



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

**International Air Law Treaty Workshop, Singapore – 12 to 14
December 2023**





ICAO



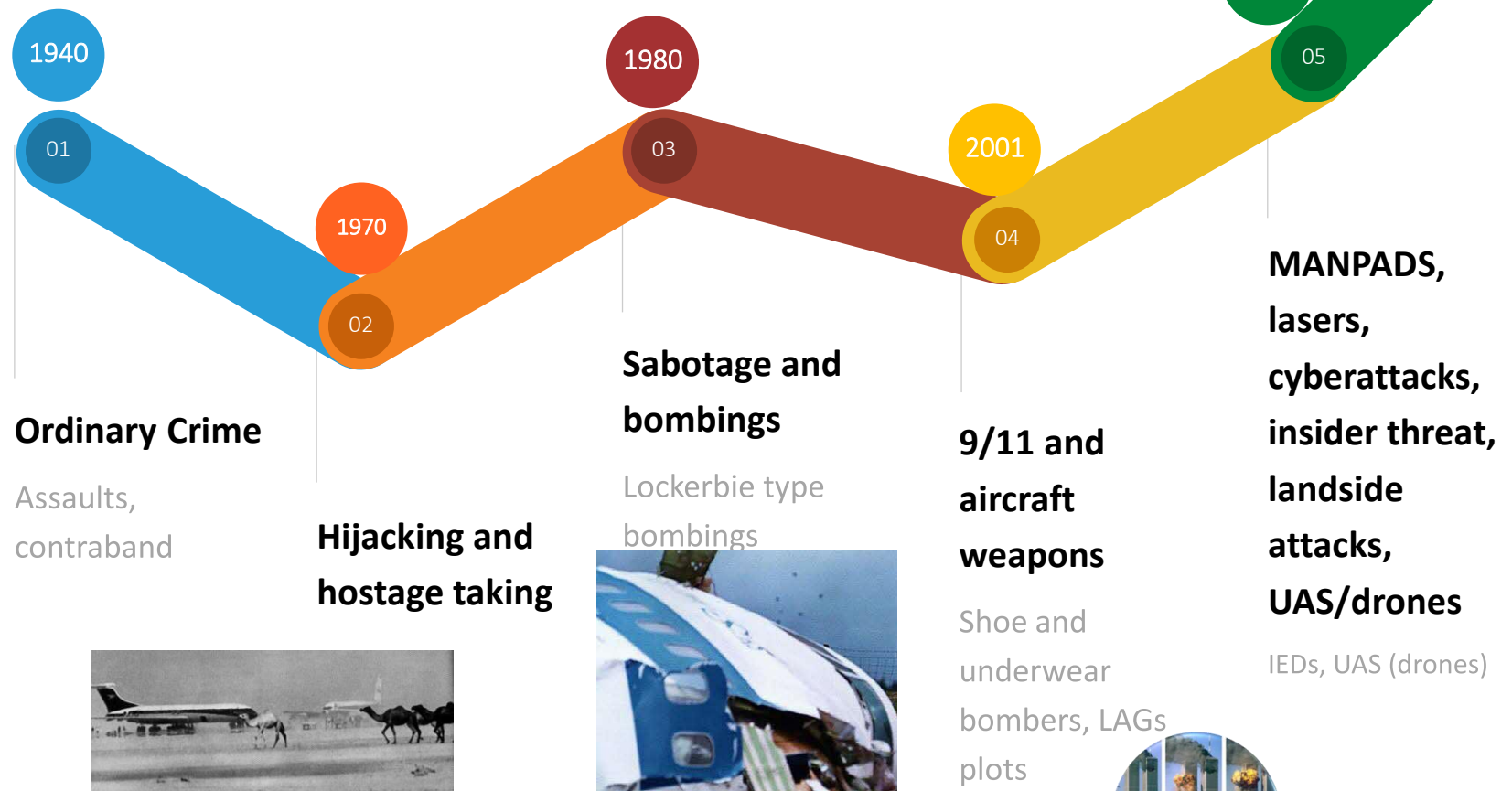
Session 3: The evolution of aerial crime and enhancements in the Beijing Protocol 2010 including addressing cyber security

International Air Law Treaty Workshop

Singapore | 12 – 14 December 2023

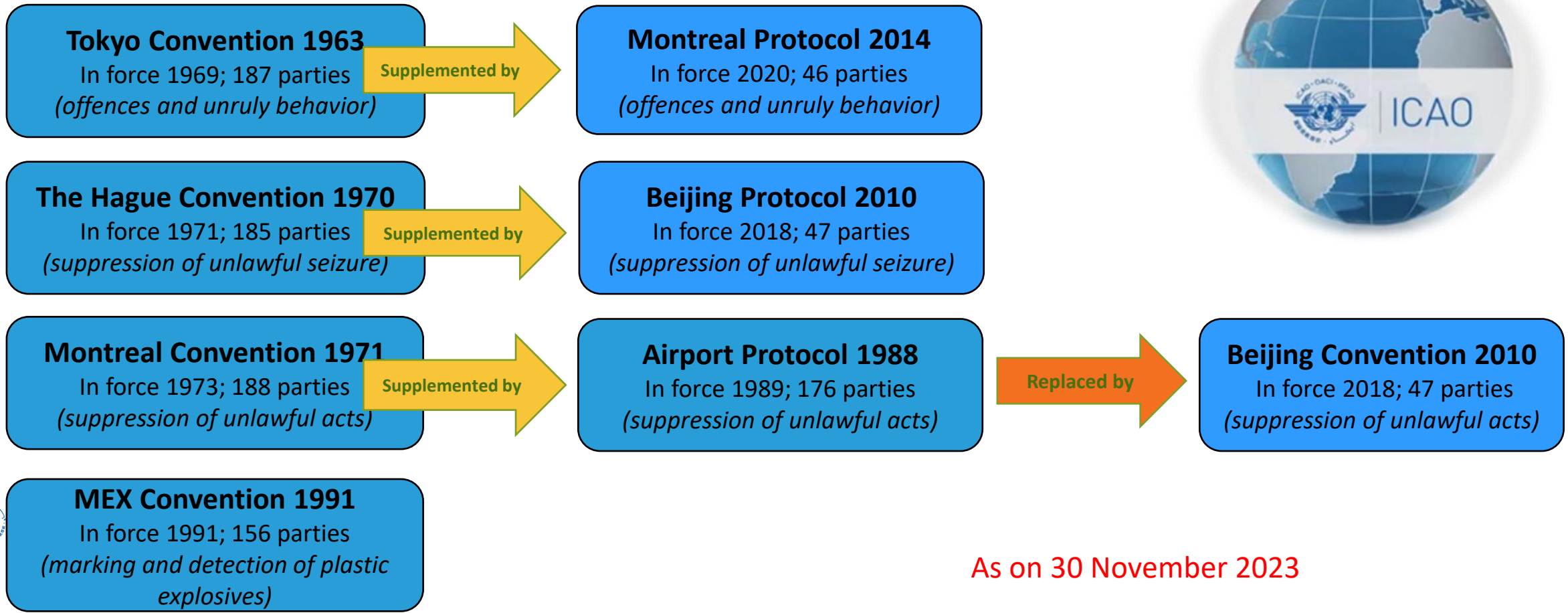


Milestones in aerial crime and acts of unlawful interference





Summary of International AVSEC Treaties



As on 30 November 2023

Study on legal measures to cover new and emerging threats



WORKING PAPER



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A35-WP/88
EX/29
24/9/04
English only

A-1

A35-WP/88
EX/29

ASSEMBLY — 35TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 14: Aviation security
14.1: Developments since the 33rd Session of the Assembly

ICAO AVIATION SECURITY PLAN OF ACTION
PROJECT 12 : LEGAL

INFORMATION PAPER

SUMMARY

This paper presents the study on legal measures to cover the new and emerging threats to civil aviation.

1. The Study on Legal Measures to Cover the New and Emerging Threats to Civil Aviation (English only), prepared by the Secretariat for the Aviation Security Plan of Action, Project 12: Legal, is set out as Appendix to this paper. This study has been referred to in paragraph 3.4.1.1 of A35-WP/49 “Developments since the 33rd Session of the Assembly”.

2. Other language versions will be available at a later stage.

(13 pages)
A.35.WP.EX29.en.EX29.wpd

1. INTRODUCTION

1.1 The ICAO Assembly adopted, in October 2001, Resolution A33-1 – *Declaration on misuse of civil aircraft as weapons of destruction and other terrorist acts involving civil aviation*, which directed the Council and the Secretary General to act urgently to address the new and emerging threats to civil aviation, in particular to review the adequacy of the existing aviation security conventions. Pursuant to this Resolution and recommendations of the High-level, Ministerial Conference on Aviation Security held in February 2002, the Council, in June 2002, approved an ICAO Aviation Security Plan of Action, which contains Project 12 – Legal Aspects. Project 12 mandates a review of existing legal instruments in aviation security so as to identify gaps and inadequacies as to their coverage in relation to the new and emerging threats. This document analyzes the coverage of new and emerging threats in existing aviation security conventions and identifies gaps and inadequacies in these conventions. The study focuses on the panel aspects of unlawful interference against civil aviation. It does not address the issue of liability in relation to unlawful interference. In its conclusion, the document contains preliminary recommendations on how to deal, from a legal point of view, with new and emerging threats to civil aviation.

2. DESCRIPTION OF NEW AND EMERGING THREATS

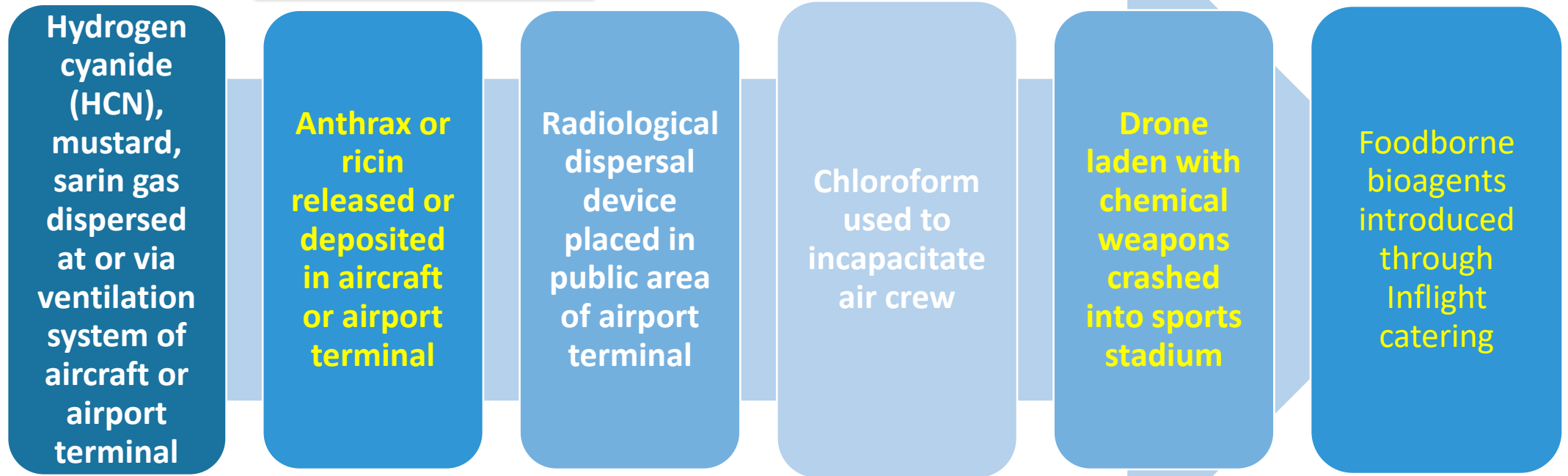
2.1 According to an ICAO study group on new and emerging forms of threat to civil aviation, the term “new threat” refers to acts that make use of methods, actions or objects not previously considered to pose a serious threat to civil aviation. The term “emerging threat” refers to those existing methods, actions or objects that could conceivably be used in an act of unlawful interference which have not yet been employed or documented for use against civil aviation.

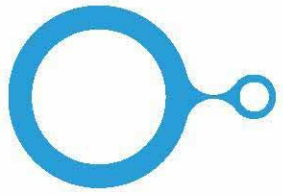
2.2 The following threats are the focus of the current study:

- 1) Misuse of aircraft as weapons;
- 2) Suicide attacks in the air and on the ground;
- 3) Electronic attacks using radio transmitters or other means to jam or alter the state of ground or airborne navigation or guidance control systems thereby endangering the safety of persons and aircraft;
- 4) Computer-based attacks which block or alter aeronautical communications or interfere with other aviation operations (e.g. aeronautical data banks) which can endanger the safety of persons and aircraft;
- 5) Chemical and biological attacks against the air travelling public or to disrupt air operations and deny use of aviation facilities by threatening its use;
- 6) Misuse of nuclear or other radioactive materials to endanger persons, contaminate property and deny use of aviation facilities; and
- 7) Attacks by making use of Man-Portable Air Defence Systems (MANPADS).



“If it can happen ...it will”:
Scenarios for BCN attacks
on civil aviation





Threats to civil aviation

- use of **IEDs** (artfully concealed, complex, homemade explosives) and **small arms** against airports and aircrafts, etc.
- use of aircraft as a **weapon**
- **MANPADS**
- **insider/non-passenger** exploitation
- **Cyber threat**
- growing concern with use of **UAS (drones)**



Cyber Attack Scenario – Air Traffic Control (ATC) and Primary Surveillance Radar (PSR)

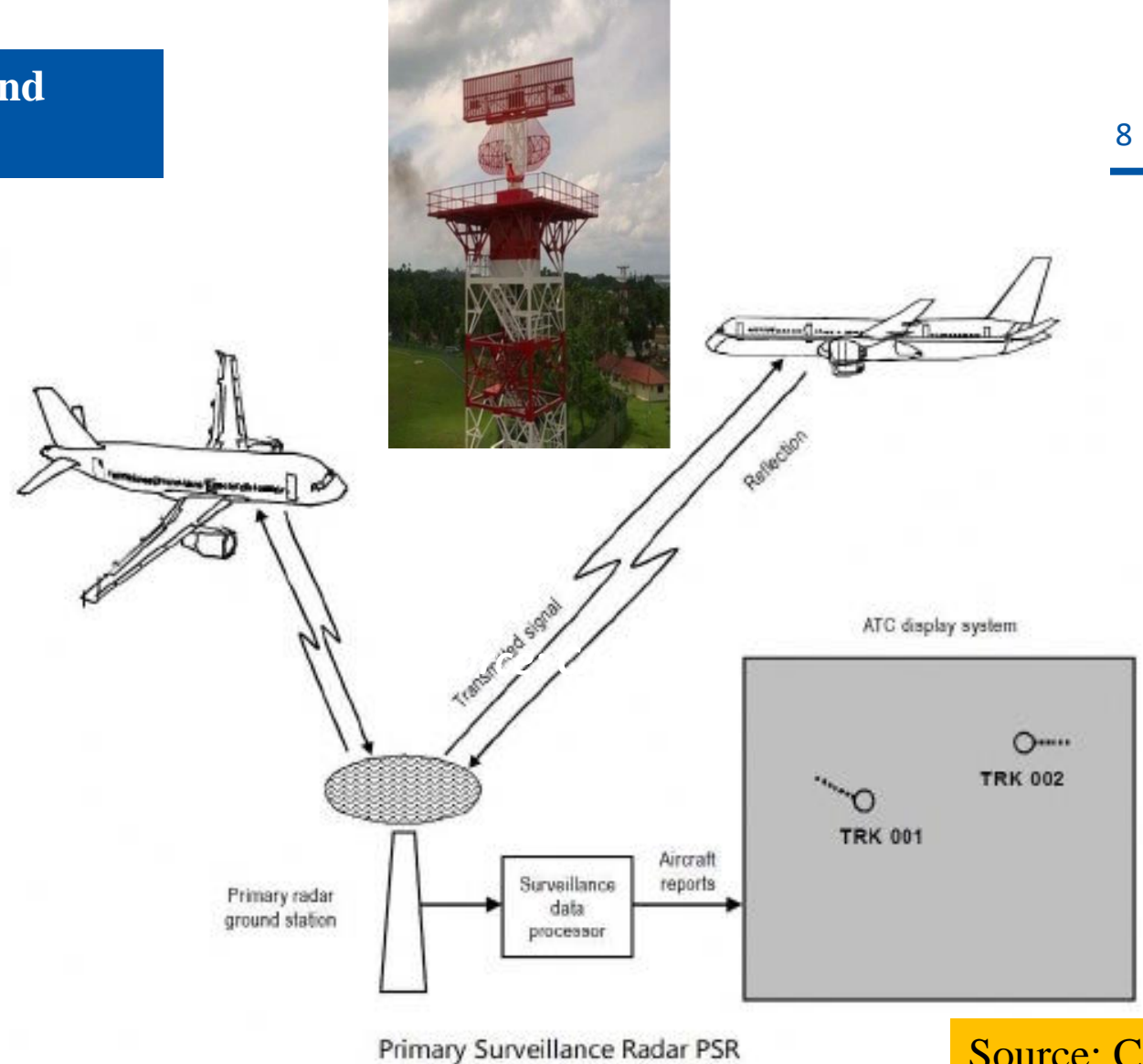
Article 1 (d) and (e) - Montreal Convention 1971

Article 1

1. Any person commits an offence if that person unlawfully and intentionally: ...

(d) destroys or damages **air navigation facilities** or interferes with their operation, if any such act is likely to endanger the safety of aircraft in flight;

(e) **communicates information** which he knows to be **false**, thereby endangering the safety of an aircraft in flight.



Beijing Convention 2010:

Article 2, paragraph c):

“Air navigation facilities” include **signals, data, information or systems** necessary for the navigation of aircraft

Source: CAAS



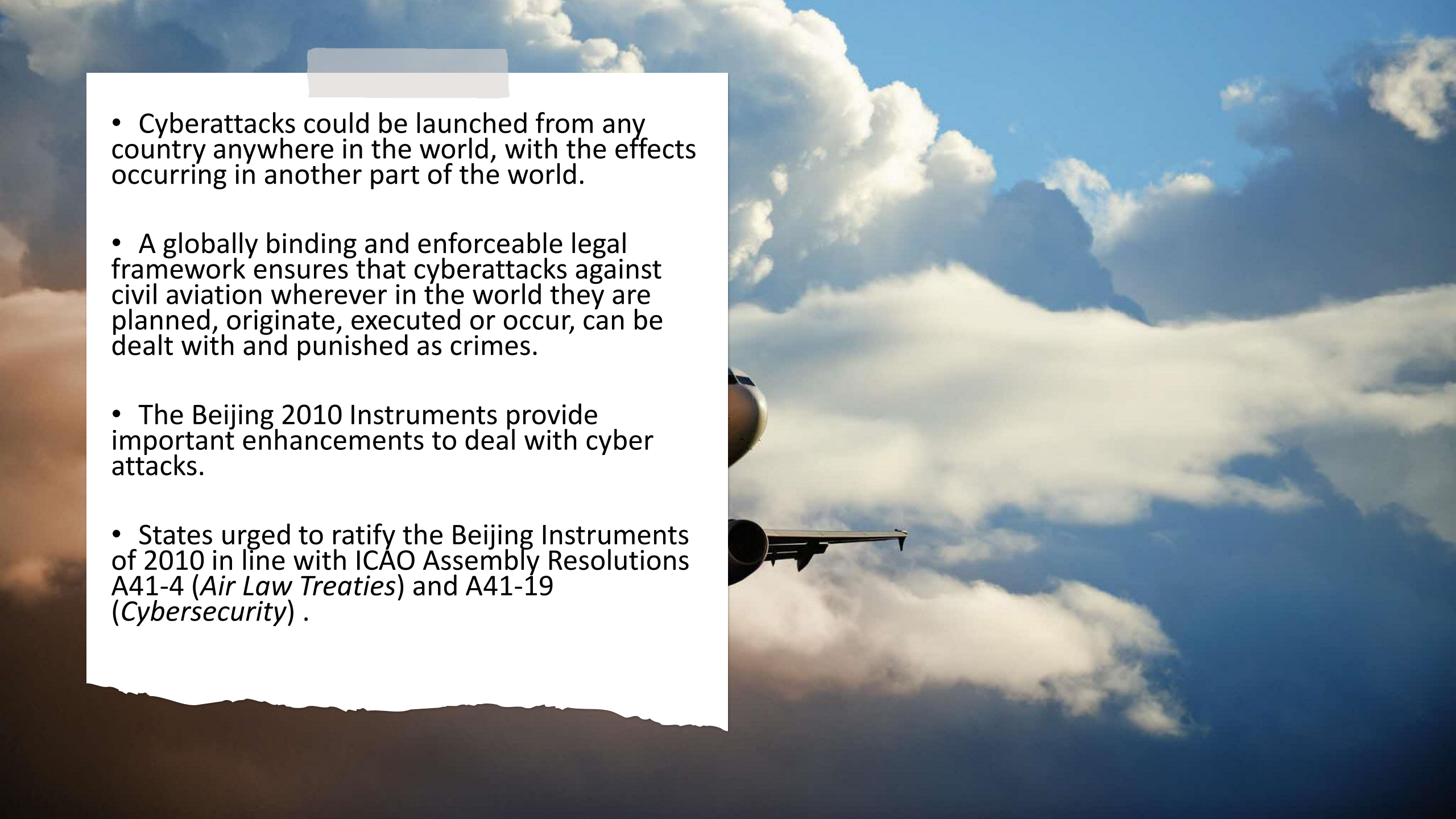
Changes to the offence of “Hijacking”

HAGUE 1970 (Article 1)

Any person who on board an aircraft in flight: unlawfully, by force or threat thereof, or by any other form of intimidation, seizes, or exercises control of, that aircraft, or attempts to perform any such act, or is an accomplice of a person who performs or attempts to perform any such act commits an offence.

BEIJING 2010 (Article 1)

Any person ~~who on board an aircraft in flight:~~ commits an offence if that person unlawfully and intentionally, seizes, or exercises control of an aircraft in service by force or threat thereof, or by coercion or by any other form of intimidation, or by any technological means.



• Cyberattacks could be launched from any country anywhere in the world, with the effects occurring in another part of the world.

• A globally binding and enforceable legal framework ensures that cyberattacks against civil aviation wherever in the world they are planned, originate, executed or occur, can be dealt with and punished as crimes.

• The Beijing 2010 Instruments provide important enhancements to deal with cyber attacks.

• States urged to ratify the Beijing Instruments of 2010 in line with ICAO Assembly Resolutions A41-4 (*Air Law Treaties*) and A41-19 (*Cybersecurity*) .

States Parties to the Beijing 2010 Instruments

Beijing Convention 2010

47 Parties

Angola, Bahrain, Benin, Botswana, Burkina Faso, Cabo Verde, China, Congo, Côte d'Ivoire, Cuba, Cyprus, Czech Republic, Dominican Republic, Eswatini, Finland, France, Gabon, Gambia, Germany, Ghana, Guyana, Honduras, Kazakhstan, Kuwait, Luxembourg, Mali, Malta, Mozambique, Myanmar, Netherlands, Oman, Panama, Paraguay, Portugal, Romania, Russian Federation, Rwanda, Saint Lucia, Seychelles, Sierra Leone, Singapore, Sweden, Switzerland, Turkey, Turkmenistan, Uganda, Uruguay.

Beijing Protocol 2010

47 Parties

Bahrain, Benin, Botswana, Burkina Faso, Cabo Verde, China, Congo, Côte d'Ivoire, Cuba, Cyprus, Czech Republic, Dominican Republic, Eswatini, Finland, France, Gabon, Gambia, Germany, Ghana, Guyana, Honduras, India, Kazakhstan, Kuwait, Luxembourg, Mali, Malta, Mozambique, Myanmar, Netherlands, Oman, Panama, Paraguay, Portugal, Romania, Russian Federation, Rwanda, Saint Lucia, Saudi Arabia, Seychelles, Sierra Leone, Singapore, Sweden, Switzerland, Turkey, Turkmenistan, Uganda.



Thank You!