

CHAPTER IV

RESULT AND DISCUSSION

This chapter provides an explanation of the process from needs analysis, planning, and preliminary product development to field testing and revision, resulting in a final product version.

4.1 Result

The final result of this research is an Aviation Security Learning Guidebook. The guidebook contains 78 pages, including the table of contents and sub-discussion delimiters. The researcher has completed the process of making an Aviation Security Learning Guidebook based on the researcher's experiences during an internship and as a mentor in the One Hour Before Duty (OHBD) program by the Head of Human Capital Business Partner Department.

The research process adhered to the eight key stages of the Borg & Gall research and development model. Research and Information Collection phase data was gathered through observation, interview, and Documentation, followed by the Planning stage, where focus was on setting objectives and determining the structure and content of the guidebook, including development of the guidebook's outline, dialogue, product design, character design, determining the colour palette, layout, and selecting fonts. Next, the Developing Preliminary form of Product phase involves creating the first draft of the guidebook from all the elements that were collated into a product, such as Prototype making, Design, layout and Character design.

In the Main Field-Testing phase, a validation test was conducted by the supervisor, an expert in the field, this involved two types of experts: material experts who assessed the content and language aspect of the guidebook, and media experts who evaluated the textual-visual elements. Next, Revising Operational Product based on the validation form assessed by the expert supervisor. In the Operational Field Testing, after revision is large-scale testing on the target stakeholder to adjust the information contained in the guidebook

for Aviation Security officers using a questionnaire, which is then Revising Final Product stage based on the questionnaire results. The final stage is Disseminating and Implementing the final guidebook, which has been printed and submitted to aviation security.

4.1.1 Research and Information Data Collection

At this stage, the theme of communication was selected as the final product, with the developed product taking the form of a guidebook focused on aviation security officer communication. The selection of Yogyakarta International Airport as the research location was based on the follow-up to previous internship activities.

During the internship, particularly in the terminal area, the researcher observed AVSEC officers providing services to passengers. This observation was conducted after discussions on the OHBD work program, the results of the first syllabus, and informal interviews with the Head of Human Capital Business Partner department. In the data collection phase, the researcher employed the triangulation method, which includes observation, interviews, and documentation, to collect and analyze relevant data to support the development of the guidebook.

a. Observation

During this observation, researchers found that it is important for all airport staff to convey accurate information to passengers using simple, clear, and easy-to-understand sentences. However, this poses a challenge for AVSEC officers when communicating with foreign passengers due to their requirement to speak Indonesian and English. This challenge complicates their communication, turning apparently simple sentences into something more difficult to understand due to a lack of structure or unnecessary complexity. Therefore, this highlights the

importance of clear communication to avoid misunderstandings and ensure a positive passenger experience.

b. Interview

On September 6, 2024, interviews and discussions were conducted with Ms. Erni, Head of Human Capital Business Partner of Yogyakarta International Airport. The meetings took place in the Human Resources Unit room at Angkasa Pura I Building, Yogyakarta International Airport, to discuss about OHBD EFAST program. The program aims to improve AVSEC officers' English communication skills. Ms. Erni observed that AVSEC officers often struggle to communicate in English and sometimes use incorrect words during their duties. Some AVSEC officers are also junior high school graduates, indicating limited education. After a brief discussion and interview, Ms. Erni appointed the researcher as the person in charge (PIC) and mentor with researcher partner intern to teach each platoon of AVSEC.

There were four platoons of AVSEC, with each platoon consisting of 26 to 33 members. As the person in charge and mentor, the researcher would led platoons B and C, while the researcher's internship partner led platoons A and C. Additionally, four students from Universitas Jenderal Soedirman served as teacher assistants to support the activities of all platoons. Based on the interview results, Ms. Erni requested that a guidebook be developed as the final outcome of EFAST and as a reference for future OHBD programs at Yogyakarta International Airport.

c. Document Analysis

In developing the guidebook, the researcher revised the syllabus initially created by previous interns, in discussion with the internship supervisor, an expert in the field, on August 26,

2024. This discussion aims to fit the material for the 45-minute OHBD EFAST timeframe. To ensure the material is clear and relevant to AVSEC's daily tasks, the syllabus outlines six meetings. Each meeting focuses on a single topic, and the final meeting concludes with an oral examination. These meetings are adjusted to the schedule made by Ms. Erni, and the material presented includes the following:

1. The first session covers basic AVSEC vocabulary for talking with foreign passengers.
2. The second session focuses on addressing, as AVSEC officers learn how to greet and introduce themselves politely.
3. The third session covers both formal and informal expressions like greetings, gratitude, apologies, compliments, and offers of help.
4. The fourth session discusses questions and instructions often used by passengers or visitors.
5. The fifth session teaches officers how to handle passengers with special needs, including people with disabilities, the elderly, pregnant women, small children, and VIP guests.
6. The sixth and final session is an oral exam, where each participant answers random questions in front of the class.

The finalized syllabus served as the foundation for the guidebook. However, the syllabus remained overly basic and lacked sufficient detail. To expand the guidebook, the researcher consulted additional references on AVSEC airport responsibilities, including prohibited items as specified by IATA, ICAO, and Injourney airport SOP, which were updated following the merger of Angkasa Pura I and II on September 9, 2024.

d. Documentation

Documentation in the form of the final syllabus and outline was developed for the creation of the Guidebook. In addition, meetings were held to discuss with Universitas Jenderal Soedirman and with the Head of Human Capital Business Partner Department.

4.1.2 Planning

In this stage, the researcher conducted a literature study of the ICAO and IATA (International Airport Transportation Association) Standard Operational Procedure (SOP) and AVSEC training materials and syllabus from OHBD. Redesign of syllabus started from data collection obtained through observation and interview, which produced the final syllabus followed by creating the product design, character, layout, colour palate and font selection using Canva.

4.1.2.1 Process Outline Data Collection

Before developing the framework, researchers compiled the final results of the syllabus implemented in the second meeting of the OHBD programe. These final results were then rearranged into a preliminary outline for the guidebook, supplemented by a collection of data from information gathered previously.

Pertemuan I

Sasaran : Security
 Hari/ Tanggal : Alokasi waktu : 30 menit
 Tema :

Materi Pembelajaran (Kompetensi Dasar)	Kegiatan Pembelajaran	Tujuan Pembelajaran	Indikator Keberhasilan
(Materi I) Vocabulary Kemampuan menguasai kosakata dasar untuk berkomunikasi dengan penumpang	1. Pengenalan kosakata dasar yang sering digunakan. 2. Latihan praktik simulasi dasar interaksi dasar antara petugas dengan penumpang	Untuk memfasilitasi komunikasi yang efektif dalam menjalankan tugas mereka serta menjaga standar keamanan dan pelayanan yang tinggi.	1. Security dapat menggunakan kosakata dengan benar dalam percakapan sehari-hari dengan penumpang. 2. Security dapat merespon pertanyaan penumpang dengan kosakata yang tepat dan pengucapan yang benar.
(Materi II) Greeting Kemampuan untuk menyapa dan memperkenalkan diri kepada penumpang dengan sopan dan profesional	1. pemberian materi terkait greeting. 2. Mengajarkan kepada security cara menyapa tamu dengan sopan	Untuk memulai interaksi atau membangun hubungan dengan orang lain secara sopan dan ramah	1. Security dapat menyapa penumpang dengan sapaan yang tepat 2. Security dapat menanggapi sapaan penumpang dengan sopan dan tepat

Materi 1 (Vocabulary)
a. Arah (Direction)

English	Pronounce	Bahasa
Right	rajt	Kanan
Left	lejt	Kiri
Straight	strajt	Lurus
Past	past	Lewat
Cross	krös	Menyebaring

Figure 4.1 Existing syllabus

Pertemuan I

Sasaran : Security
 Hari/ Tanggal : Alokasi waktu : 30 menit
 Tema : **Basic Vocabulary**

Materi Pembelajaran (Kompetensi Dasar)	Kegiatan Pembelajaran	Tujuan Pembelajaran	Indikator Keberhasilan
(Materi I) Vocabulary Kosakata dasar untuk berkomunikasi dengan penumpang	1. Pengenalan kosakata dasar yang sering digunakan di bandara. 2. Latihan praktik pada kosakata direction dan posisi suatu barang disekitar ruang belajar	Pengenalan dan penerapan kosa kata dalam bahasa inggris dasar menunjuk arah dan posisi suatu lokasi dan barang	1. Security mampu memberikan detail lokasi dari kosa kata dasar yang dipelajari serta posisi suatu barang atau tempat.

Pertemuan II

Sasaran : Security
 Hari/ Tanggal : Alokasi waktu : 30 menit
 Tema : **Addressing**

Materi Pembelajaran (Kompetensi Dasar)	Kegiatan Pembelajaran	Tujuan Pembelajaran	Indikator Keberhasilan
(Materi II) Addressing Materi tentang menyapa dan memperkenalkan diri kepada penumpang dengan sopan.	1. Pemberian materi terkait Addressing 2. Mengajarkan kepada security cara menyapa seseorang yang belum dikenal	Penerapan tata cara berinteraksi atau memanggil orang asing secara sopan dan ramah.	1. Security dapat menyapa penumpang dengan sapaan yang tepat 2. Security dapat menanggapi sapaan penumpang dengan sopan dan tepat

Figure 4.2 Final produce syllabus

The final syllabus is obtained from validation and discussion with experts, who are the internship supervisors, on 26 August 2024, during the internship period, in the

lecturer's room at Universitas Diponegoro. The syllabus combined several materials into one and selected vocabulary and expressions that are frequently used in the daily conversation of AVSEC officers. In the preliminary syllabus, there are several parts which discuss about grammatical. These sections have been excluded due to a need for more detailed discussion and the limitation of the OHBD duration, specifically 45 minutes prior to the commencement of duties by AVSEC personnel. The final syllabus is used as foundation to create an outline in the guidebook.

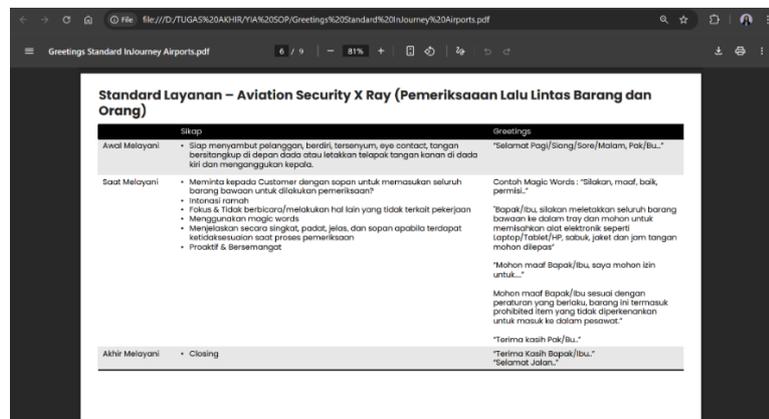


Figure 4.3 SOP document by Injourney Airport

Additionally, as supplementary content, the outline of the Guidebook is also derived from the Injourney Airport Standard Operating Procedures file, which not only explains standard greetings and attitudes for Aviation Security but also Customer Service. The Aviation security section contains such as, The operational standards regarding standard greeting Aviation Security Document, standard greeting Aviation Security Checking X-Ray, standard greeting Aviation Security Manual Inspection, standard greeting Aviation Security Screening of Passenger and

standard greeting Aviation Security Public with Indonesia. Therefore, the researcher included this part to chapter 1 as an opening the contents of the guidebook in English and Indonesia. For the complete syllabus and Injourney Airport Standard Operational Procedure for AVSEC can be seen on Appendix.

When collecting data, frequently asked passenger questions were included in the dialogue guidebook. Departing passengers often inquired about the location of various places and which prohibited items were allowed. Arriving passengers commonly asked about the location of the airport train station.

4.1.2.2 Concept dialogue

After processing the data for the guidebook, content creation began, the guidebook will consist of 4 Unit which several part sub-units. The first Unit cover information what is Aviation Security, and standard greeting for Aviation Security X-Ray, Aviation Security Manual Inspection, Aviation Security Screening of Passenger, Aviation Security Public. Moreover, an additional sub-unit in this unit, which discusses polite greetings. This sub-unit discusses the use of formal titles and times of day.

In Unit Two, the content includes flight information, such as Flight Codes, Three-Letter Flight Codes (which are categorized by both ICAO and IATA), and the linking of flight information with locations. In this unit, the dialogue outline is tailored to the content of Unit 2 and includes: (1) Giving directions to the airline check-in, (2) Giving

directions to the gate, and (3) Giving directions to OOG Security.

Table 4.1 Concept Dialogue Unit 2

No.	Indonesia	English
1.	<p>Arah check in Maskapai</p> <p>SC: Permisi, pak. Apakah ada yang bisa saya bantu, karena anda terlihat kebingungan?</p> <p>P: Ini pertama kali saya ke Indonesia. Saya kebingungan dengan kode penerbangan. Bisakah anda membantu saya dimana letak maskapai untuk kode penebangan GA-678?</p> <p>SC: Ga Adalah kode penerbangan Garuda Indonesia. Letaknya ada di sisi sebelah kiri, di loket B.</p> <p>P: Terimakasih banyak atas bantuan anda. Pak.</p>	<p>Direction for check in Airline</p> <p>SC: Hello, excuse me, sir. What can I help you? You seem confused</p> <p>P: This is my first flight to Indonesia. I am a little bit confused about this flight code. Could you tell me where is airline for flight code GA-678?</p> <p>SC: GA is a flight code for Garuda Indonesia. Walk to the left from here. Then head to Island B.</p> <p>P: Thank you for your help, sir.</p>
2.	<p>Menunjukkan arah pintu Gate.</p> <p>P: Halo, permisi. Gate 4B ada dimana? Saya tidak</p>	<p>Showing the direction of the Gate.</p> <p>P: Hello, excuse me. Where is Gate 4B? I don't see a sign that</p>

melihat tanda yang jelas
untuk arah ke gate 4B.

clearly leads to Gate
4B.

SC: Halo bu, Lokasi gate
4B ada di lantai bawah.
Di ujung belokan
pertama nanti belok
kanan.

SC: Hello, Ms. The gate
4B is downstairs. At the
end of the first corner,
turn right.

P: Oh, nice. Thank you.

P: Oh, baik. Terimakasih.

SC: My pleasure.

SC: Dengan senang hati.

3. **Menujukan arah ke OOG security.** **Showing the direction of the OOG security.**

Pengumuman

Announcement

Mohon perhatian untuk
Nyonya Robbert,
penerbangan Air Asia
dengan kode pesawat
AK-890 tujuan Kuala
Lumpur, silahkan menuju
ke OOGS sekuriti di
check in area.
Terimakasih.

Attention please,
attention for Mrs.
Robert Air Asia
passenger on flight
number AK-890,
leaving for Kuala
Lumpur. Please report
to OOGS security
officer at Check-in area.
Thank you.

P: Permisi, baru saja ada
pengumuman atas nama
saya untuk menuju ke
OOGS sekuriti. Ada
dimana lokasinya?

P: Excuse me, there is
an announcement
calling my name asking
me to go to OOGS

SC: Halo, bu. Lokasi
OOGS berada dekat
dengan sekuriti

security office. Where
is the location?"

pemeriksaan, disisi	SC: Hello, Ms. OOGS
lainnya. Ikuti jalan ini	location is near the
nanti akan terlihat	security checkpoint, on
tempatny.	the other side. Follow
P: Terimakasih atas	this road and you will
informasinya.	find it.
SC: Dengan senang hati.	P: Thank you for your
	information.
	SC: My pleasure.

Unit three focuses on the duties of airport security officers in the inspection/screening area. This unit contains content such as giving appropriate instructions during screening, body screening, requesting travel documents, and inspecting and confiscating prohibited items. It includes one example of dialogue about prohibited items that require official permits.

Table 4. 2 Concept Dialogue Unit 3

No.	Indonesia	English
1.	SC: Maaf, barang ini tidak diizinkan masuk ke dalam pesawat, anda perlu surat izin untuk membawanya. Apakah anda memiliki surat izin maskapai, surat tugas atau surat izin membawa senjata api? P: Ya, saya punya, ini. Anda bisa mengecek	SC: Sorry, this item is not allowed in carry-on baggage. You need a permit to take this item. Do you have airline approval letter, duty letter or transport permit? P: Yes, I have it. Here, you can check the

nama dan kode angka yang ada di surat ini.	name and code on this letter.
SC: Baik, terimakasih atas kerjasamanya dan maaf atas ketidaknyamanan ini.	SC: Thank you for your cooperation. Sorry for the inconvenience.
P: Tidak apa, anda hanya menjalankan tugas.	P: Doesn't matter. You are just doing your job.
SC: Saya kembalikan. Terimakasih dan semoga perjalanan anda menyenangkan.	SC: Here you go. Thank you. And enjoy your flight.

Unit 4 focuses on aviation security protection officers, covering suspicious behaviour, using warning phrases and commands, implementing evacuation language, and crowd control. The unit presents two example dialogues: (1) handling a suspicious who trying to enter a restricted area, and (2) the fire evacuation scenario.

Table 4. 3 Concept Dialogue Unit 4

No.	Indonesia	English
1.	<u>Perilaku mencurigakan</u>	<u>Suspicious Behaviour</u>
	SC: Berhenti di sana, itu area terlarang dan anda tidak boleh memasukinya!	SC: Stop there! It's a restricted area, you should not enter it!
	P: Oh, maaf. Tapi saya ada janji dengan	P: Oh! sorry. But I have an appointment with someone I know here.

seseorang yang saya kenal di dalam.
SC: Boleh saya tau nama lengkap serta dibagian mana ia bertugas?
P: Namanya Gintaro Purnama.

Security Security mencoba menghubungi ponsel untuk menanyakan apakah ada nama yang penumpang itu sebutkan. Namun, setelah memastikanya, tidak ada nama tersebut pada petugas Avsec

Security attempted to contact AVSEC officers by phone to inquire if there was a name the passenger had mentioned. Still, after confirming, it was found that such a name did not exist.

SC: Mohon maaf pak, nama yang anda sebutkan tidak ada. Sebaiknya bapak menghubungi orang tersebut untuk membuat janji temu diluar area ini.

SC: Sorry, sir. The name you mentioned does not exist. We would prefer you to contact the person who makes appointments outside of this area.

P: Tapi ada yang perlu saya bahas dengannya.
SC: Mohon maaf pak, jika bapak tetap memaksa untuk menerobos masuk kedalam Kawasan ini,

P: But I have something to do with him!
SC: Sorry, sir. But if you still try to enter this area, you will be sanctioned in accordance with the

bapak akan dikenakan regulations and you
sanksi berdasarkan may be accused of
peraturan yang berlaku being the chief suspect
dan bapak bisa dijadikan for suspicious
tersangka utama atas behaviour.

perilaku mencurigakan. **P:** I will leave, then.

P: Baik, saya akan pergi.

2. **Evakuasi kebakaran** **Fire evacuation**

Sebuah alarm kebakaran A fire alarm sounded in
berbunyi di area terminal the airport terminal
bandara. Dengan sigap area. AVSEC officers
petugas AVSEC segera immediately evacuated
melakukan evakuasi the passengers from the
warga yang berada di location and waited for
Lokasi kejadian dan the ARFF (Airport
menunggu unit ARFF Rescue Fire Fighting)
(Airport Rescue Fire Fighting) datang ke
Lokasi.

SC: Attention please.

SC: Mohon perhatian, The fire alarm is now
Alarm kebakaran saat ini raised. Please follow
telah berbunyi. Harap our instructions and
ikuti instruksi dari kami stay calm while we
evacuate.

dan tetap tenang selagi **P:** Where is the fire
kami melakukan escape?

evakuasi. **SC:** The emergency exit

P: Dimana letak pintu on the left side, at the
daruratnya? first corner. Do not use

SC: Pintu darurat lift or elevator during
disebelah kiri, di evacuation!
tikungan pertama. Jangan **P:** What about our
gunakan lift selama items?
pengevakasian. **SC:** Leave your all item
P: Bagaimana dengan on the site and quickly
barang-barang kami? to the exit door!
SC: Tinggalkan barang- **P:** Alright
barang kalian di tempat **SC:** Follow to the
dan segera menuju ke assembly point and do
pintu keluar. not jostle or push each
P: Baik. other. Help people
SC: Ikuti ke tanda titik around you who also
kumpul dan jangan need help.
berdesak desakan atau **P:** Understand.
saling mendorong. Bantu
orang di sekitar yang juga
memerlukan bantuan.
P: Siap.

4.1.2.3 Guidebook Design Formatting

At this stage, the contents of the guidebook are planned, designed, and then compiled in the Developing Preliminary Form of Product stage. The plan includes the selection of colour palette, font size and type, preliminary sketches of characters in the book, and book size using Canva.

a. Book Size Selecting

The book size is customized from the layout of the guidebook, an A5 size with dimensions of 21 x 14.8 cm.

The A5 was selected for the aim of producing a compact and easily portable book that is still large enough to ensure that the text is easy to read.

b. Colour Palate and Cover

The colour palate uses in this guidebook consist of Azure and Gray tone. Azure is a light shade and combination of blue shade. The hills in front of Yogyakarta International Airport and the view of the runway and beach from the waiting room served as inspiration for this colour represents confidence, responsibility, stability and also provides a sense of security and calmness.

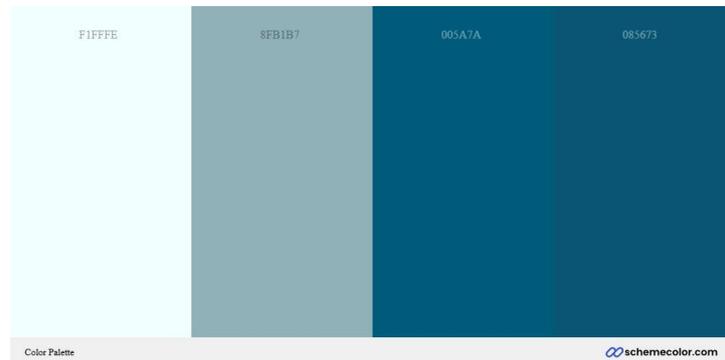


Figure 4.4 Colour palette guidebook





Figure 4.5 Scenery of the hill and in waiting room

c. Font Size and Type Selection

In selecting font types, there are three types used in the guidebook content, as follows:

1. The title of the book on the cover page written as “**Aviation Security**” uses the Coco Gothic font, size 21pt in black colour.

AVIATION SECURITY

Figure 4.6 Font type of title “Aviation Security”

2. The title of “**Guidebook**” uses ITC New Baskerville font, size 37pt in black colour.

GUIDEBOOK

Figure 4.7 Font type of title “Guidebook”

3. The author’s name “**Imfa Aistya Ramadhani & Alfin Rosyidha, S.Pd., M.A.**” uses the Poppins font, size 10pt in black colour.

Disusun oleh:
Imfa Aistya Ramadhani & Alfin Rosyidha, S.Pd., M.A.

Figure 4. 8 Font type of author’s name

- 4. The “**Bahasa Asing Terapan Sekolah Vokasi Universitas Diponegoro 2025**” is written use Poppins font, size 9pt in white colour.



Figure 4. 9 University Information

In compiling the guidebook content, the font used is Poppins for all text sections to maintain visual consistency and readability, except tittle of each unit. The difference in the use of the Poppin font in the main content lies in the font size, which is adjusted to suit the information, such as:

- 1. The text in Unit 1- 4 use font size 25pt and the tittle text of Unit use font size 29pt, written in black colour and Bold format.

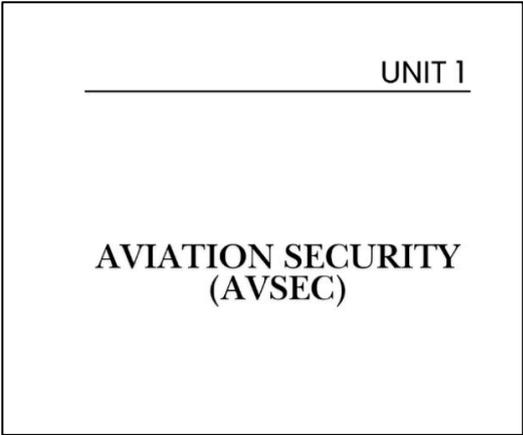


Figure 4.10 Font type of each Unit

2. The text of heading uses 9pt and the body content use font size 7.5pt to make it easier for readers to differentiate between each section of material

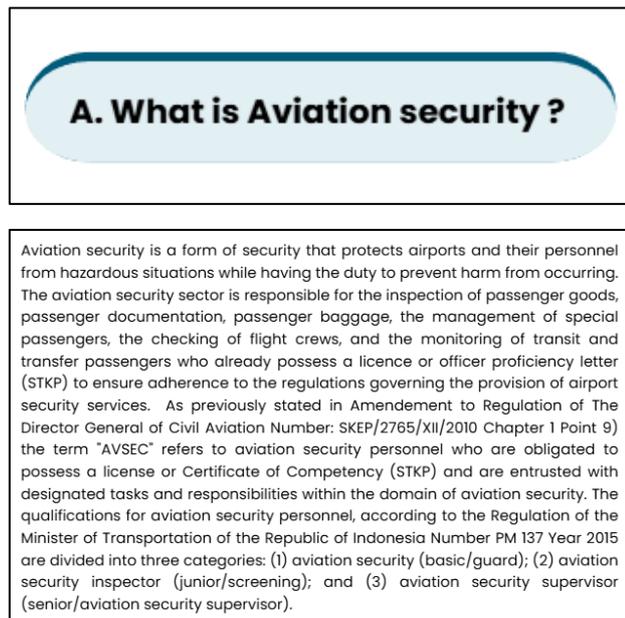


Figure 4.11 Font of Heading and body content

d. Design Character and Colouring

The initial phase of creating the character's first sketch involves the identification of references pertaining to head anatomy and hair models, using the Pinterest application. The creation of character sketches is adjusted to the research object of this guidebook, AVSEC officers. The preliminary results of this character design are then combined, and an open commission character carries out the final character modification and colouring.

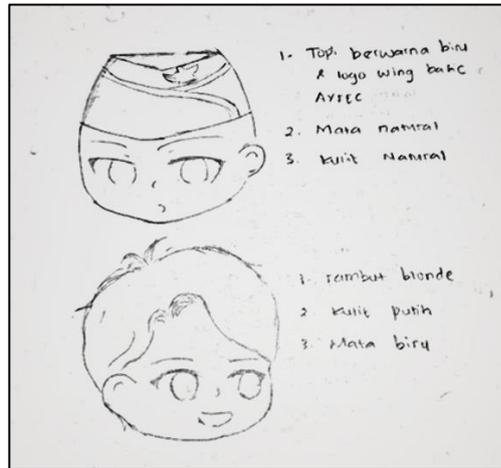


Figure 4.12 The preliminary character design



Figure 4.13 Final result of character design

The final character designs were created, and several expressions were then added to suit the planned dialogue situations, such as angry, happy, and alert. The colouring was also adjusted to suit the character criteria, namely for AVSEC officers and foreign passengers. A more detailed illustration of these changes can be found in the appendix.

1. The colour palette for AVSEC colouring characters use code, Dark Azure (#005A7A), Light Orange (#F7E0DA), Pastel Orange (#F2D17F), Red (D97871) and Gray Red (#715C58) is as follows:



Figure 4.14 Colour palate of design character



Figure 4.15 After colouring of AVSEC Character

2. The colour palette for Passenger colouring characters use code, Light Orange (#FAEAE4), Gray Orange (#907961), Orange (CA7556), and Dark Red (#84322D) is as follows:



Figure 4.16 Colour palate of Passenger character



Figure 4.17 After colouring of Passenger character

4.1.2.4 Audio Concertation

At this stage, researchers utilised Artificial Intelligence (AI) from Google AI Studio and LMNT AI in the form of audio conversations to assist AVSEC officers in understanding and mirroring the pronunciation of proper English. Additionally, the use of AI facilitated the selection of voice types and tones customised to the character requested

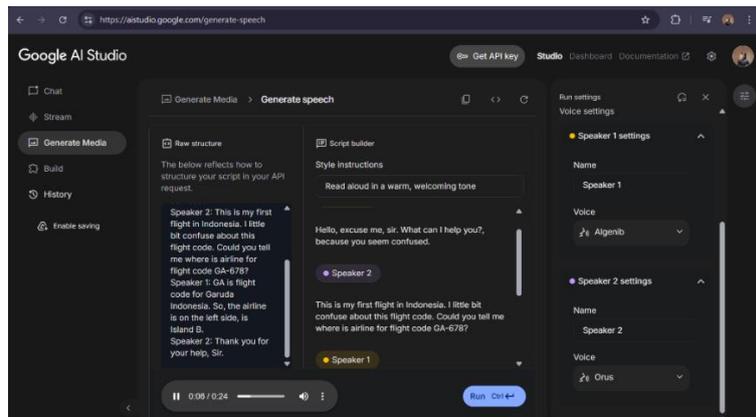


Figure 4.18 Google AI Studio

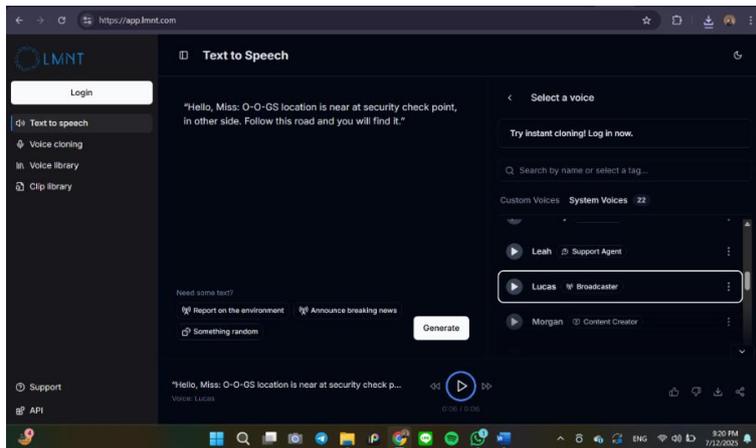


Figure 4.19 LMNT AI

After the audio conversion is complete, QR codes will be generated to access the audio conversion directly on Google Drive and QR code for each audio conversation, corresponding to the material presented in each unit.

4.1.3 Developing Preliminary form of Product

As a prototype function of the preliminary product development, in this stage, all the results of the needs analysis conducted during the planning stage, including the outline, book size, font type and size, colour palette, and character illustration, are arranged systematically.

1. Cover page design

A combination of the blue shade from the hill and the view outside the waiting room, along with the element that has been designed will be used as the cover page of the guidebook with the following result:

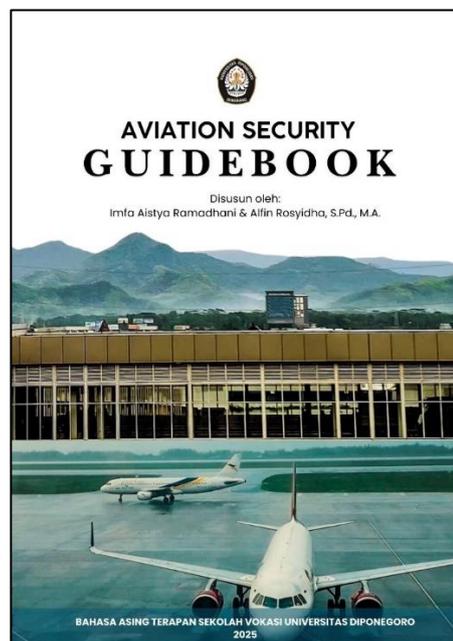


Figure 4.20 Cover for the guidebook result

On the cover page, the font used for the title "Aviation Security" is Coco Gothic, while the word "Guidebook" uses ITC New Baskerville. The Poppins font is selected for the author's name and university identity. As a selection of font variations is employed

for this purpose, the objective is to provide clear visual contrast and create an attractive and professional appearance on the cover page.

2. Design format content

The design display for each cover unit includes a photo element of the hill view in front of YIA. In this page, Gray Azure and Dark Azure design elements are used as the background for the main content and Dark azure is also use to colour the page format, as shown in figure 4.21.

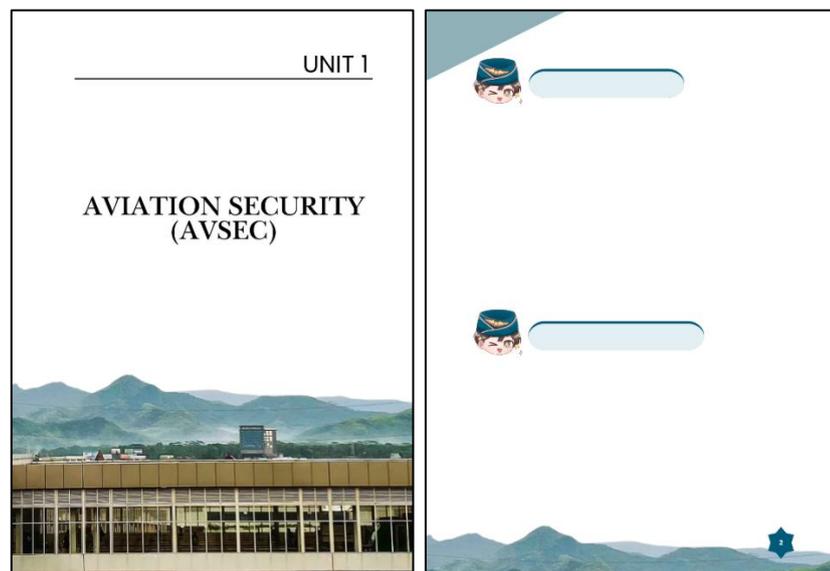


Figure 4.21 Cover page unit and Main content design

3. Bilingual formatting

Created this guidebook, the bilingual format was designed to that the English section at the top and the Indonesian section at the bottom. This structure is helpful in improving readers' understanding of both languages.

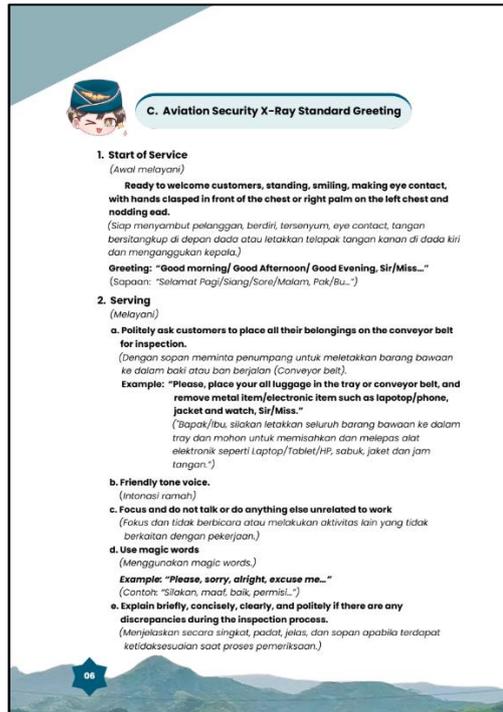


Figure 4.22 Bilingual Formatting

4.1.4 Main Field Testing

At this stage, the compiled book will be tested by a lecturer acting as an examiner to review the results of the product that has been compiled in the preliminary product development phase. Using a validation form, the testing conducted on the product will focus on content and language aspects for the material and media form. The material and media expert validation were carried out by Alfin Rosyidha S.Pd., M.A. On July 14, 2025. The result form of expert validation are as follows:

Form of Validation Product
Developing A Guidebook: English For Aviation Security

Validator : Alfin Rasyidha, S.Pd., M.A.
Date : 11 July 2025

Media Expert Validation

Please checklist one of the selected answers (x)

1. The guidebook display is attractive?

Strongly Disagree Disagree Agree Strongly Agree

2. The readability of font style and font size is clear?

Strongly Disagree Disagree Agree Strongly Agree

3. The selection of color suitable in the guidebook?

Strongly Disagree Disagree Agree Strongly Agree

4. The audio clarity and voice quality clear?

Strongly Disagree Disagree Agree Strongly Agree

5. Does the guidebook easy to carry and move?

Strongly Disagree Disagree Agree Strongly Agree

6. The guidebook is practical to use?

Strongly Disagree Disagree Agree Strongly Agree

7. Is there more information that needs to be added to this book? If yes, please explain.

-

8. Criticism and suggestion.

⊕ Layout for English version would be better if it is written separately not up and down.

⊕ Add author of the book

⊕ Add title of each QR.

Figure 4.23 Media expert form after validation

Based on the results of the media validation form, the supervisor assessed that the guidebook produced was satisfactory. However, the supervisor noted that the layout of the bilingual sections lacked aesthetic appeal and was visually unappealing. It was suggested that the two languages be written separately, rather than placed one on top of the other. The supervisor also recommended adding a title to each QR code and including the author's name on the cover of the guidebook.

<p>6. Is the QR Code are easily accessible?</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input checked="" type="radio"/> Agree <input type="radio"/> Strongly Agree</p> <p>7. Is there more information that needs to be added to this book? If yes, please explain.</p> <p>—</p> <p>8. Criticism and suggestion.</p> <p>⊗ Change "melajar" to "Pelayanan"</p> <p>⊗ by attention to punctuation.</p>	<p style="text-align: center;">Form of Validation Product</p> <p style="text-align: center;">Developing A Guidebook: English For Aviation Security</p> <p>Validator : Alfin Rosyidha, S.Pd., M.A.</p> <p>Date : 14 Juli 2025</p> <p style="text-align: center;">Material Expert Validation</p> <p>Please checklist one of the selected answers (x)</p> <p>1. Is the material suitable for the Aviation Security's needs?</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input type="radio"/> Agree <input checked="" type="radio"/> Strongly Agree</p> <p>2. Is the translation appropriate with grammar rules?</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input checked="" type="radio"/> Agree <input type="radio"/> Strongly Agree</p> <p>3. The use of language in material is easy to understand? (both English and Bahasa Indonesia)</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input type="radio"/> Agree <input checked="" type="radio"/> Strongly Agree</p> <p>4. Is the material make it easier for Aviation Security to communicate with foreign passenger?</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input type="radio"/> Agree <input checked="" type="radio"/> Strongly Agree</p> <p>5. Is the organizing content appropriate for the purpose of designing guidebook?</p> <p><input type="radio"/> Strongly Disagree <input type="radio"/> Disagree <input checked="" type="radio"/> Agree <input type="radio"/> Strongly Agree</p>
--	---

Figure 4.24 Material expert form after validation

Next is the validation sheet, completed by the supervisor. The feedback on the guidebook was considered adequate and appropriate for the target audience. The translation was deemed satisfactory. However, the supervisor noted that the terminology in the serving section was not suitable in Indonesian, suggesting that the terms “Start of Serving, Serving, and End of Serving” be changed to “Awal Pelayanan, Pelayanan, and Akhir Pelayanan” in Indonesian. The supervisor also advised careful attention to punctuation in each sentence.

4.1.5 Revising Operational Product

In the operational revision stage of the product, the preliminary product development was revised, with the validation results and advice provided by the supervisor. The researcher designed a bilingual layout with English sentences at the top and Indonesian sentences at the bottom. However, the supervisor suggested changing the bilingual layout into a

separate layout. Additionally, the bilingual format has been changed to the front pages, which contain text in English, and the back pages display Indonesian translations of the main content. This parallel structure is helpful for cross-referencing and improves the understanding of readers of both languages. Moreover, it makes the layout look neater.

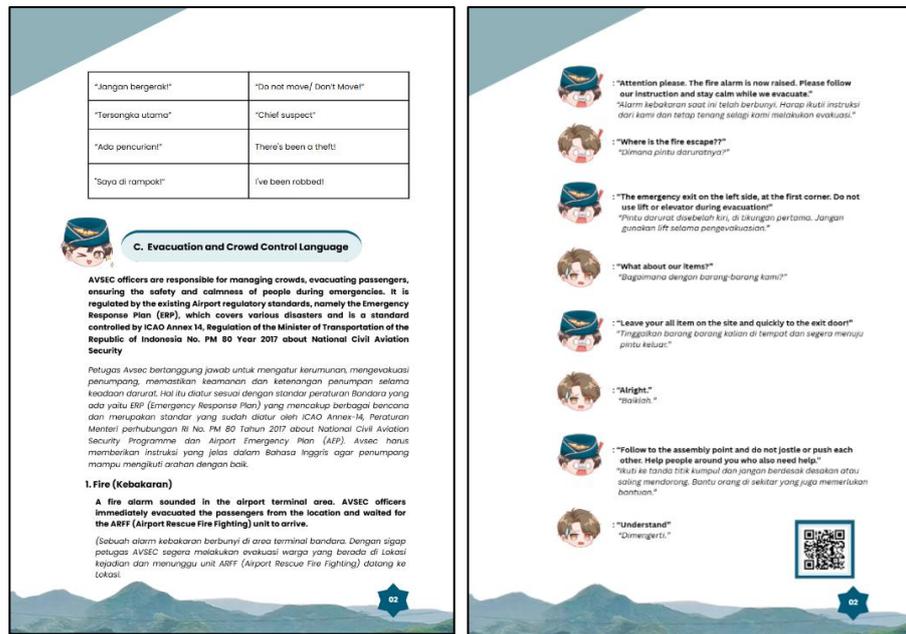


Figure 4.25 Before the bilingual layout revision

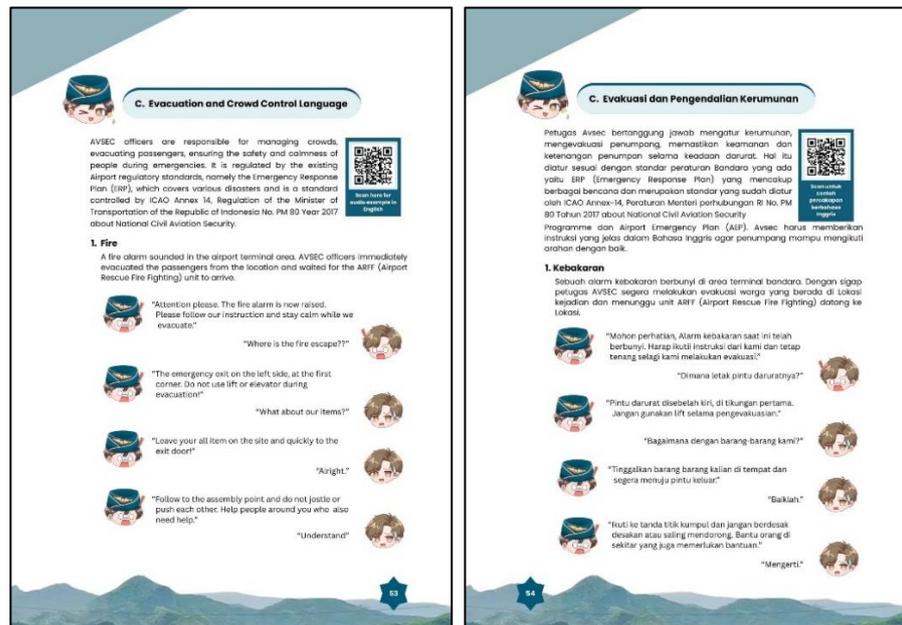


Figure 4.26 After the bilingual layout revision

In addition, there is a typo in the word “Excuse”, which was previously written as “Exuce” in the Standard Greeting Aviation Security manual inspection, Unit 1. The next revision is the inappropriate use of punctuation, such as “Sorry, Sir/Ms. This area...” which was written as ’Sorry Sir/Ms. This area...’ and an improvement to the translation of the sentence “Star of Serving, Serving and End of Serving”, which was translated using the sentence “*Awal Melayani, Melayani dan Akhir Melayani*”, to be translated into a more readable sentence as “*Awal Pelayanan, Pelayanan dan Akhir Pelayanan*”.

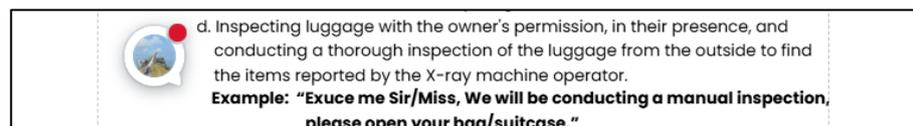


Figure 4.27 Sample of typo before revision

conducting a thorough inspection of the luggage from the outside to find the items reported by the X-ray machine operator.

Example: "Excuse me, Sir/Miss. We will be conducting a manual inspection. Please open your bag/suitcase."

Figure 4.28 Sample of typo after revision



C. Standar Layanan Aviation Security X-ray

- 1. Awal Melayani**

Siap menyambut pelanggan, berdiri, tersenyum, eye contact, tangan bersilang di depan dada atau letakkan telapak tangan kanan di dada kiri dan mengangguk kepala.

Sapaan: "Selamat Pagi/Siang/Sore/Malam, Pak/Bu..."
- 2. Melayani**
 - a. Dengan sopan meminta penumpang untuk meletakkan barang bawaan ke dalam baki atau ban berjalan (Conveyor belt).

Contoh: "Bapak/Ibu, silakan letakkan seluruh barang bawaan ke dalam tray dan mohon untuk memisahkan dan melepas alat elektronik seperti Laptop/Tablet/HP, sabuk, jaket dan jam tangan."
 - b. Intonasi ramah.
 - c. Fokus dan tidak berbicara atau melakukan aktivitas lain yang tidak berkaitan dengan pekerjaan.
 - d. Menggunakan *magic words*
Contoh: "Silakan, maaf, baik, permisi..."
 - e. Menjelaskan secara singkat, padat, jelas, dan sopan apabila terdapat ketidaksesuaian saat proses pemeriksaan.
Contoh: 1.) "Mohon maaf, Bapak/Ibu, saya mohon izin untuk..."
2.) "Mohon maaf, Bapak/Ibu, sesuai dengan peraturan yang berlaku, barang ini termasuk prohibited item yang tidak diperkenankan untuk masuk ke dalam pesawat."
 - f. Proaktif dan antusias
- 3. Akhir Melayani**

Mengucapkan terimakasih dengan senyaman hangat.

Sapaan: "Terimakasih/Dengan senang hati."

Figure 4.29 Before improvement sentence



C. Standar Layanan Aviation Security X-ray

- 1. Awal Pelayanan**

Siap menyambut pelanggan, berdiri, tersenyum, eye contact, tangan bersilang di depan dada atau letakkan telapak tangan kanan di dada kiri dan mengangguk kepala.

Sapaan: "Selamat Pagi/Siang/Sore/Malam, Pak/Bu..."
- 2. Pelayanan**
 - a. Dengan sopan meminta penumpang untuk meletakkan barang bawaan ke dalam baki atau ban berjalan (Conveyor belt).

Contoh: "Bapak/Ibu, silakan letakkan seluruh barang bawaan ke dalam tray dan mohon untuk memisahkan dan melepas alat elektronik seperti Laptop/Tablet/HP, sabuk, jaket dan jam tangan."
 - b. Intonasi ramah.
 - c. Fokus dan tidak berbicara atau melakukan aktivitas lain yang tidak berkaitan dengan pekerjaan.
 - d. Menggunakan *magic words*
Contoh: "Silakan, maaf, baik, permisi..."
 - e. Menjelaskan secara singkat, padat, jelas, dan sopan apabila terdapat ketidaksesuaian saat proses pemeriksaan.
Contoh: 1.) "Mohon maaf, Bapak/Ibu, saya mohon izin untuk..."
2.) "Mohon maaf, Bapak/Ibu, sesuai dengan peraturan yang berlaku, barang ini termasuk prohibited item yang tidak diperkenankan untuk masuk ke dalam pesawat."
 - f. Proaktif dan antusias
- 3. Akhir Pelayanan**

Mengucapkan terimakasih dengan senyaman hangat.

Sapaan: "Terimakasih/Dengan senang hati."

Figure 4.30 After improvement sentence

4.1.6 Operational Field Testing

After the product review by the supervisor, the process continues to the Operational Field-Testing stage to conduct field trials and obtain feedback on the preliminary product. To obtain this feedback, a questionnaire was distributed on August 8, 2025, in the Airport Operation Control Centre (AOCC) room and the Yogyakarta International Airport terminal. At this stage, the stakeholders on duty in the area and interns were selected as respondents. These individuals were chosen because this guidebook was explicitly designed for Aviation Security officers at Yogyakarta International Airport. It is hoped that the input from these target users will contribute to the further development of this guidebook.

Table 4. 4 List of respondents

Company	Division	Occupation	Number of respondents
Yogyakarta	Airport	Aviation	
Internasional	Operation,	Security	
Airport	Service & Security Division Head	Screening & Protection	30
		On Job Training	10

To simplify the process of determining the score of the questionnaire, a Likert scale will be used to find the interval for each statement on each indicator and to find the interval, the percentage calculation of the obtained data is conducted using the following formula:

$$\text{Index} = \frac{\text{Score from each respondent}}{\text{Number of respondents}}$$

With an amount of 12 statements, the questionnaire consists of three indicators covering questions related to the content aspect, design-visual aspect, and linguistic aspect of the guidebook. Data will be presented in the table below, to generating interval data for the product assessment questionnaire of the guidebook using a Likert scale from respondent answer.

Table 4. 5 List of respondent interval

No.	Statement	Average	Interval
1.	The material in the guidebook is relevant to Aviation Security work needs.	3.00	Agree
2.	The guidebook presents topics that are appropriate to the needs of the field.	3.50	Strongly Agree
3.	This guidebook helps to improve communication at work.	3.50	Strongly Agree
4.	The guidebook includes enough real-life airport situations.	3.40	Strongly Agree
5.	The page layout is neat and easy to read.	3.50	Strongly Agree
6.	Illustrations or pictures support the understanding of the material.	3.50	Strongly Agree
7.	The font and colours used are easy to read and visually appealing.	3.50	Strongly Agree
8.	Sections and chapters are neatly arranged.	3.50	Strongly Agree
9.	The language used in the guidebook is clear and easy to understand for the target audience.	3.40	Strongly Agree

10.	The bilingual format (English and Indonesia) is effectively implemented throughout the guidebook.	3.60	Strongly Agree
11	The writing of the contents in the guidebook is grammatically correct.	3.40	Strongly Agree
12.	Vocabulary used is appropriate to the context of Aviation Security.	3.40	Strongly Agree

Based on the results of the interval analysis questionnaire covering 3 aspects, including content aspect, design visual aspect and linguistic aspect, an interval average value of 3,50 from the Design-Visual Aspect. Following that, the average interval score for the linguistic aspect was 3.45, and finally, the content aspect received an average interval score of 3.35.

Among the assessment result in the questionnaire, the largest interval value can be found in question 10, “The bilingual format (English and Indonesian) is effectively implemented throughout the guidebook.” 22 out of 40 respondents chose “Strongly Agree”, while the remaining respondents chose “Agree”, therefore the 10th question achieved an interval value of 3.60 in the questionnaire. On the assessment one, “The material in the guidebook is relevant to Aviation Security work need” This produces the lowest interval in the questionnaire, which is 3.00, with an equal ratio of 20 respondents choosing “Strongly Agree” and 20 others choosing “Agree” out of a total of 40 respondents.

From the analyzed interval results, the guidebook for aviation security is overall excellent in the aspects of content, visual design, and linguistics. With an average interval score exceeding 3.25, it can be concluded that the respondents "Strongly Agree" with the statements in the questionnaire and that this guide is relevant and valuable for Aviation Security officers.

4.1.7 Revising Final Product

After the operational field-testing phase was completed, this phase was successfully passed without requiring significant final improvements to the product developed based on the feedback obtained from the questionnaire.

4.1.8 Disseminating and Implementing

At this stage, the guidebook, which has been declared worthy after the product has been revised, will be submitted on August 26, 2025 at Yogyakarta International Airport in print and PDF so that it can be accessed more easily. In addition, the researcher will register this Aviation Security Learning Guidebook as work protected by Intellectual Property Rights (IPR) and will include the IPR certificate in the appendix.



Figure 4.31 Handover Guidebook to HC Business Partner Department Head

4.2 Discussion

The researcher developed a guidebook based on the OHBD training program, EFAST. Provides content that is sufficiently appropriate and concise, as well as structured in accordance with the communication needs of AVSEC, this guidebook combines the EFAST syllabus with relevant conversation examples that match operational airport scenarios. The Aviation Security Learning Guidebook is used as a learning tool tailored to professional needs and as a guide for Aviation Security officers in serving passengers. The purpose of using guidebook as a learning tool is to facilitate the application of English language skills to specific professional contexts relevant to the participants. Additionally, this result is consistent with Hutchinson & Waters (1987) English for Specific Purpose (ESP), which is tailored to the professional materials based on need analysis. After the OHBD work programme, EFAST was implemented. By creating a guidebook as the primary product, the researcher expanded on the content that was taught. Ms. Erni encouraged and supported this work and allowed EFAST to continue as a thesis

This study employs the Research and Development (R&D) method, which refers to the Borg and Gall model, an approach to developing the Aviation Security Learning Guidebook. During the production process, the researcher observed a challenge faced by AVSEC. Based on information and discussion on September 6, 2024, in the Human Capital Unit room of the Angkasa Pura I Building, the Head of Human Capital Business Partner Department noted that AVSEC had difficulty delivering effective communication to passengers during daily interactions. Therefore, the Head of Human Capital Business Partner Department considers this important because AVSEC staff face challenges in effectively communicating with foreign passengers. As a result, OHBD training was held to improve these communication skills. Observations and interviews revealed that many Aviation Security (AVSEC) representatives lacked proficiency in English, primarily due to a lack of confidence in conveying clear and simple information.

After developing the materials, the preliminary product was created and evaluated by supervisors who assessed the media and materials, providing suggestions and revisions to improve quality. A questionnaire was then distributed to airport stakeholders, with 40 respondents providing feedback. This input helped ensure the product met its objectives and quality standards. Respondents found the guidebook easy to understand due to its educational and clear visual presentation. Feedback was evaluated across three aspects—content, design-visual, and linguistic—with average scores of 3.50 (design-visual), 3.45 (linguistic), and 3.35 (content). The combined average was 3.40, which falls into the ‘Strongly Agree’ range for the interval assessment (3.25–4.00).

While making this guidebook, the researcher took inspiration from Widyawati’s (2022) Guidance book, “English for Public Services Yogyakarta International Airport,” and the research, “Producing English Guidance Book of Customer Service at PT Angkasa Pura I, Yogyakarta International Airport (YIA), Kulonprogo.” Additionally, the researcher based it on the OHBD program. Although the first guidebook provides many examples of daily conversation, it does not offer audio conversation features to help readers understand concepts and pronunciation. Its bilingual layout also shows inconsistency, providing translations only in the dialogue section. In contrast, the researcher focuses their guidebook on AVSEC officers and writes it in a separate bilingual design. They equip it with a QR code feature that contains audio conversation dialogues, making it easier for users to understand English pronunciation. Another difference lies in the design of the two guidebooks. The first guidebook lacks appeal, while the researcher adopts a colourful and interactive design. Each unit displays attractive visuals and layout elements that grab the reader’s attention.

The results of this study show that the Aviation Security Learning Guidebook is relevant to communication needs in the airport environment. The data confirms that the material addresses the lack of teaching resources for Aviation Security officers, especially those interacting with international

passengers. The integration of OHBD EFAST further strengthens the guidebook's practicality, as it is based on actual observations and assessments from superiors. These findings demonstrate that the guidebook is not only theoretically useful for ESP (English for Specific Purposes), but also has practical value in improving Aviation Security communication. The final product will also serve as basic material at YIA for the next OHBD.