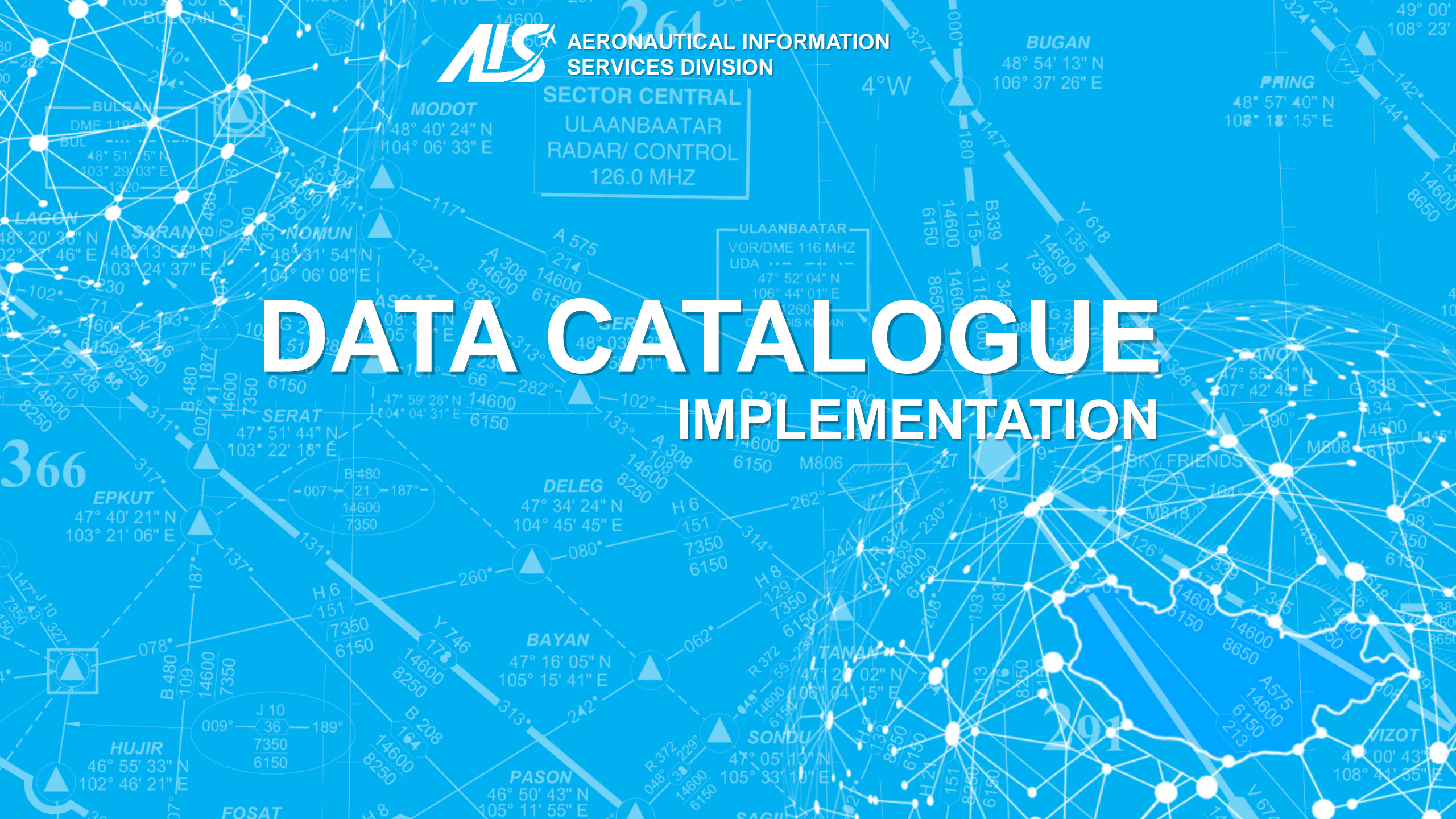




AERONAUTICAL INFORMATION  
SERVICES DIVISION

SECTOR CENTRAL  
ULAANBAATAR  
RADAR/ CONTROL  
126.0 MHZ


# DATA CATALOGUE IMPLEMENTATION



# Contents

- 1. Legal document status**
- 2. Current implementation status**
- 3. Unclear data**

# Legal document status




 <b>ИРГЭНИЙ НИСЭХИЙН ЕРӨНХИЙ ГАЗАР</b>	<b>Иргэний нисэхийн ерөнхий газрын ажилтнууд хамрагдах сургалтын хөтөлбөр</b>
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БАТЛАХ ХУУДАС

НИСЭХИЙН МЭДЭЭЛЛИЙН ҮЙЛЧИЛГЭЭНИЙ БАЙГУУЛЛАГЫГ НИСЭХИЙН  
МЭДЭЭЛЭЛ, НИСЭХИЙН ӨГӨГДЛӨӨР ХАНГАХ ТОМИЛОГДСОН  
МЭДЭЭЛЭГЧИЙН 16 ЦАГИЙН СУРГАЛТЫН ХӨТӨЛБӨР

Хэвлэлт: 01 Огноо: 2019.08.19

Өөрчлөлт: 00 Огноо: 2019.08.19

Баталсан:	Зөвшөөрсөн:	Зөвшөөрсөн:
<b>Албан тушаал:</b> НМУА-ны дарга	<b>Албан тушаал:</b> НСТ-ийн захирал	<b>Албан тушаал:</b> АНБЗГ-ын дарга
<b>Нэр:</b> П.Ариунгэрэл	<b>Нэр:</b> Б.Гангэрэл	<b>Нэр:</b> Е.Эрдэнэбат
<b>Гарын үсэг:</b> 	<b>Гарын үсэг:</b> 	<b>Гарын үсэг:</b> 
<b>Огноо:</b> 2019 оны 8 сар 19	<b>Огноо:</b> 2019 оны 8 сар 19	<b>Огноо:</b> 20... оны ... сар ...

1. According to Annex 15 AMDT 40 and PANS-AIM DOC 10066, we have included the "Data Catalogue" in our national document of "Requirement for Aeronautical Information Service Product"

2. We have incorporated the data catalogue to the co-operation agreement with our data originator. For example:

✓ "New Ulaanbaatar International Airport" LLC and "AIS" co-operation contract was signed on 19.03.2020.

3. We will provide training course to our data originators in respect to "Data Catalogue" in accordance with approved curriculum by the CAAM.

✓ Planned course will commence in July and October of 2020.



# Current implementation situation



## Aeronautical data catalogue

- 1. Table A1.1 Aerodrome data**
- 2. Table A1.2 Airspace data**
- 3. Table A1.3 ATS and other routes data**
4. Table A1.4 Instrument flight procedure data
- 5. Table A1.5 Radio navigation aids/systems data**
6. Table A1.6 Obstacle data
7. Table A1.7 Geographic data
8. Table A1.8 Terrain data
9. Table A1.9 Data type
10. Table A1.10 Information about national and local regulation, services and procedures

# Current implementation situation

BUGAN  
48° 54' 13" N  
106° 37' 26" E



	COMPLETED DATA	DATA NOT AVAILABLE	UNCLEAR DATA
Table A1-1 Aerodrome data	168	71	6
Table A1-2 Airspace data	31	14	0
Table A1.3 ATS and other routes data	22	25	2
Table A1.5 Radio navigation aids/systems data	22	28	3

# What we have done:

1. We associated each data contained in the data catalogue to AIP data set contained in PANS-AIM DOC 10066 clause 5.3.3.1.
2. We referenced each data type to it's respective AIP section.
3. We used three parameters to filter out all data catalogue to better management.

**TABLE A1-1 Aerodrome data**



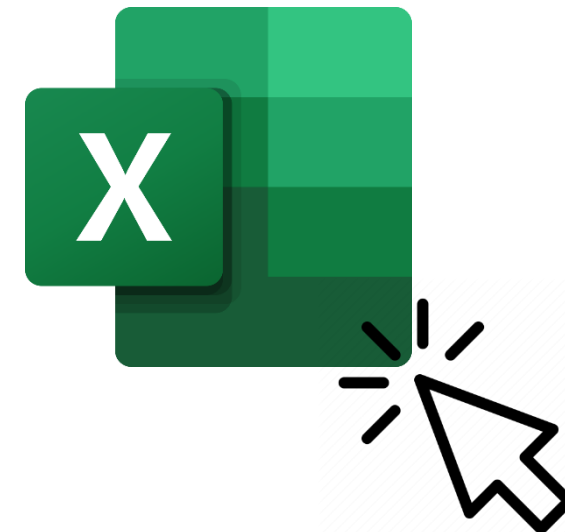
# Current implementation situation



To reduce mistakes made by the data originator, we have also closed list on the data column to limit the option to input for data type for “Code-list” and “Text”.

Chart Res.	Data Originator	Data	Complete
	"NUBIA" LLC	ZMCK	Yes
	"NUBIA" LLC	UBN	Yes
	"NUBIA" LLC	Nil	No
	"NUBIA" LLC	"CHINGGIS KHAAN" International Airport.	Yes
	"NUBIA" LLC	Tuv Province, Selenge suum	Yes
	"NUBIA" LLC	INT-NTL	Yes
	"NUBIA" LLC	INT NTL INT-NTL	Yes

*TABLE A1-1 Aerodrome data*



# Unclear data



Type values are limited to one option

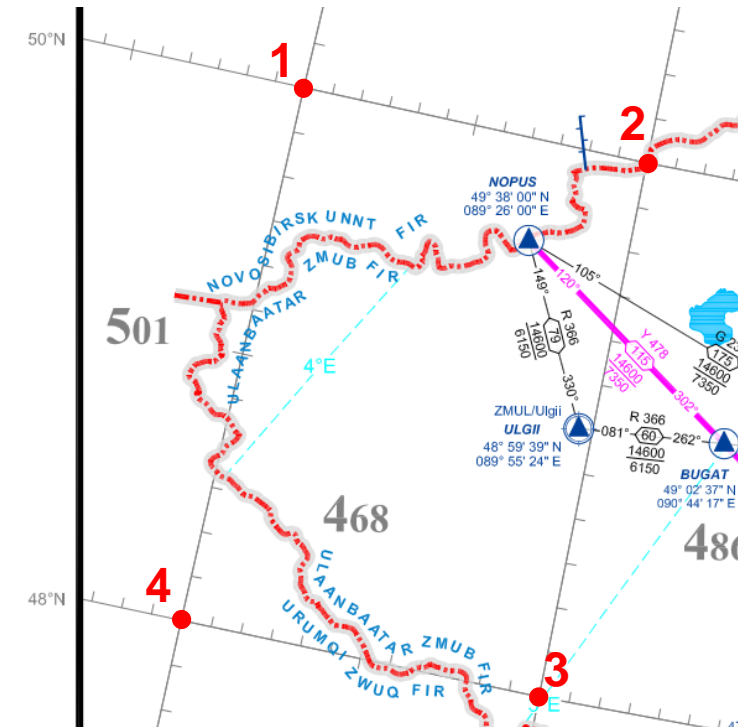
**POLYGON**

Table A1.3 ATS and other routes data

Subject	Property	Type	Description
AMA	Lateral Limits	Distance	Lateral limits of the sectors
	Vertical Limit	Altitude	Area Minimum Altitude (AMA) - The minimum altitude to be used under instrument meteorological conditions (IMC), that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.

Type	Latitude	Longitude
CWA - Clockwise arc	473315.95N	1074426.54E
GRC - Great Circle = line segment for short distances	473928.50N	1055316.86E
GRC - Great Circle = line segment for short distances	480810.63N	1055321.08E
GRC - Great Circle = line segment for short distances	482008.10N	1060607.80E
GRC - Great Circle = line segment for short distances	482949.82N	1064002.05E
GRC - Great Circle = line segment for short distances	475551.40N	1074244.60E

- 1. 50N 88E
- 2. 50N 90E
- 3. 48N 90E
- 4. 48N 88E



# Unclear data



## Description is not given

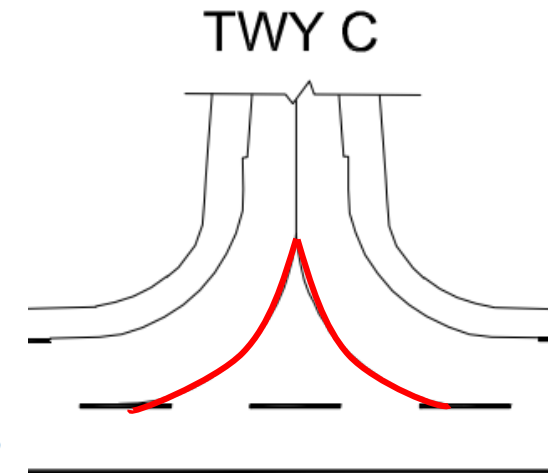
Table A1-1  
Aerodrome data

Subject	Property	Sub-Property	Type	Description
	RWY exit line			
		Exit guidance line	Line	The geographical location of the runway exit line
		Colour	Text	Colour of runway exit line
		Style	Text	Style of runway exit line
		Directionality	Code List	Directionality of RWY exit line (one-way or two-way)

## Raw data from the Originator

ХБЗ чөлөөлөх шугам RWY exit line			
Заагч шугам (Чөлөөлөх) Exit guidance line	Line	ХБЗ чөлөөлөх шугамын газарзүйн байрлал The geographical location of the runway exit line /	TWY "B" - 47 39' 00.190"N 106 48' 28.552" E TWY "D" - 47 38' 37.535"N 106 50' 35.834" E
Өнгө Colour	текст	ХБЗ чөлөөлөлөх шугамын өнгө Colour of runway exit line	Yellow
Хэв маяг Style	текст	ХБЗ-ны чөлөөлөлөх шугамын хэлбэр Style of runway exit line	Width = 15 см Length = 378 м
Чиглүүлэгч Directionality	Кодын жагсаалт Code List	ХБЗ-ны чөлөөлөлөх шугамын чиглэл (нэг эсвэл хоёр чиглэлтэй) Directionality of RWY exit line (one-way or two-way)	2 way

## Our understanding



Data imported from AMDB  
(.shp file used)

Thank you for your attention

SECTOR CENTRAL  
ULAANBAATAR  
RADAR/ CONTROL  
126.0 MHZ

ULAANBAATAR  
VOR/DME 116 MHZ  
UDA ...  
126.0 MHZ  
NNGGIS ...

A 575  
51  
14600  
6150

B 480  
21  
14600  
7350

J 10  
36  
7350  
6150

264

366

345