

PLENARY SESSION 1

Nicole Barrette-Sabourin, Training Officer, Flight Safety Section, ICAO

BIO DATA

Mrs. Nicole Barrette-Sabourin is a training officer and the Project Manager for Language Proficiency Requirements issues in the Flight Safety Section of the Air Navigation Bureau of ICAO.

She has been a staff member of ICAO since 1983, worked in the TRAINAIR Central Unit since the inception of the programme in 1988 until 2005 and now belongs to the Aviation Training Policy and Standards Unit. She holds a Master's Degree in Educational Technology from Concordia University in Montreal, Canada.

She is presently involved in the ICAO endorsed Government Safety Inspector Programme, the ICAO/ACI Airport Management Programme and the IATA Training and Qualification Initiatives. In April 2006, she has served as the Secretary of the Proficiency Requirements in Common English Study Group (PRICE SG) during its fifth meeting, organized the technical work programme of the Second ICAO Aviation Language Symposium conducted in May 2007 and developed and conducted language proficiency implementation plan workshops in the ICAO regions.

“Implementation of ICAO language provisions: Issues and Challenges”

SUMMARY

In September 2007, the ICAO Assembly adopted resolution A36-11 - Proficiency in the English language used in radiotelephony communications. The resolution urges States that will not comply with language proficiency requirements to provide ICAO with their implementation plans and directs the Council to support Contracting States in their implementation of the language proficiency requirements by establishing globally harmonized language testing criteria. The presentation will provide a status report on the development of implementation plans. A description of the work carried out to date on the development of language testing criteria will also be provided.

Implementation of ICAO language provisions: Issues and Challenges

Nicole Barrette-Sabourin
Training Officer and LPR Project Manager
Flight Safety Section, Air Navigation Bureau, ICAO

1. Introduction

1.1 The lack of English language proficiency has played a key contributing role to several accidents in civil aviation. The mid-air collision that occurred over New Delhi in 1996 brought this safety concern to the forefront when 349 passengers and flight crew lost their lives.

1.2 Resolution A32-16 was adopted during the 32nd session of the Assembly of ICAO. This resolution urged ICAO to consider the matter with a high level of priority and to “...take steps to ensure that air traffic controllers and flight crews involved in flight operations in airspace where the use of the English language is required, are proficient in conducting and comprehending radiotelephony communications in the English language”

2. Chronology of events

2.1 Since the adoption of this resolution in 1998, several actions were taken.

- In 2000, the Proficiency Requirements in Common English Study Group (the PRICE SG) met for the first time.
- During the 33rd session of the Assembly Contracting States requested that the language proficiency requirements being developed should not be limited to English.
- In March 2003, the language provisions were formally adopted to become applicable in March 2008.
- At the time of adoption, the Council requested that a mid-point review be conducted on the status of implementation of the requirements.
- This mid-point review was followed by another in April 2007.
- In October 2008, the Assembly held its 36th session and adopted resolution A36-11.
- The language proficiency requirements became applicable on 5 March 2008.

3. Overview of the ICAO language provisions

3.1 The language provisions can be found in ICAO Annexes 1, 6, 10 and 11. It is in Annex 10 that the use of the English language is specified. Paragraph 5.2.1.2.1 states that “The air-ground radiotelephony communications shall be conducted in the language normally used by the station on the ground or in the English language.” Paragraph 5.2.1.2.2 states that “The English language shall be available, on request from any aircraft station, at all stations on the ground serving designated airports and routes used by international air services.”

3.2 Annex 1 specifies to whom the language proficiency requirements apply and the level of proficiency for the language used in radiotelephony communications

- The requirements apply to pilots, air traffic controllers and aeronautical station operators involved in international operations
- These personnel should speak and understand the language used for radiotelephony communications (Paragraphs 1.2.9.1 and 1.2.9.2)
- They should demonstrate this ability to speak and understand the language used in radiotelephony communication to the ICAO Operational level 4 (Paragraph 1.2.9.4)
- And personnel who are proficient below level 6 (Levels 5 and 4) should be formally evaluated at regular intervals. (Paragraph 1.2.9.6) with a recommended practice of every 3 years for level 4 and every 6 years for level 5.

3.3 Annex 6 Part I and III specify the role of operators in ensuring that flight crew demonstrate the ability to speak and understand the languages used in radiotelephony communication to the level specified in Annex 1. Annex 11 makes a similar statement for air traffic service providers.

4. ICAO Deliberations

4.1 When the Council adopted the language provisions in March 2003, it had requested that their implementation be monitored. The understanding was that if States encountered major difficulties in implementing the language proficiency Standards in paragraph 1.2.9 of Annex 1, it would be possible for the Council to consider reviewing the applicability date. Therefore in November 2005 a survey was sent to all ICAO regions. The results of this survey were considered in June 2006. 36 States and two international organizations responded. It was noted that 10 out of the 36 responses were from States that have English as a first language. As the results of the survey were considered inconclusive, it was agreed to retain the applicability date of March 2008. Contracting States of ICAO were informed accordingly and reminded of the need to take the necessary measures to implement the language proficiency requirements in a timely manner.

4.2 A second survey was conducted in October 2006 and its results were reviewed by the ICAO Air Navigation Commission in April 2007. 59 States completed in part, or in full, the questionnaire and three States had responded to the State letter without completing the questionnaire. The table below summarizes this survey results. The majority of respondents indicated that language provisions would be implemented by 5 March 2008.

	No. of States who have replied indicating:		
	Full implementation	Partial implementation	N/A
Will all pilots with air transport pilot's licence (ATPL) and commercial pilot's licence (CPL) be at least at Level 4?	48	18	
Will air traffic controllers be at least at Level 4?	41	21	
Will aeronautical station operators be at least at Level 4?	22	5	30
Will pilots with private pilot's licence (PPL) be at least at Level 4?	42	12	

4.3 In June 2007, the Council considered a report on the status of implementation of the language proficiency provisions as well as options concerning the applicability date. The Council decided to retain the applicability date of 5 March 2008 as it established a milestone and maintained the focus on implementation of these standards. It was also recognized that some States would not meet the applicability date. Therefore a resolution was developed and adopted during the last Assembly.

5. Addressing Non-compliance

5.1 There are four articles of the Convention on International Civil Aviation (the Chicago Convention) that impact non-compliance with the language proficiency requirements. These are articles 33, 38, 39 and 40, which will be briefly described below.

5.2 *Article 33- Recognition of certificates and licenses*

This article stipulates that if Contracting States meet the minimum requirements specified for licenses and airworthiness certificates, then these licenses and certificates will be automatically recognized by other Contracting States. This means that non compliance with the ICAO language proficiency requirements could invalidate recognition of licenses.

5.3 *Article 38 – Departures from international standards and procedures*

This article addresses differences with the international standards. Contracting States that do not comply with international standards or that adopt regulations and practices that differ from the international standards must notify ICAO of these differences. Once ICAO is notified, it advises all other Contracting States of the differences.

5.4 *Article 39 – Endorsement of certificates and licences*

The endorsement of licenses for language proficiency is addressed through article 39 of the convention and also in Annex 1, paragraph 5.1.1.2 XIII. Article 39 stipulates that when an international standard is not met, the licence should be endorsed accordingly. Annex 1 stipulates that from 5 March 2008 an endorsement on language proficiency should be included on the licence. Whether a licence holder involved in international operations meets or does not meet the language proficiency requirements, his or her licence should be endorsed.

5.5 *Article 40 - Validity of endorsed certificates and licenses*

Article 40 stipulates that no pilot with a license endorsed under article 39 shall participate in international navigation, except with the permission of the State or States whose territory is entered. This means that a pilot that does not meet the minimum language proficiency requirements and has a licence so endorsed may continue to operate internationally, provided that the States over which and to which the flight is conducted are in agreement. This could involve multiple bilateral agreements for these licence holders.

6. English language proficiency in international operations

6.1 In some regions of the world, there is an agreement that a language other than English may be used in radiotelephony communications. During these international flight operations, pilots and controllers conduct radiotelephony communications in Russian or Spanish, for example. In these cases where air traffic services are provided in Russian or Spanish, article 40 would not apply. However, the lack of language proficiency in English would limit the operational area in which pilots could fly. In any case, the controllers involved in international operations are still required to have at least ICAO Operational Level 4 in English as stipulated in Annex 10 (see paragraph 3.1 above).

6.2



The use of a language other than English in international operations endorsement of licences has implications on the endorsement of licences. This can be better understood through examples of flight operations in such a region.

Example 1

Consider the flight from Ashkhabad, Turkmenistan to Minsk, Byelarus illustrated in the map below:

Air traffic services during this flight are provided in Russian. Presuming that the flight crew are proficient in Russian at ICAO Operational Level 4 and that their licence are endorsed in accordance with the requirements of Annex 1, article 40 would not apply and bilateral agreements with Russia, Ukraine and Byelarus would not be needed. However, English language air traffic services would still be required in accordance with Annex 10.

Example 2

Consider the flight from Ashkhabad, Turkmenistan to Stockholm, Sweden illustrated in the map below:



Air traffic services during this flight are provided in Russian and in English. Presuming that the flight crew are proficient in Russian and English at ICAO Operational Level 4, and that their licences are endorsed for these two languages in accordance with the requirements of Annex 1, article 40 would not apply. Once again, English language air traffic services would still be required through the whole flight in accordance with Annex 10.

If the flight crew is not proficient to ICAO Operational Level 4 in English, their licences should be endorsed in accordance with article 39. In this case, the permission of States that do not provide air traffic services in Russian would need to be obtained in accordance with article 40.

7. Assembly Resolution A36 -11

7.1 One of the consequences of example 2 above is that States need to enter into numerous bilateral agreements. Another consequence and far worse in terms of safety is that States could ignore the standard. In its consideration of the issue, the Council of ICAO decided that further actions were necessary to a) mitigate the risks of non-compliance with the language proficiency requirements and b) strengthen the implementation of the language proficiency requirements in a way that could not be ignored. To achieve this, the Council of ICAO proposed and the Assembly adopted Resolution A36-11.

7.2 Through A36-11, States have an additional three years (or until March 2011) to comply with the language proficiency requirements. However, this is conditional on States

providing their implementation plan as soon as practicable but no later than 5 March 2008. The implementation plans should also include risk mitigating measures as appropriate.

7.3 The resolution urges States to waive the permission requirements under Article 40 for pilots from another State provided that the implementation plan is acceptable to them. The resolution also urges States not to restrict their operations into other States provided that their implementation plan for air traffic controllers and radio station operators is acceptable. It is important to note that the implementation plans provided by States are not reviewed or approved by ICAO.

7.4 Further to the adoption of the resolution, States were advised of the adoption of this resolution and requested to provide ICAO with their implementation plans or their notification of compliance, as appropriate. The implementation plan should include information concerning:

- Notification of compliance/differences
- Focal Point contact details
- National Regulatory Framework
- Estimate of the national level of implementation for pilots and controllers (this item should be updated on a regular basis)
- Information concerning training and testing programmes
- Interim measures

7.5 A series of workshops in each of the ICAO region was conducted for the development of implementation plans and to provide detailed guidelines on the development of these plans. Eight workshops were conducted from December 2007 to early March involving 488 participants from 102 States. To date 137 States and territories have provided either a notification of compliance (46 States), an implementation plan (88 States), or contact details for their focal points (3 States). This information can be found on the ICAO Flight Safety Information Exchange website at <http://www.icao.int/fsix/lp.cfm>.

8. Globally Harmonized Testing Criteria

8.1 Resolution A36-11 also includes a resolving clause that “Directs the Council to support Contracting States in their implementation of the language proficiency requirements by establishing globally harmonized language testing criteria”. ICAO is presently developing guidelines on these criteria which will be initially issued as an ICAO Circular. Eventually these guidelines will be included in the second edition of Document 9835 – *Manual on the Implementation of ICAO Language Proficiency Requirements*. Its purpose is to provide practical guidance to States’ to assess testing services, to support the language testing industry’s self-regulation and to facilitate positive washback. An additional challenge in developing these criteria is to balance best practices with practicality, as well as ensuring that they are applicable in 190 Contracting States. The primary target audience for the document are civil aviation authority personnel that may not necessarily have English as a first language and that are not language testing experts.

8.2 The criteria will address the following issues:

- Test design and construct

Including but not limited to purpose, rationale, compliance with holistic descriptors and rating scale

- Test validity and reliability
Including but not limited to documented evidence and what it means in layperson terms
- Rating
Including but not limited to number of raters, initial and recurrent rater training
- Test administration and security
Including but not limited to interlocutor and candidate instructions, evidence to be collected by raters, equipment requirements, record-keeping
- Organizational structure
Including but not limited to separation between training and testing activities and adaptation to local requirements
- Qualifications
For test development and design teams, test administration teams including interlocutors, and rating teams

8.3 In addition, phraseology in language testing will be addressed, bearing in mind the intent of the language provisions, the existing assessment of phraseology within the operational environment, the need to use correct standardized phraseology and the need to elicit plain language speech samples. Finally, the assessment of Level 6 proficiency will also be addressed within the context of Annex 1 standards.

9. Implementation Support Activities

9.1 Since the adoption of the language provisions, ICAO has undertaken several activities to support their implementation. These are briefly described below:

- Manual on the Implementation of LPRs (2004)
- Rated Speech Samples (2005/2007)
 - This CD was developed with the assistance of the linguistic sub-group of the PRICE SG.
 - It provides speech samples of level 3, 4 and 5 speakers as well as a detailed rating for each.
- 11 Regional Seminars (2004-2007)
 - These seminars were aimed at understanding the requirements towards facilitating their implementation.
- PRICE SG/05 (2006)
 - Conducted to develop additional guidance based on practical experience in language testing.
- ICAO Aviation Language Symposia (2004/2007)
 - The first one conducted shortly after the adoption of the provisions
 - The second to further assist States with implementation
- Implementation Plan Workshops (2007/2008)
- Implementation plan guidelines (FSIX)
- Posting of State implementation plans (FSIX)

10. Conclusion

10.1 ICAO's Safety Management Course describes the management dilemma that aviation organizations face in a very useful manner. In order to achieve its production objectives, the management of any aviation organization requires the management of many business processes. Safety management is a core business function just as financial management, Human Resource management, etc. This brings about a potential dilemma for management and that is to ensure that safety is managed while also ensuring the financial viability of the organization. Investing heavily in safety management (protection) will impact the financial health of an organization (production), while not investing in safety management could have catastrophic consequences.

10.2 Aviation organizations, including aviation language testing organizations have a responsibility to balance protection and production. It is critical that the language testing industry navigate within this safety space. To do so it needs to balance best practices with available resources without compromising safety and without overtaxing the system.

