



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

GLOBAL AND REGIONAL STATISTICS ON RUNWAY SAFETY

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INTRODUCTION



Safety

The state in which risks associated with aviation activities, related to or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Runway Safety

The state in which risks associated with the operation of aircraft on runways are reduced and controlled to an acceptable level.

Runway Safety Occurrence categories

Category	Description
Abnormal Runway Contact (ARC)	Any landing or take-off involving abnormal runway or landing surface contact.
Ground Handling (RAMP)	Occurrences during (or as a result of) ground handling operations.
Runway Excursion (RE)	An event in which an aircraft veers off or overruns off the runway surface during either take-off or landing.
Runway Incursion (RI)	Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.
Loss of Control on the Ground (LOC-G)	Loss of aircraft control while the aircraft is on the ground.
Collision with Obstacle(s) (CTOL)	Collision with obstacle(s), during take-off or landing whilst airborne.
Undershoot / Overshoot (USOS)	A touchdown off the runway surface.

Global Aviation Safety Plan

High-risk categories of occurrences



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



Runway Excursion (RE)

Runway incursion (RI)

Mid-Air collision (MAC)

Controlled flight into terrain (CFIT)

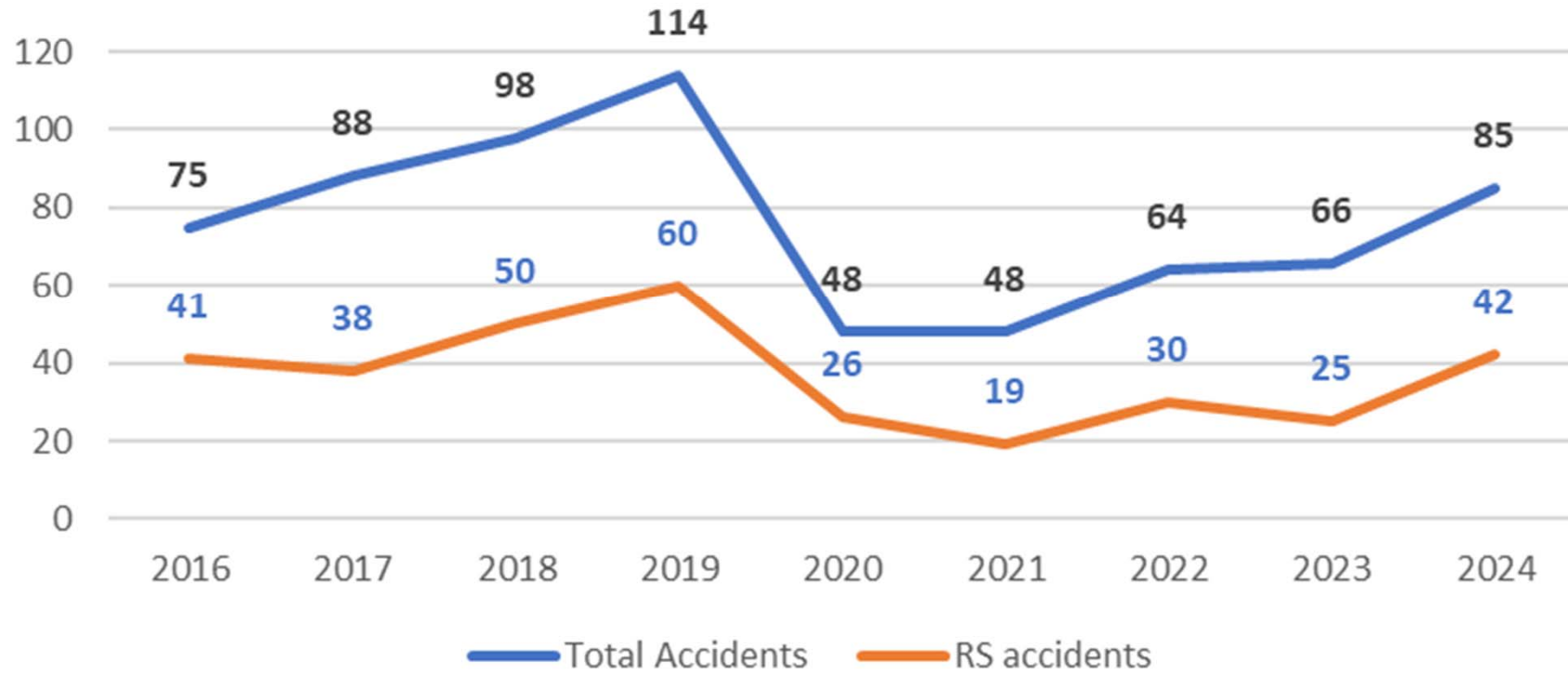
Loss of control in-flight (LOC-I)

Runway safety

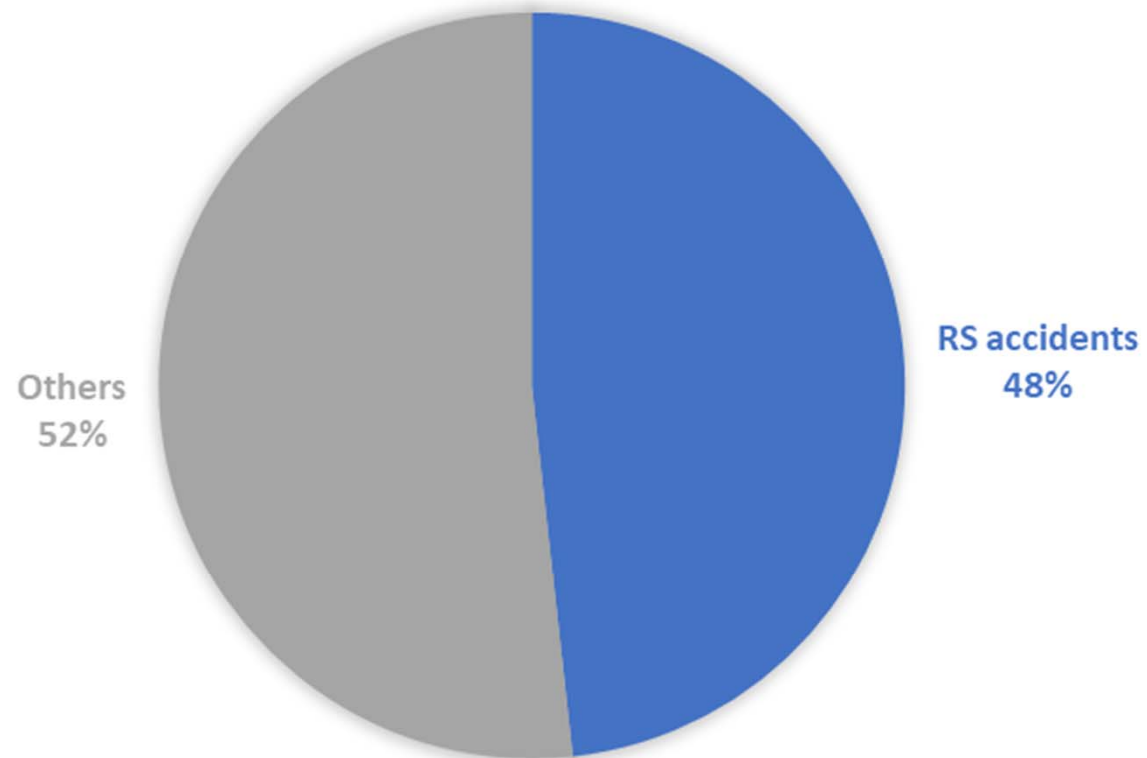
GLOBAL STATISTICS



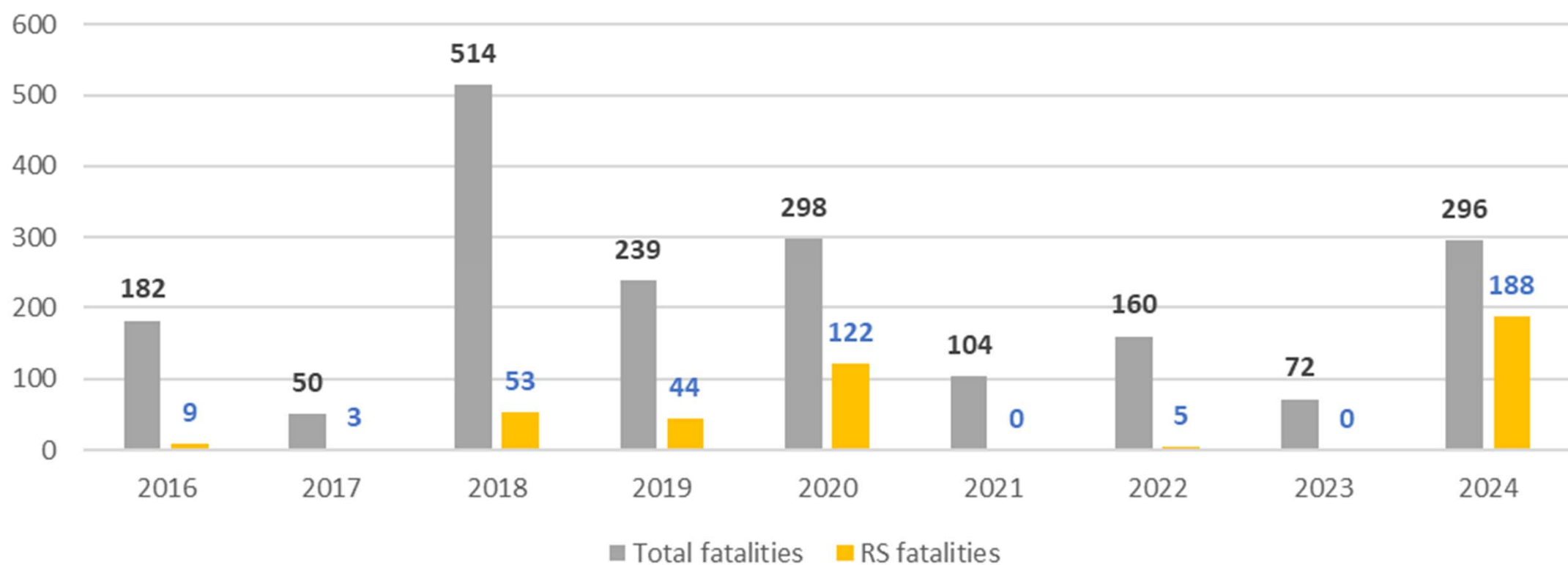
GLOBAL ACCIDENTS VERS GLOBAL RS-RELATED ACCIDENTS



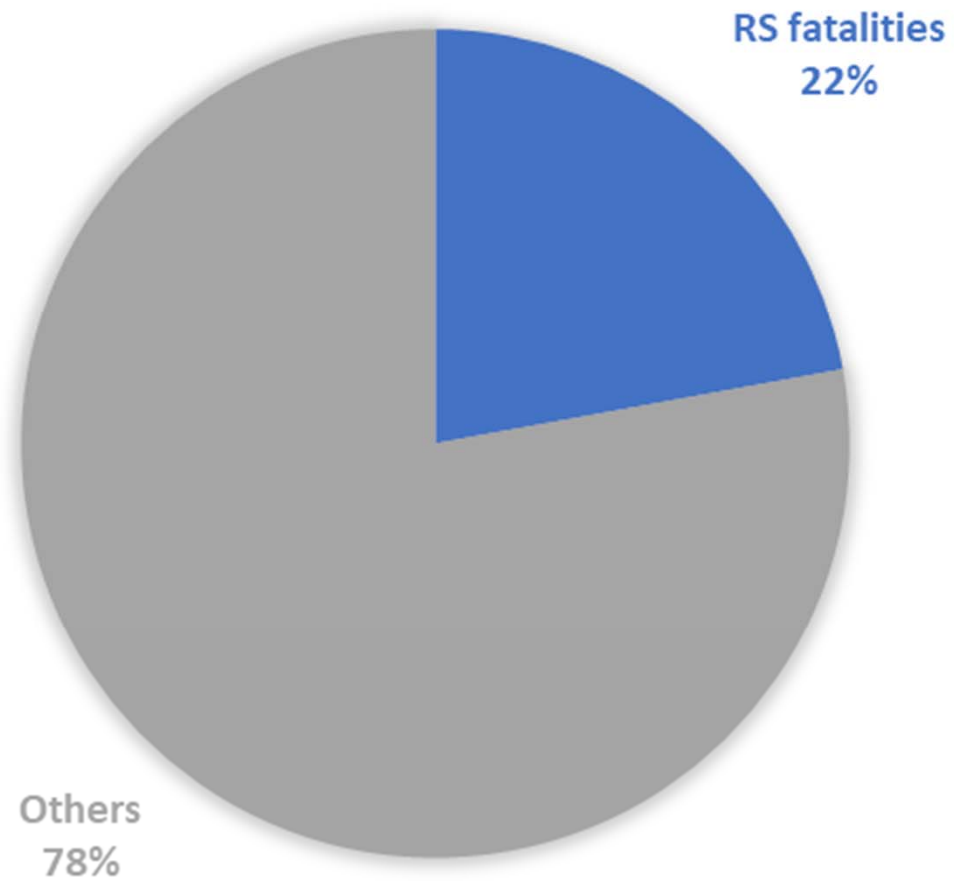
PROPORTION OF WORLD TOTAL ACCIDENTS VS RS RELATED ACCIDENTS (2016-2024)



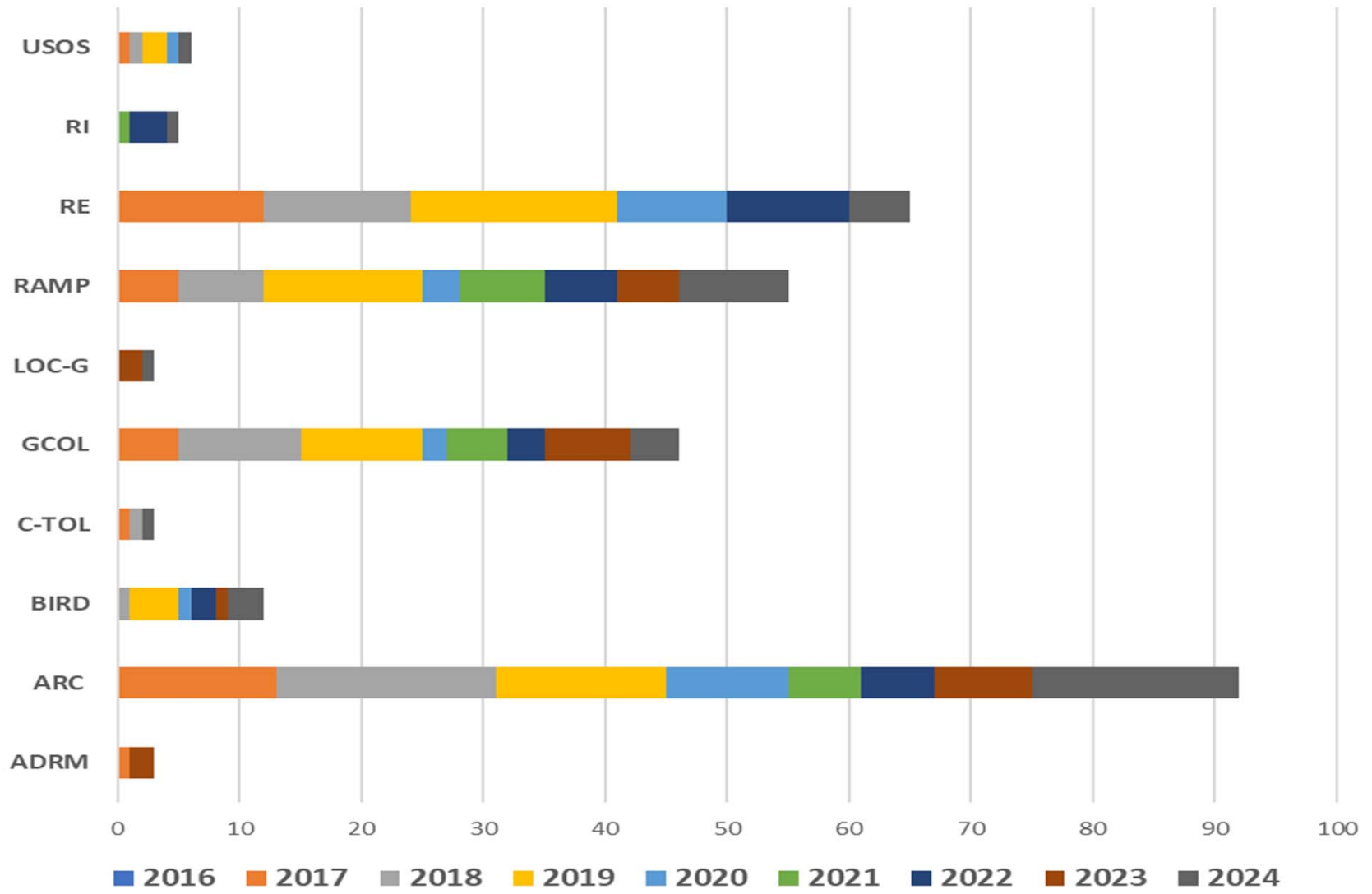
Global fatalities vs RS-related fatalities



PROPORTION OF WORLD TOTAL FATALITIES VS RS RELATED FATALITIES (2016-2024)



OCCURENCES OF GLOBAL RS ACCIDENTS PER CATEGORY



Runway safety

REGIONAL STATISTICS

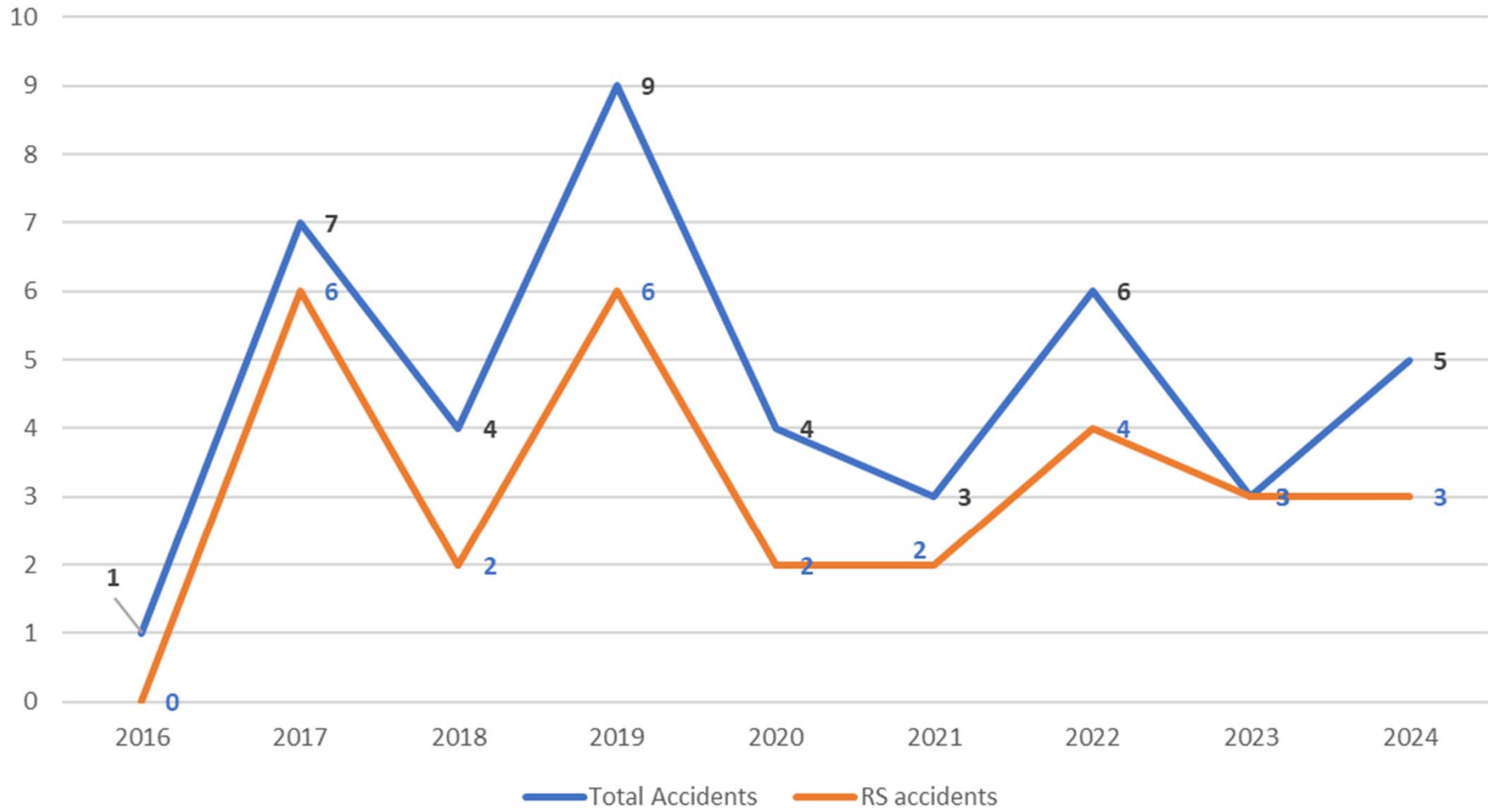




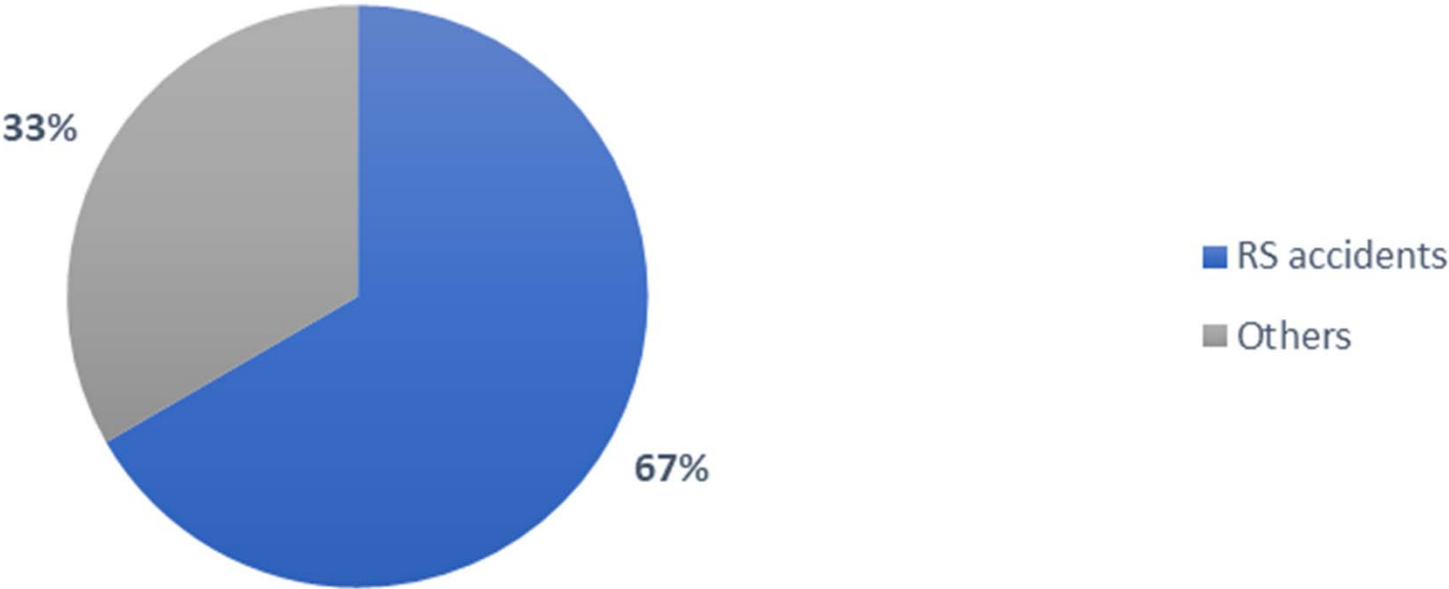
AFI REGION RUNWAY SAFETY STATISTICS

Source: ICAO safety
reports (2016-2024)

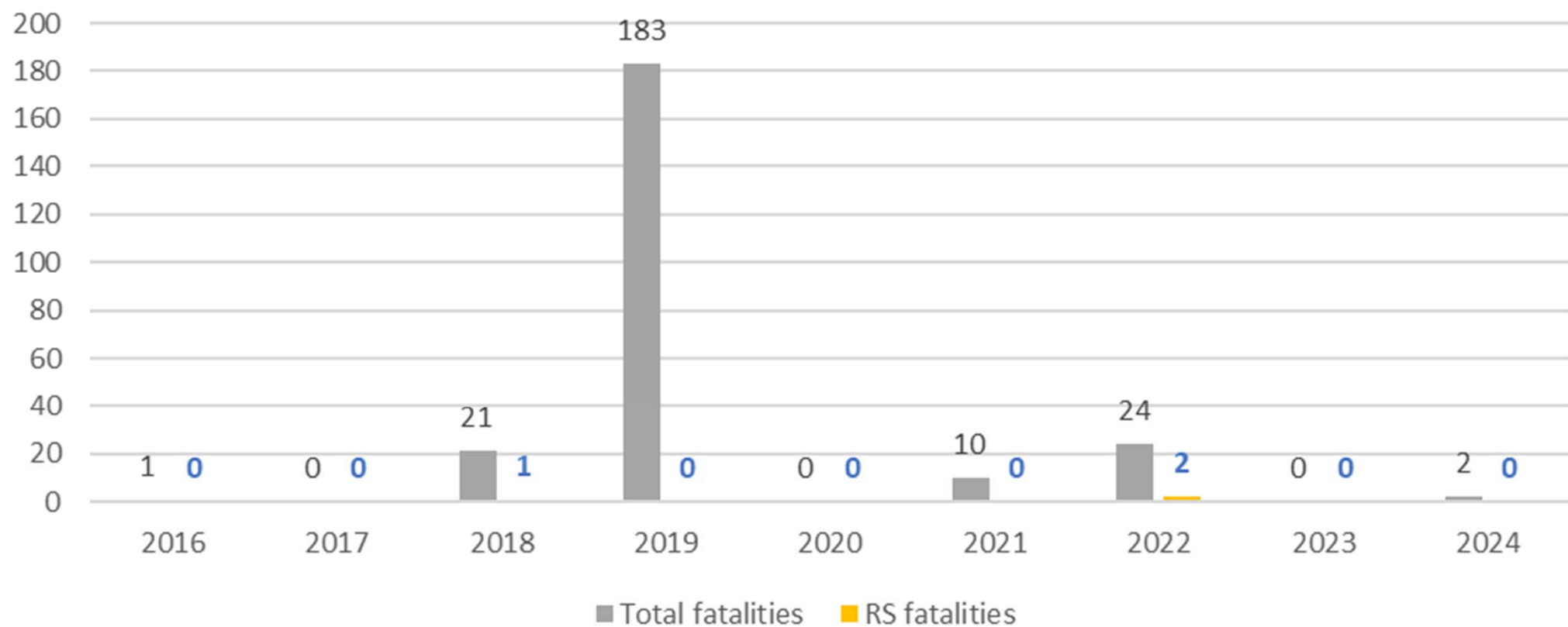
Regional accidents vs Regional RS related-accidents



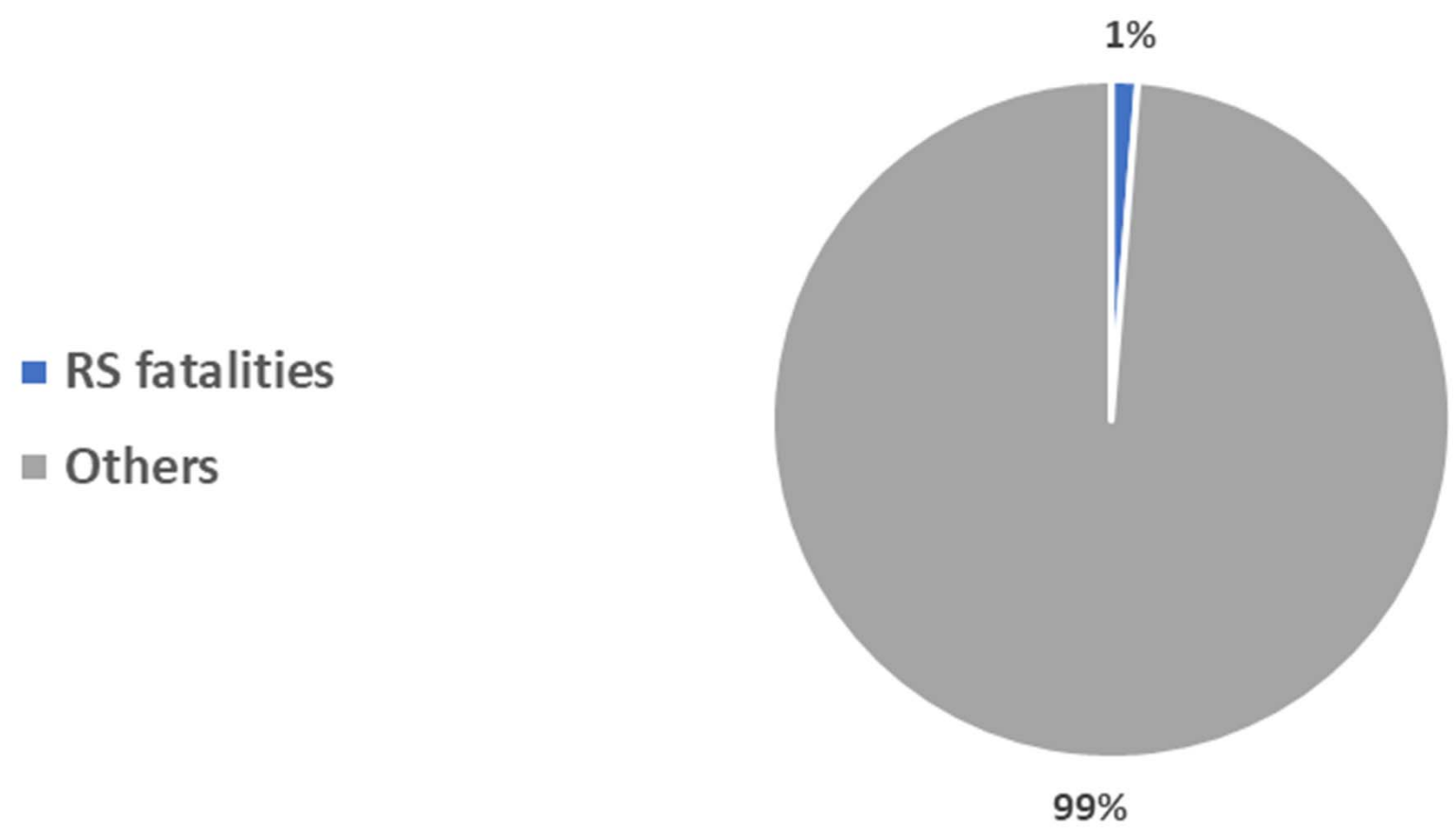
Regional Proportion of RS-related accidents (2016-2024)

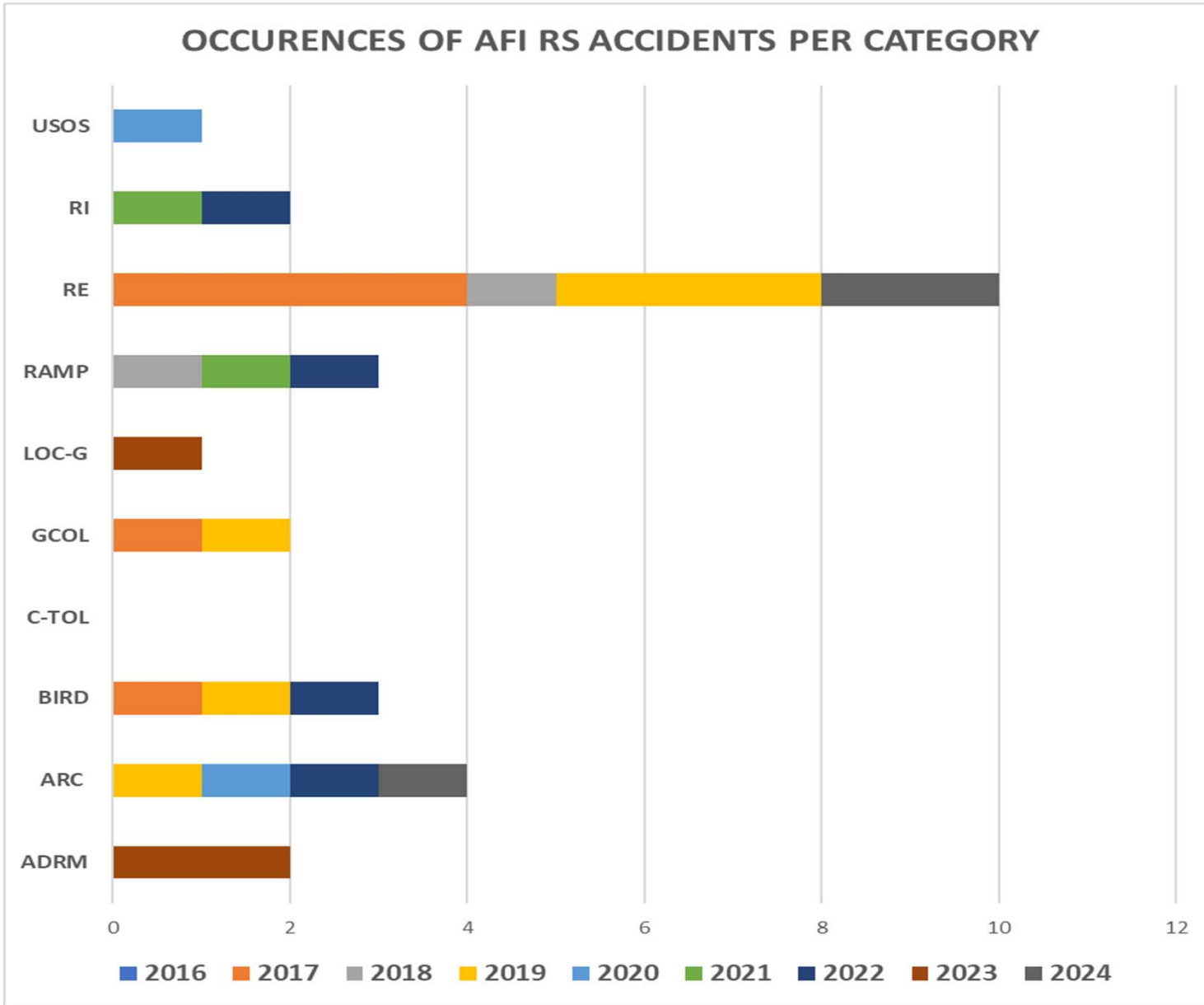


Regional fatalities vs RS-related fatalities (2016-2024)

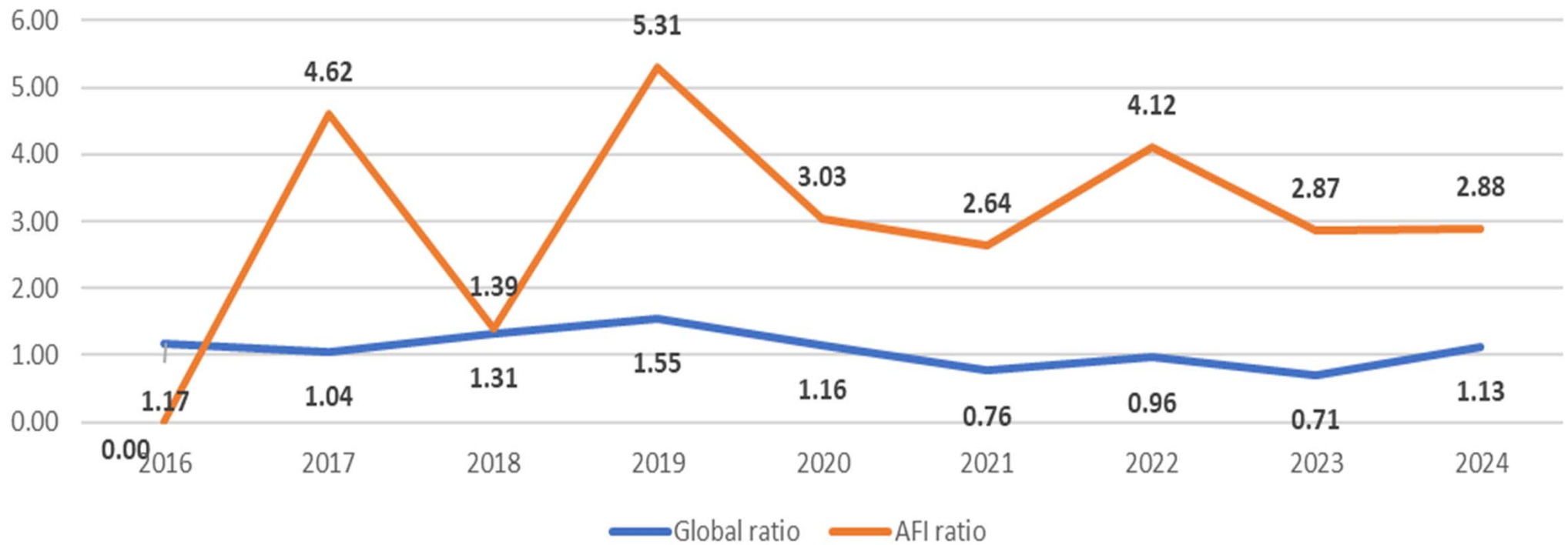


Regional Proportion of RS- fatalities (2016-2024)





Ratio of Global RS accidents versus Regional RS accidents per million of departure



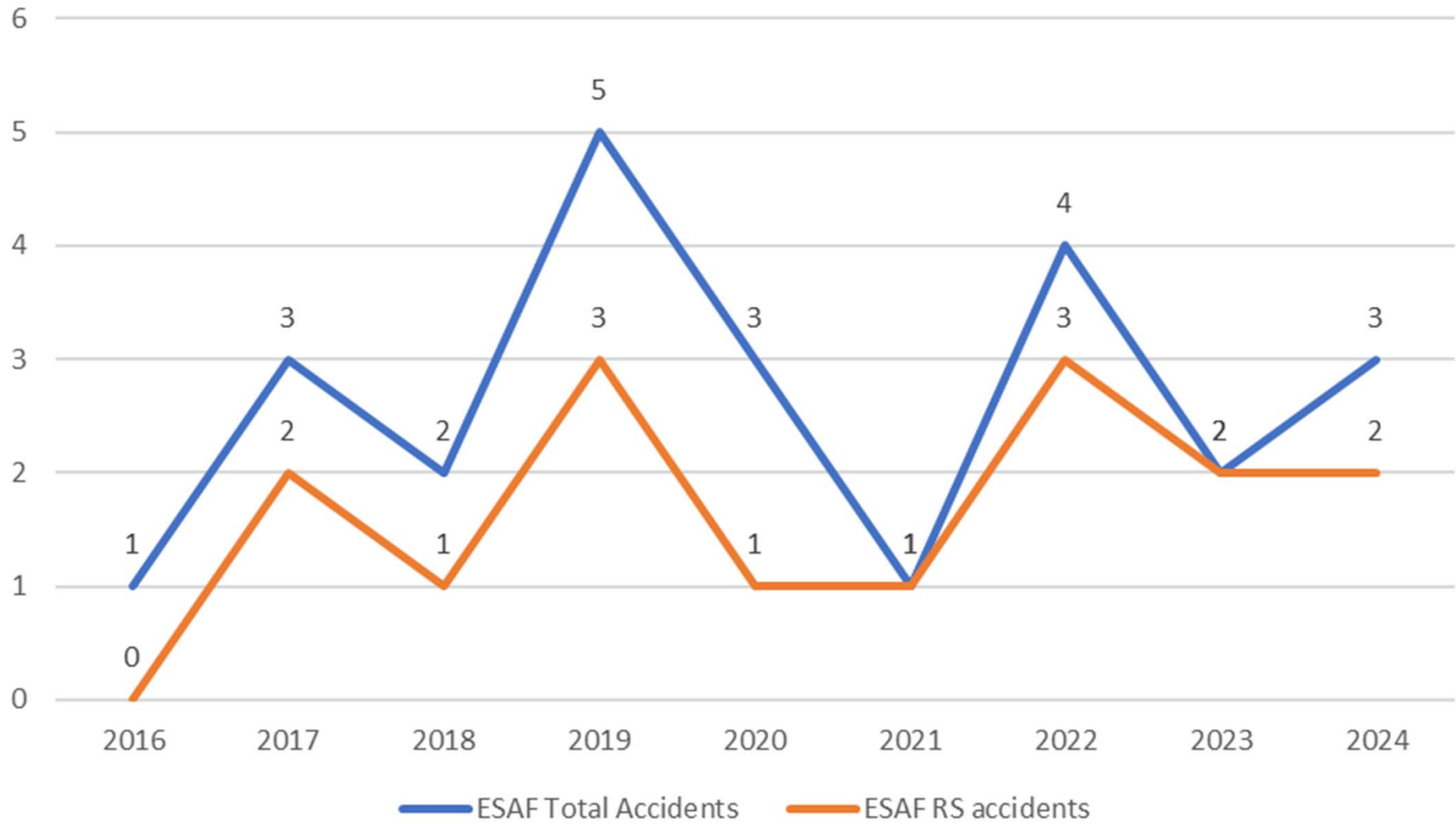


ESAF RUNWAY SAFETY STATISTICS

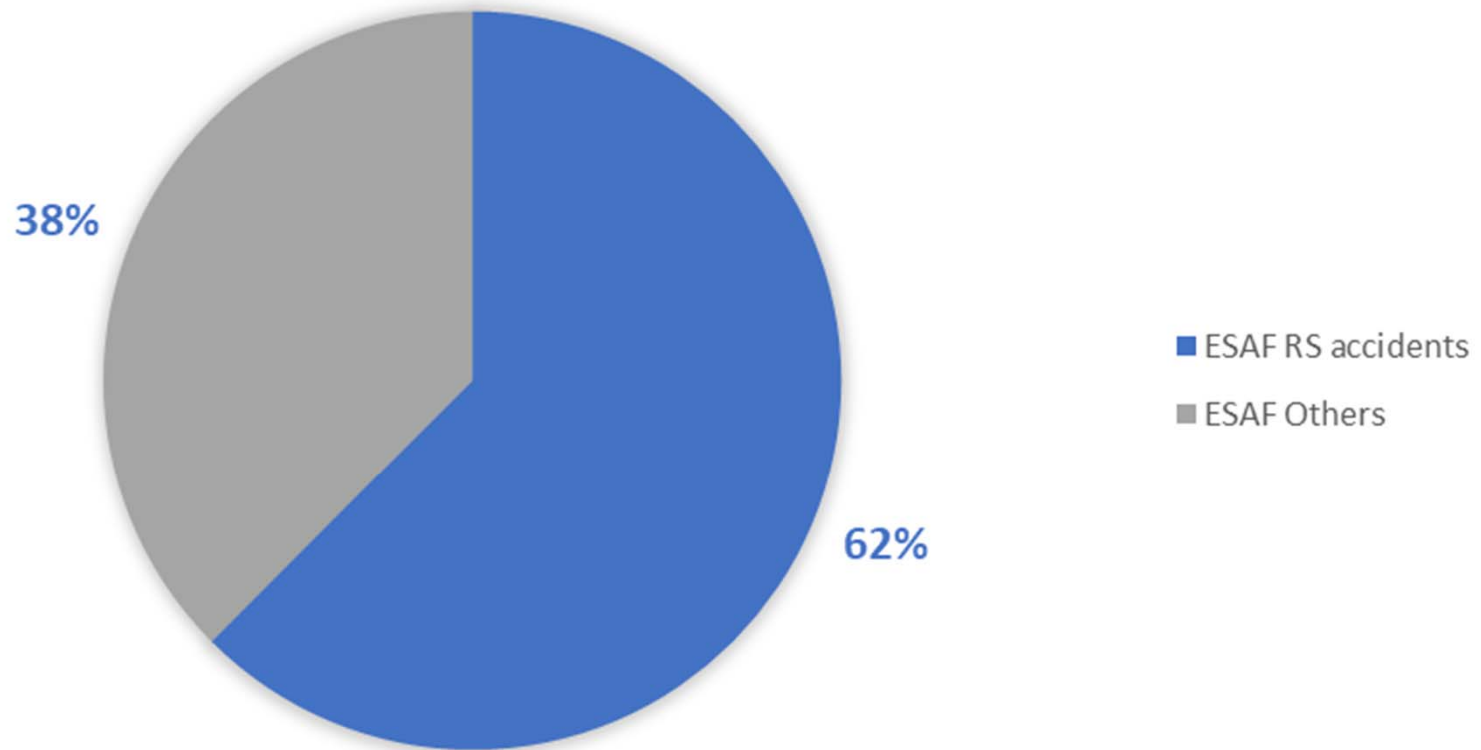
Source: ICAO safety
reports (2016-2024)



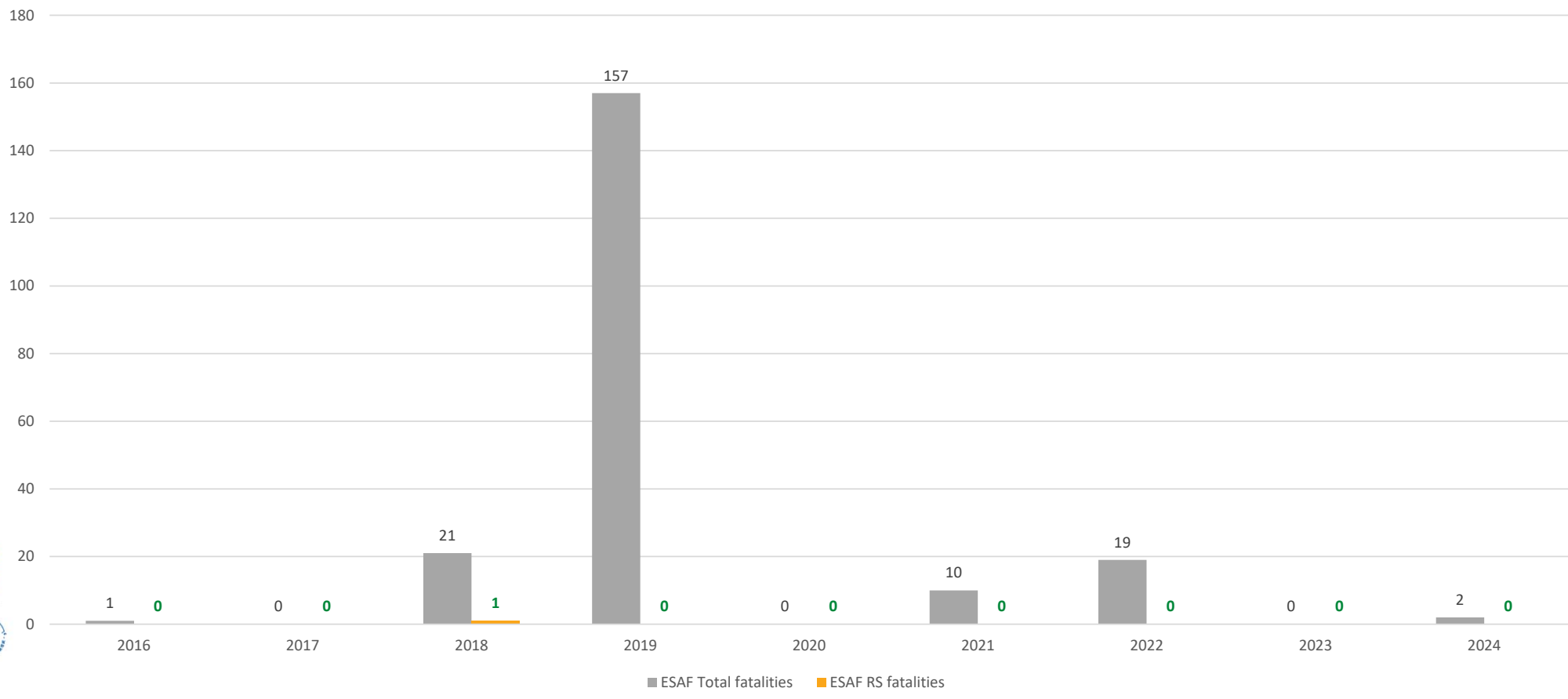
ESAF TOTAL ACCIDENTS VS RS-RELATED ACCIDENTS



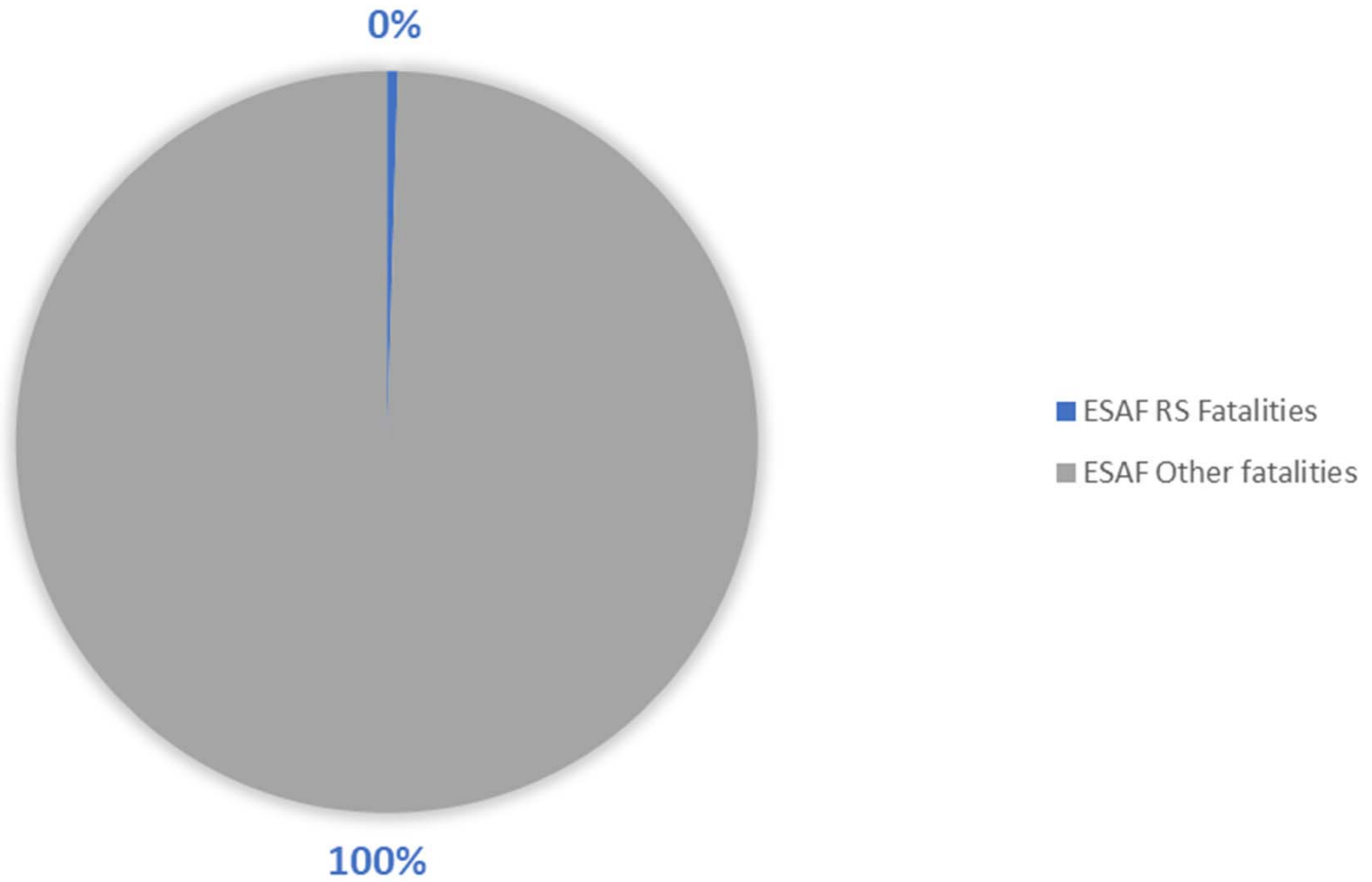
PROPORTION OF RS-RELATED ACCIDENTS IN ESAF (2016-2024)



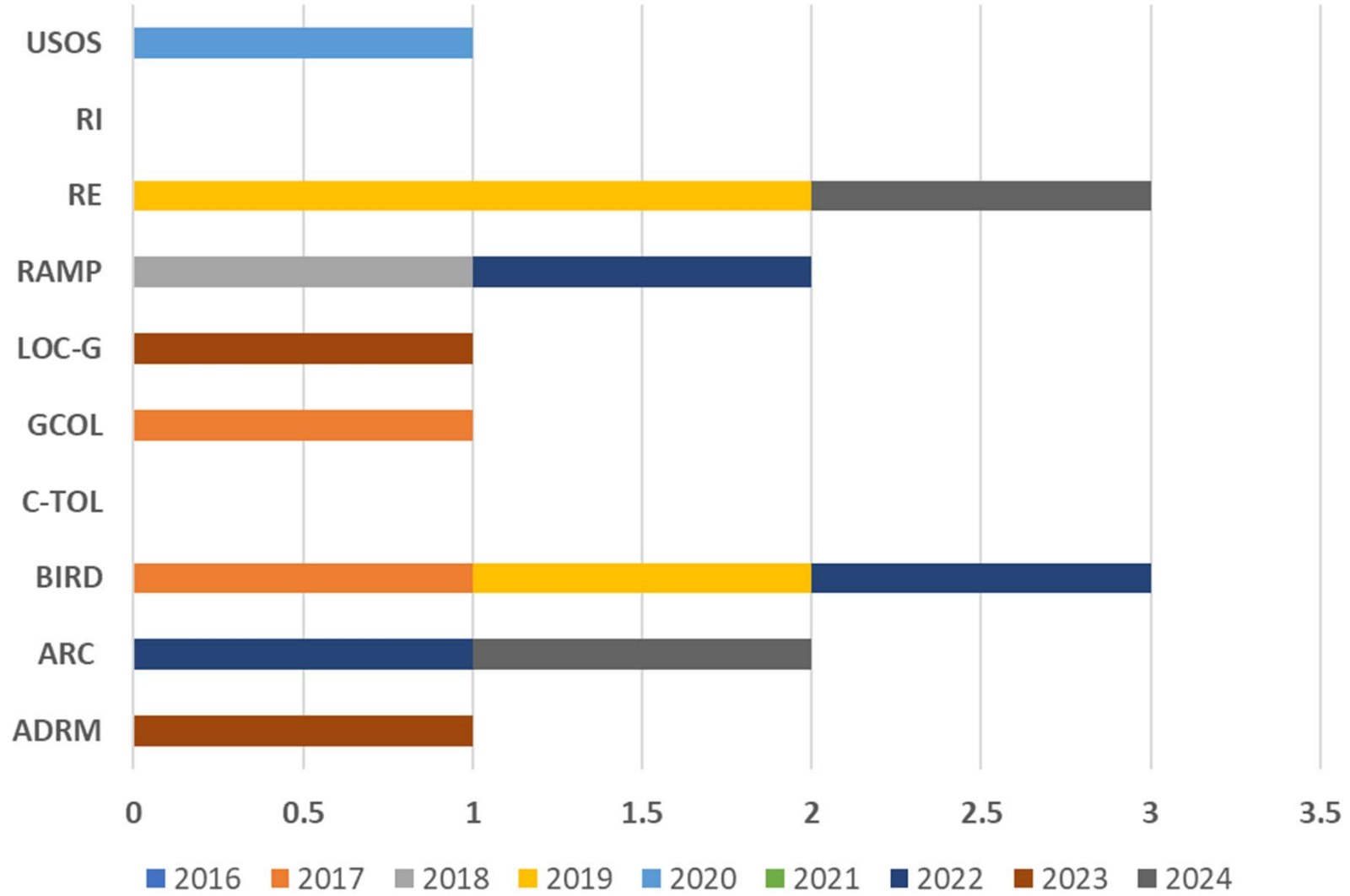
ESAF TOTAL FATALITIES VS RS-RELATED FATALITIES



PROPORTION OF ESAF TOTAL FATALITIES VS RS-RELATED FATALITIES (2016-2024)



OCCURENCES OF ESAF RS ACCIDENTS PER CATEGORY



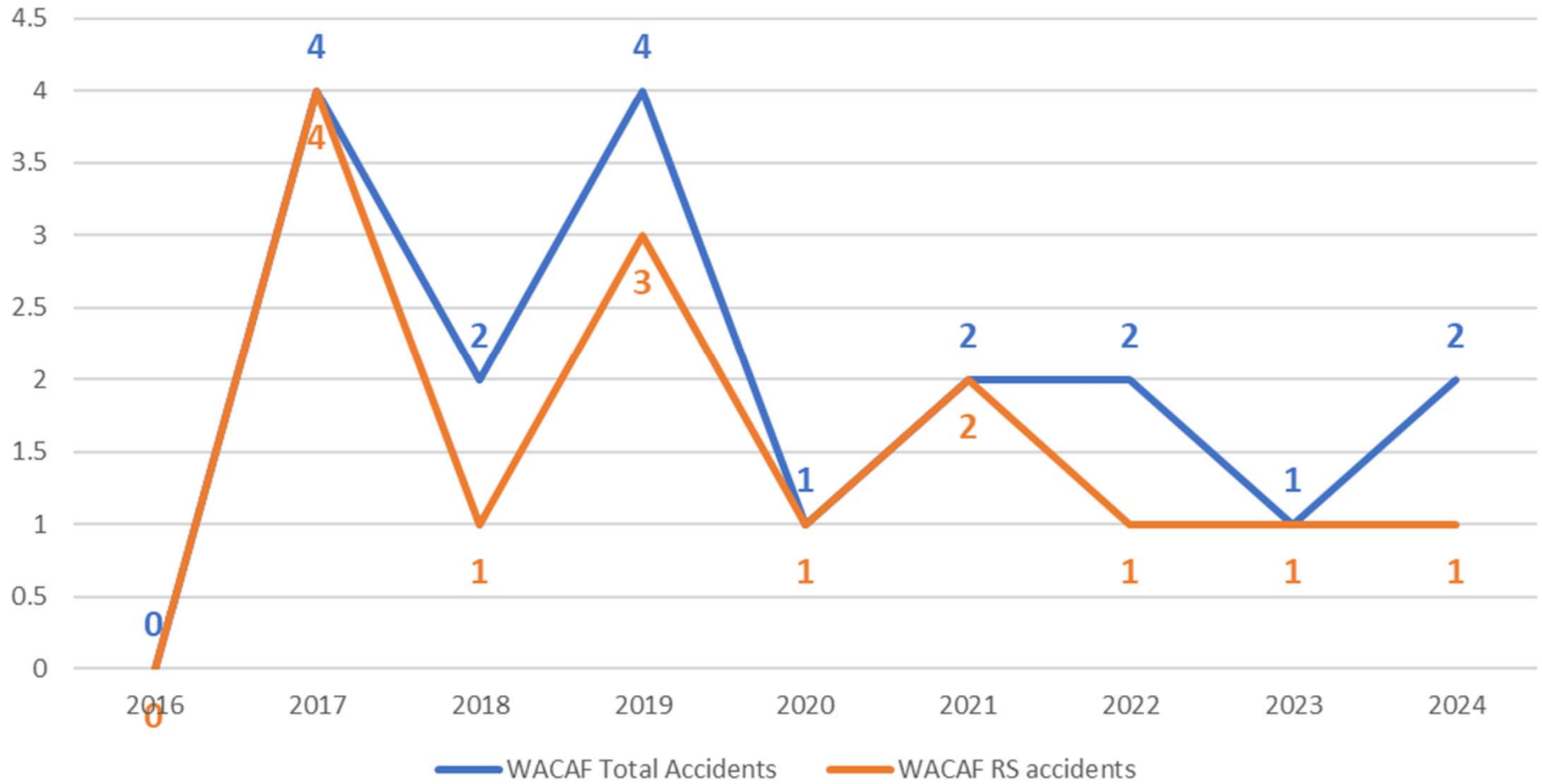


WACAF RUNWAY SAFETY STATISTICS

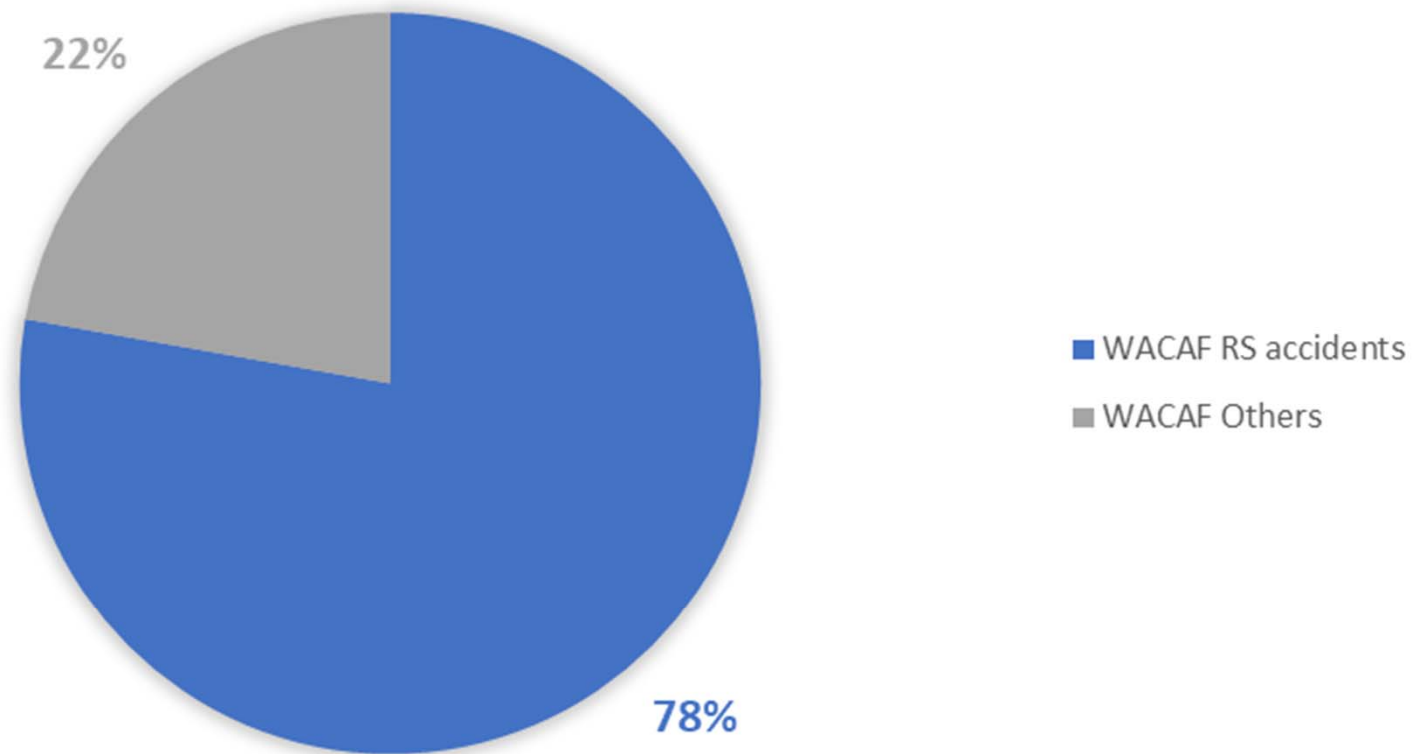
Source: ICAO safety
reports (2016-2024)



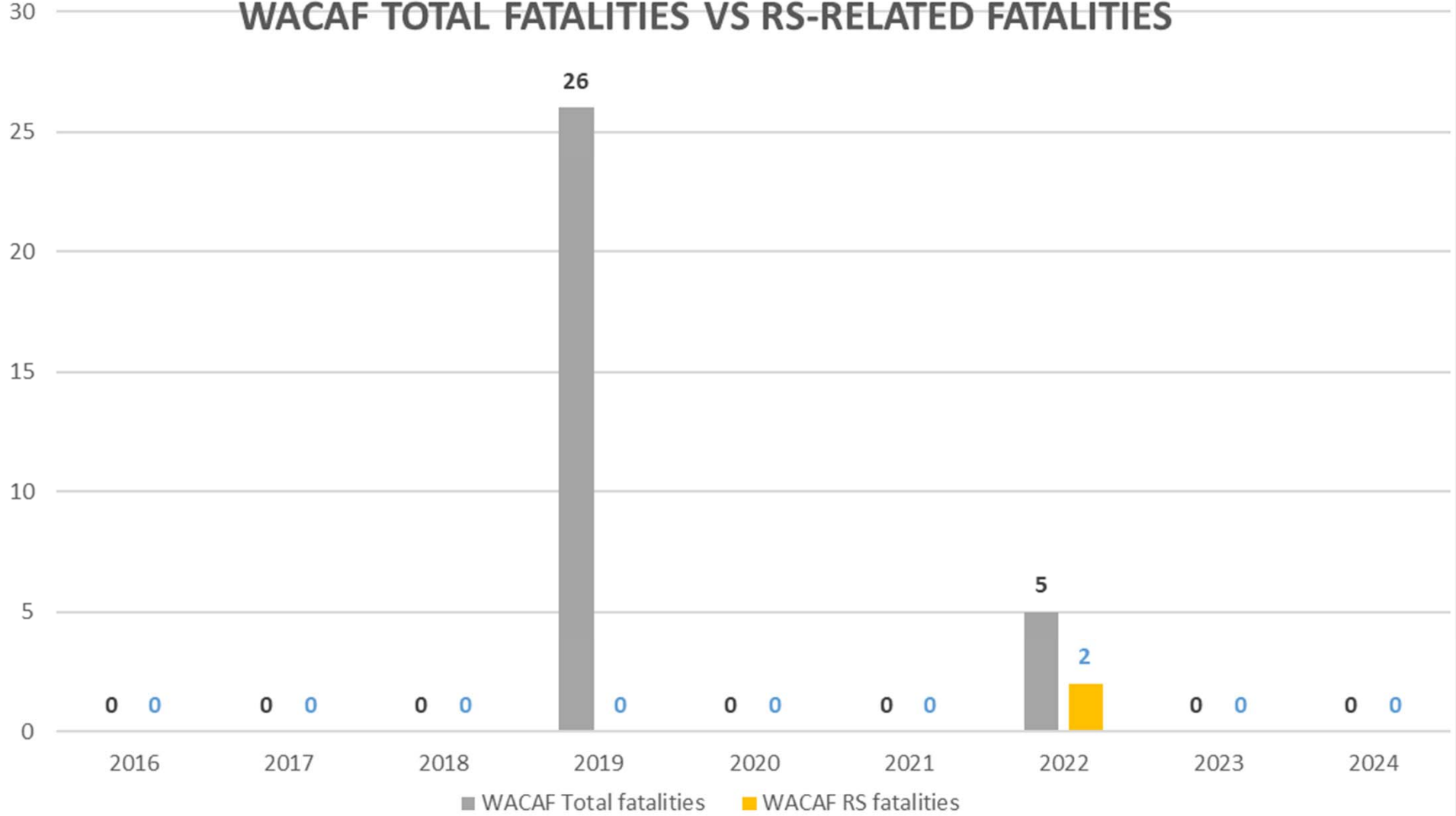
WACAF TOTAL ACCIDENTS VS RS-RELATED ACCIDENTS



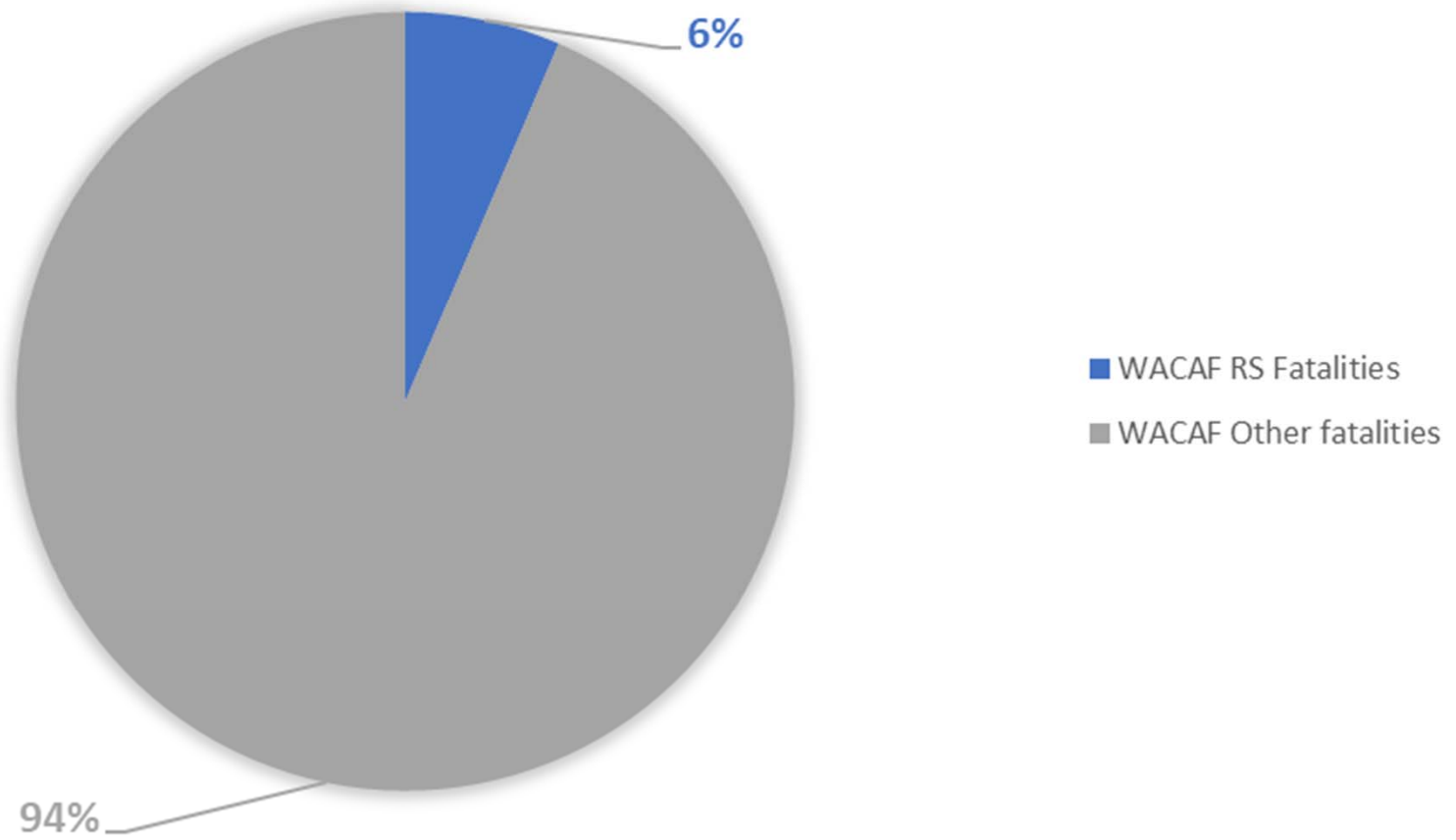
PROPORTION OF RS-RELATED ACCIDENTS IN WACAF (2016-2024)



WACAF TOTAL FATALITIES VS RS-RELATED FATALITIES



PROPORTION OF WACAF TOTAL FATALITIES VS RS-RELATED FATALITIES (2016-2024)

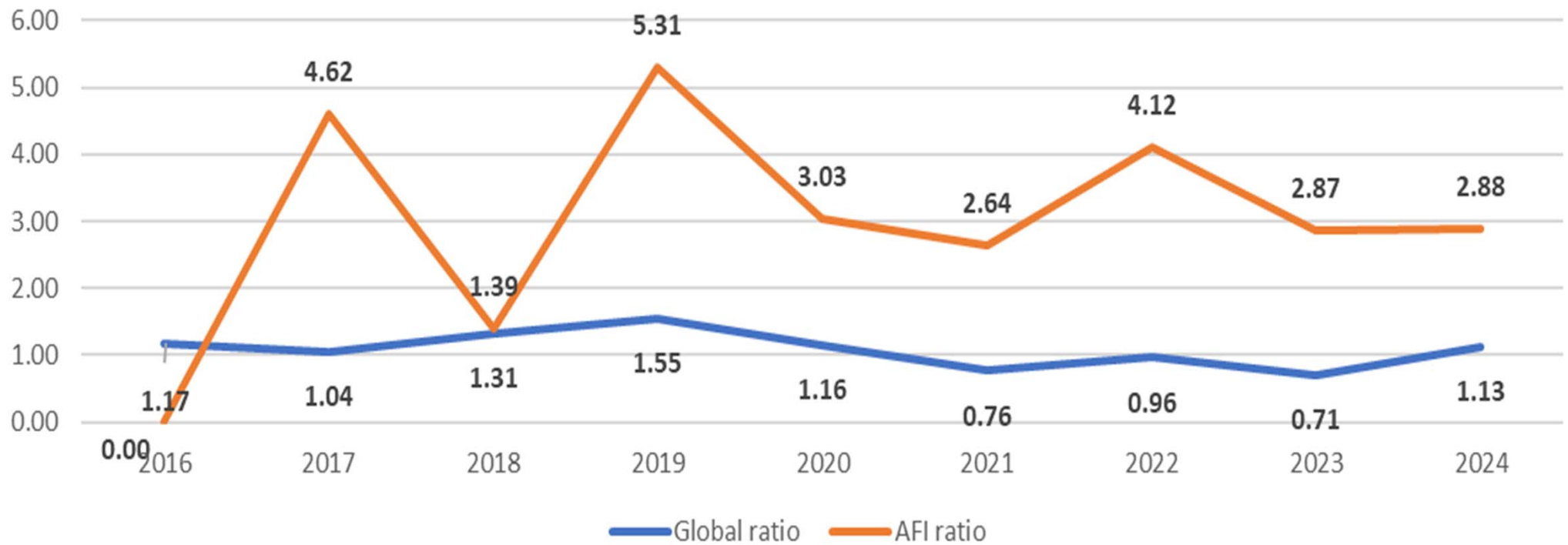




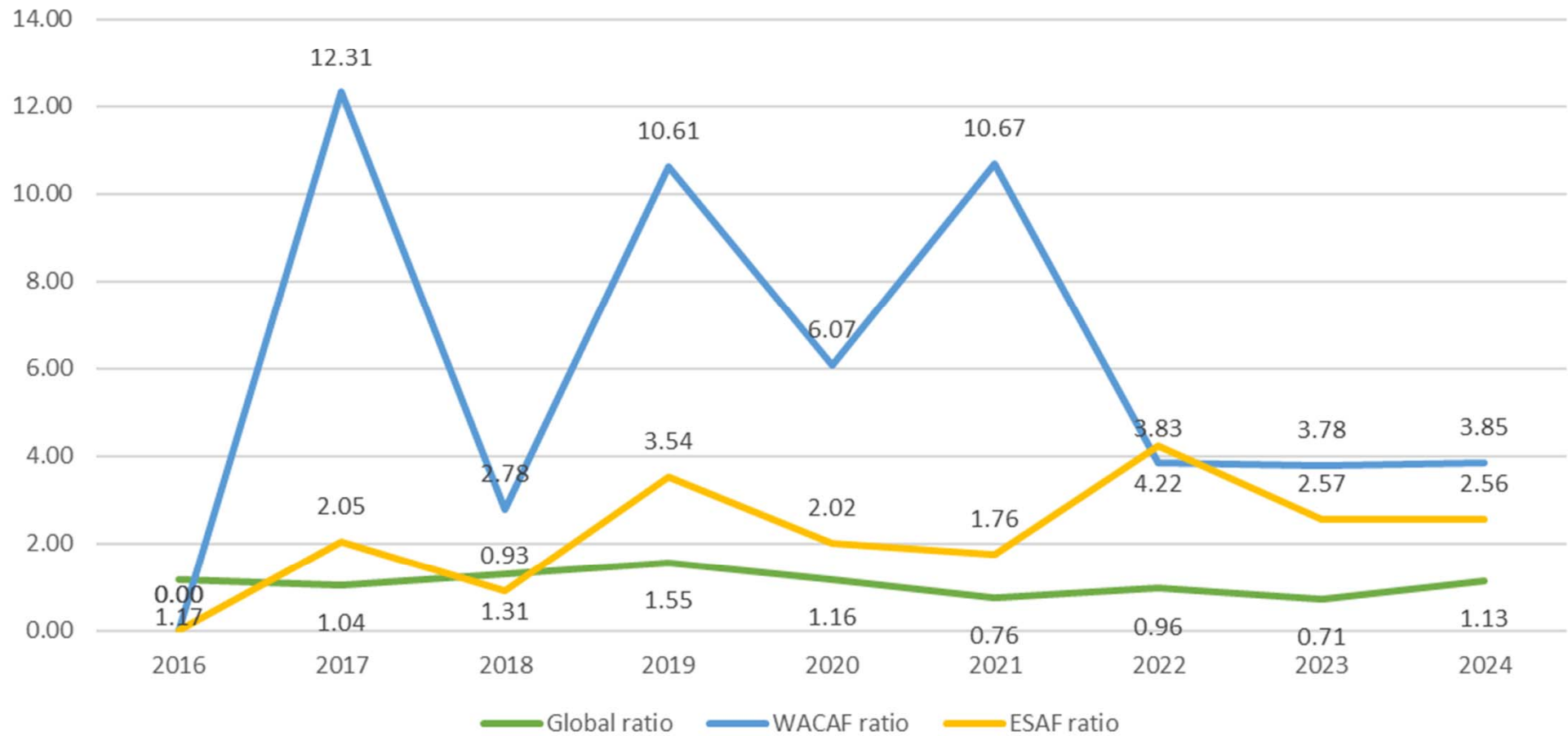
Global versus Regional runway safety accident ratio

Source: ICAO safety
reports (2016-2024)

Ratio of Global RS accidents versus Regional RS accidents per million of departure



Ratio of Global RS accidents versus WACAF and ESAF RS accidents per million of departure overtime (2016-2024)



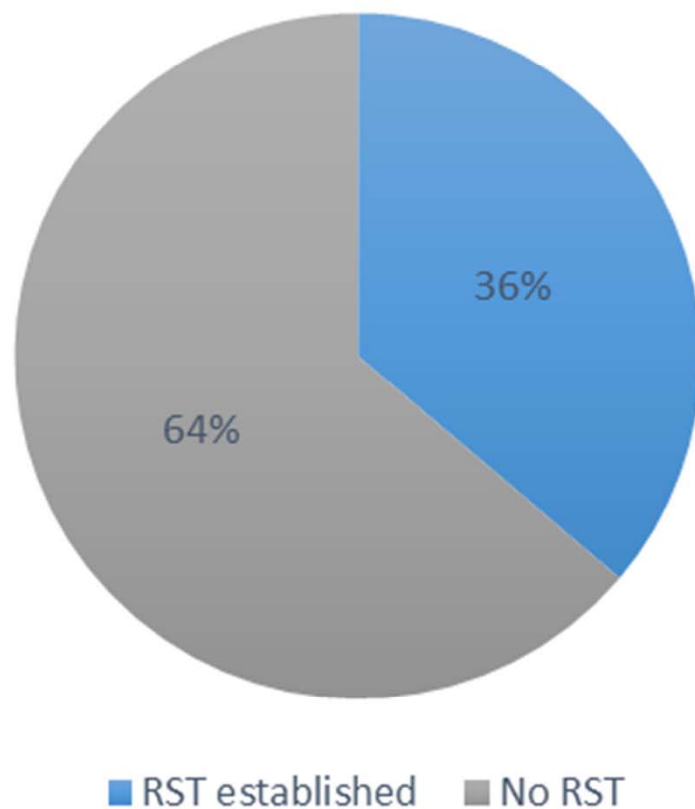


RST STATISTICS

Source: ICAO safety
reports (2016-2024)



RST ESTABLISHMENT STATUS



STATE/TERRITORY	RST ESTABLISHMENT STATUS		
	RST	NO RST	% Implementation
WACAF	17	37	31.4814815
Benin	1	0	100.00
Burkina Faso	1	1	50.00
Cameroon	2	3	40.00
Cape Verde	2	0	100.00
Central African Republic	0	2	0.00
Chad	0	1	0.00
Congo	2	0	100.00
Cote d'Ivoire	1	0	100.00
Democratic Republic of Congo	0	5	0.00
Equatorial Guinea	0	1	0.00
Gabon	1	2	33.33
Gambia	1	0	100.00
Ghana	1	0	100.00
Guinea	1	0	100.00
Guinea-Bissau	0	1	0.00
Liberia	0	1	0.00
Mali	1	5	16.67
Mauritania	0	5	0.00
Niger	1	2	33.33
Nigeria	0	5	0.00
Sao Tome and Principe	0	1	0.00
Senegal	1	1	50.00
Sierra Leone	0	1	0.00
Togo	1	0	100.00

STATE/TERRITORY	RST ESTABLISHMENT STATUS		
	RST	NO RST	% Implementation
ESAF	25	37	40.3225806
Angola	0	1	0.00
Botswana	1	3	25.00
Burundi	1	0	100.00
Comoros	0	2	0.00
Djibouti	0	1	0.00
Eritrea	0	2	0.00
Eswatini	0	1	0.00
Ethiopia	2	2	50.00
Kenya	2	1	66.67
Lesotho	0	1	0.00
Madagascar	2	3	40.00
Malawi	0	2	0.00
Mauritius	1	0	100.00
Mozambique	2	1	66.67
Namibia	2	0	100.00
Rwanda	1	0	100.00
Seychelles	0	1	0.00
Somalia	0	5	0.00
South Africa	5	5	50.00
South Sudan	0	1	0.00
Uganda	1	0	100.00
Tanzania	2	1	66.67
Zambia	1	3	25.00
Zimbabwe	2	1	66.67



KEY TAKE AWAYS:

- 67% of accidents in the AFI region are Runway Safety related events:

- ESAF: 62%
- WACAF: 78%

-The most recurrent events are (as per the ICAO safety reports) :

- RE - Runway excursions
- RAMP – Ramp accident/incidents
- BIRD - Wildlife strikes
- ARC - Abnormal runway contact

RSTs are critical for addressing local runway safety challenges and thus, improving runway safety status at the regional level

KEY TAKE AWAYS:

- RSTs must be established at all international airports in ESAF and WACAF
- Lack of reporting
 - States must provide national runway safety performance data to the regional office in order to enable:
 - the identification of critical priorities at the regional level
 - the development of a suitable regional action plan for improving runway safety

RSTs are critical for addressing local runway safety challenges and thus, improving runway safety status at the regional level



Thank You!