circumstances means much more than just “no obstacles and separation okay”. So, the message from the procedures must be clear.

- Pilots may try to land in conditions requiring low visibility procedures and CAT rating without ATC checking for corresponding licenses but with the corresponding minima (e.g. higher DH for CAT I approaches which will lead to discontinued approaches in CAT II or III conditions because of the inability to spot the runway.).

- The controller is not allowed to prohibit a pilot making an approach and/or to withhold a landing clearance because of weather. Such a procedure could have also a severe legal impact.

- ATCOs are not responsible if a pilot decides to land (or depart) with an RVR lower than the minima; their responsibility is the usual one: authorise a landing if the runway is free, and authorise a departure maintaining wake turbulence minima. During LVP you perform a lot of work to keep the runway free, and the radio beacons (mainly ILS) undisturbed, but in essence it is business as usual for a Tower ATCO.

AIP EXTRACTS

- Phraseology: "RVR or visibility (as appropriate) ... meters. This is below published minima for take-off on runway ... (runway designation). ... (call sign) taxi instructions and take-off CLR not issued".

- Pilots requesting to land with RVR below 150m will be advised that they are below minimum, but will not be refused landing clearance.

- A pilot on IFR flight plan shall not take off when the reported RVR or visibility, as appropriate, is below the MNM value published in the AIP. ATC will issue the official weather report. Neither taxi instructions nor take-off clearance shall be issued.

- When the reported RVR and/or visibility, as appropriate, are/is below the published AD minima, ATC shall:
o inform the pilot accordingly
o request the pilot to state his intentions using the following phraseology:
"Reported RVR and/or visibility is .... This is below published minima. Advise your intentions".

**Aircraft Operators**

- It is proposed that if the PIC decides to continue his approach, ATC will not give clearance to land – at best he would give “clear to land at own discretion” upon which the detail of the event will be reported to the Authority and their HQ at ATNS.

- At present a normal landing clearance will be given and nothing happens after that.

- A controller's involvement must be limited to issuing a landing clearance - which means that as far as he or she is aware the runway is unobstructed.

- Controllers should not try to second-guess a pilot's operating minima which does nothing to advance the cause of safety and only serves to confuse what is a well-understood set of operating procedures.

- If the reported minima is below the minima for the approach and the pilot indicates that he intends to commence the approach, the controllers advise the pilot and don’t give him the clearance to land.

- If, during the approach RVR descend below 550m. and aircraft haven’t passed the OM or - if not available an equivalent distance (5 NM) - ATC will not clear to land the aircraft.

- If the aircraft has passed OM - or an equivalent distance (5 NM) - and has already been cleared to land and the RVR descend below 550m, ATC will inform the pilot of the last RVR leaving to the pilot the decision to continue to land or pull up.

- ATCOs are not familiar with any applicable phraseology.

**National/Regulatory Aviation Authorities**

- ATC can NOT climb into the cockpit and fly the airplane with the pilot. The decision rests only with the pilot in command.

**EUROCONTROL Note:**

ICAO PANS ATM 7.10.2. states,

"An aircraft may be cleared to land when there is reasonable assurance that the separation in 7.10.1, or prescribed in accordance with 7.11 will exist when the aircraft crosses the runway threshold..."
It is important to recognise that an ATC clearance to land is not an instruction. As described in PANS ATM 4.5.1., “Clearances are issued solely for expediting and separating air traffic and are based on known traffic conditions which affect safety in aircraft operations”. In the case of a landing clearance this means that the controller has taken the necessary actions to ensure that the runway is clear and that safe separation can be maintained from other traffic. The pilot is not bound to comply with the clearance (if for instance the weather conditions prevent a landing) but should inform the controller if they do not intend or cannot execute it.

Moreover, ICAO PANS ATM, 4.5.1.3, clearly identifies where the division of responsibility/accountability is between ATC and the pilot-in-command regarding the execution of issued ATC clearances. [EUROCONTROL emphasis in **bold** and *underline* text]

“4.5.1.3 The issuance of air traffic control clearances by air traffic control units constitutes authority for an aircraft to proceed only in so far as known air traffic is concerned. **ATC clearances do not constitute authority to violate any applicable regulations for promoting the safety of flight operations or for any other purpose; neither do clearances relieve a pilot-in-command of any responsibility whatsoever in connection with a possible violation of applicable rules and regulations.**”

Thus, this provision negates the need for ATC to use discretionary type landing clearances. Controllers can issue a normal landing clearance once they have fulfilled their safety and traffic responsibilities - the decision to execute that clearance is solely the pilot-in-command’s taking into account, inter alia, any minima (including RVR) that are applicable.
Controller reporting of LVO/RVR Minima related occurrences

ANSPs

- Occurrence reporting is regulated within the General Air Traffic Management Handbook. It does not contain any specific information about the reporting of LVO/RVR occurrences.

- Reporting all approaches and landings in conditions below AD minima to the CAA and subsequently to the relevant operating agencies, is the only action to be taken by ATCOs worth considering.

Aircraft Operators

- Should a pilot land in below RVR conditions, nothing happens.

- Pilots are trained that planned continuation of an approach when the RVR is known to be below that for the category of approach must only be considered with respect to safety where undue delay in landing could have a significant safety implication. In such cases a mandatory report shall be filed by the captain.

- If an aircraft has passed the OM - or an equivalent distance (5 NM) - and has already been cleared to land and the RVR goes below 550m, ATC will inform the pilot on the last RVR leaving to the pilot the decision to continue to land or pull up. When on the ground, or after the go around, the controllers fill in a report.

- ATCOs are not familiar with any applicable phraseology and they do not feel they should report such an event.
UK AIC - Absolute Minima

ANSPs

- If the decision is to make controllers obliged to act as a ‘safety check’ when a commander decides to commence an approach to land when the reported RVR is less than the specified minima, then promulgate the information through the national AIP, create the corresponding clear and unambiguous procedures and integrate them into operations. Otherwise, initiate an awareness campaign to remove any existing ambiguity.

- There is not a limitation imposed by ATC in the case of an active LVP, related with a RVR minima.

- There is an ultimate limit, but it’s related with obstacles, not RVR. Depending of the category of the approach (CAT I, II or III) you have a different height and a different RVR, but it must be followed by the pilot, not the controller.

- It would be useless to have an "absolute minimum minimum" published in any documentation, as you will never know what the actual approved minimum for every operator/aircraft combination is.

Aircraft Operators

- UK CAA's Absolute Minima guidance is a red herring. Absolute minima are aimed mostly at general aviation aircraft and are of no use in Cat II or III operations. In fact the Absolute Minima serve only to obfuscate AWOPS procedures and cause confusion and are not supported by some operators.

- The content of UK AIC 100/2006 is considered a satisfactory way of advising crew that the continuation of the approach is in breach of regulatory requirements. It should be noted however that the absolute minima as determined by ATC may be lower than that required for that aircraft type, crew qualification, or national legislative requirement (of company).

National/Regulatory Aviation Authorities

- Procedures described in UK AIC for Absolute Minima subject to derogation by EU authorities; therefore, they could be applied by any EU state.

- There have been concerns with the UK Absolute Minima procedure for some time and there are views that it has outlived its purpose.