

# DRONES' INSURANCE



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## DRONES AND INSURANCE - CONTEXT



Using drones  
in insurance  
sector



Insuring risks  
related to  
drones

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## DRONE MEANS ....AND DRONE NAMES

Drone – used mostly by the French  
RPA/S – Remotely Piloted Aircraft (Systems) – used by international aviation organizations (ICAO)  
UAS – Unmanned Aerial System – used in the UK and USA  
UA – unmanned aircraft – used in the EU legislation  
UAV – popular name

Drone = Aircraft ?



## SOME FACTS...

- The rapid development of UAS technology has created a burgeoning market for UAS, with the estimated **global market for UAS** expected to reach **\$93 billion by 2021**.
  - „**The potential usages of UAS is limited only by our imagination**”



# APPLICATION OF DRONES

Oil&gas exploration

Agriculture spraying / monitoring

Delivering goods

Track wildlife

Media, news

Wildlife mapping

Fire detection and fighting

Weather monitoring

**Insurance claims adjustment**

Patrolling borders

Aerial imaging

Stalking

Terrorism

Privacy invading

# DRONES - RISKY TOYS ?



<https://www.youtube.com/watch?v=xeviAWB0i4Y>

April 2014: An Australian triathlete sustained head injuries after a drone fell from the sky.

November 2015: An eighteen-month-old boy lost an eye after being hit by a drone flown by a family friend.

March 2016: A drone came within approximately 200 feet of a Lufthansa Airbus A380 approaching Los Angeles International Airport

- 1. Amputations
- 2. Eye injuries
- 3. Concussions and head injuries

- 1. Collisions with aircrafts and vehicles
- 2. Airport chaos and BI

## Fundamental sector risks (by Lloyd's)

Negligent or reckless pilots

Patchy regulatory regimes

Poor enforcement

Vulnerability to cyberattack

Privacy infringement



## RISK ON THE INCREASE

- With the growing numbers of drones, the perceived and possible risks have also increased, not only to civil aviation operations but also to the greater society.
  - **Increasing application = increasing risks**

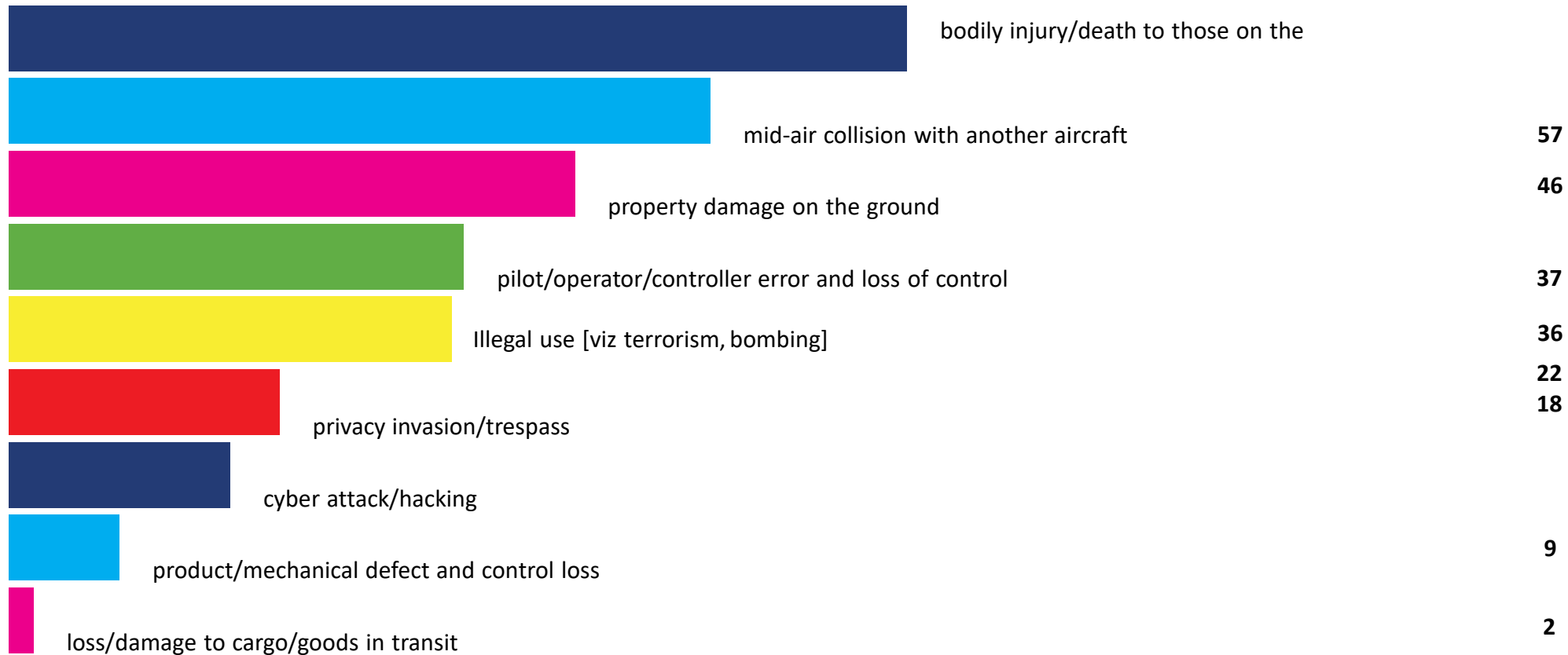


# RISK PERCEPTION IN THE INSURANCE MARKET

## What do you envisage as the biggest insurable risks associated with drones?

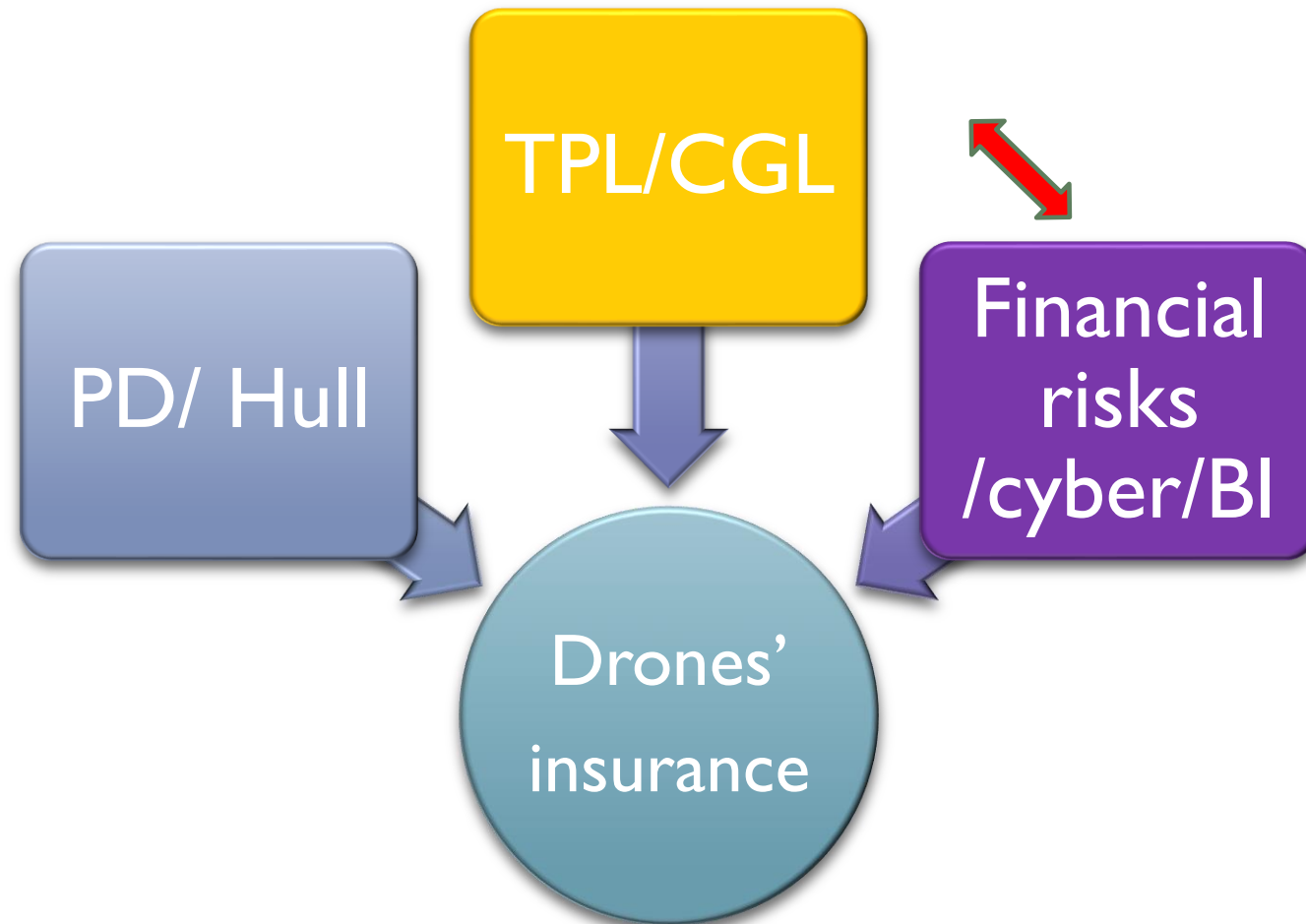
please rank the below risks as follows:

(1 = biggest risk; 2 = second biggest risk; 3 = third biggest risk)



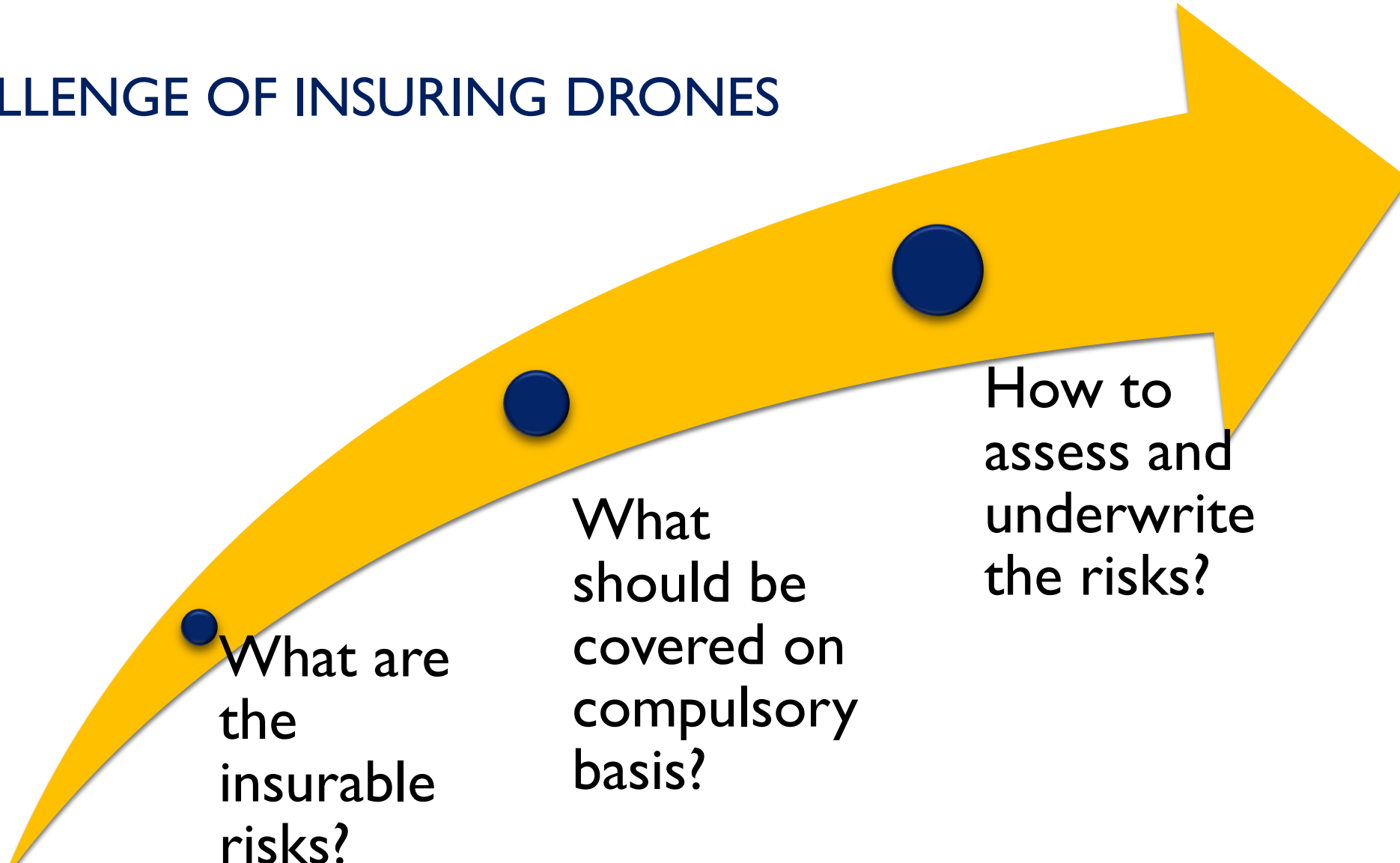
# TALKING ABOUT DRONES' INSURANCE WE MEAN...

Various interests = various risks



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## CHALLENGE OF INSURING DRONES



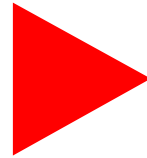
What are the insurable risks?

What should be covered on compulsory basis?

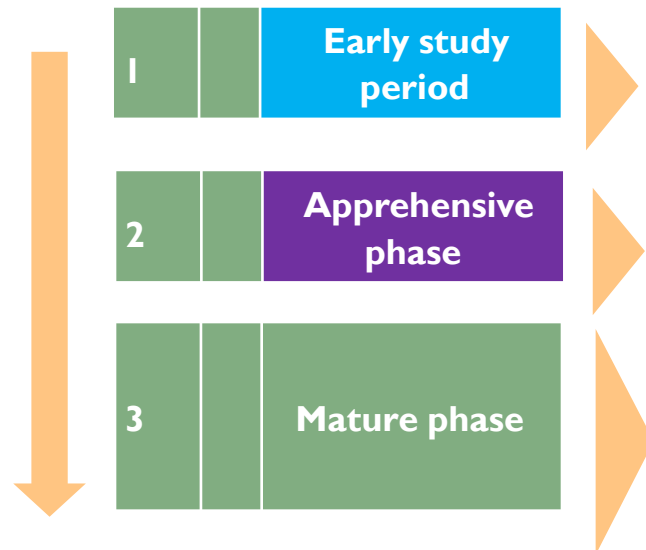
How to assess and underwrite the risks?

# FROM GAMING TO INSURING

Insurance as “Enabler”



**Supports the development of and response to social technical and economic evolution by managing and financing the associated risks**



- Efforts to understand exposure
- Risks may unknowingly be covered = silent risks
- Initial risk knowledge leads to concerns
- Insurers look to reduce/contain coverage
- Increased risk knowledge = enhanced understanding
- Risk management, customized coverage & other approaches, at reasonable cost



## REGULATORY RISK – IMPACT ON INSURANCE

- Lack of comprehensive liability regime
- Lack of coordinated international standards
- Choice of standards: air or road traffic patterns ?
- Autonomous road vehicular systems and drones - sharing similar legal risks ?

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## REGULATORY RISK – IMPACT ON INSURANCE

- Rome Convention 1952 ?
- Riga Declaration 2015
- No harmonized liability regime within EU (strict- liability regime / fault based regimes)
- Negative opinion of the EU Study of 2014: *“we recommend that there should not be any attempt to harmonise third-party liability regimes across the EU”*

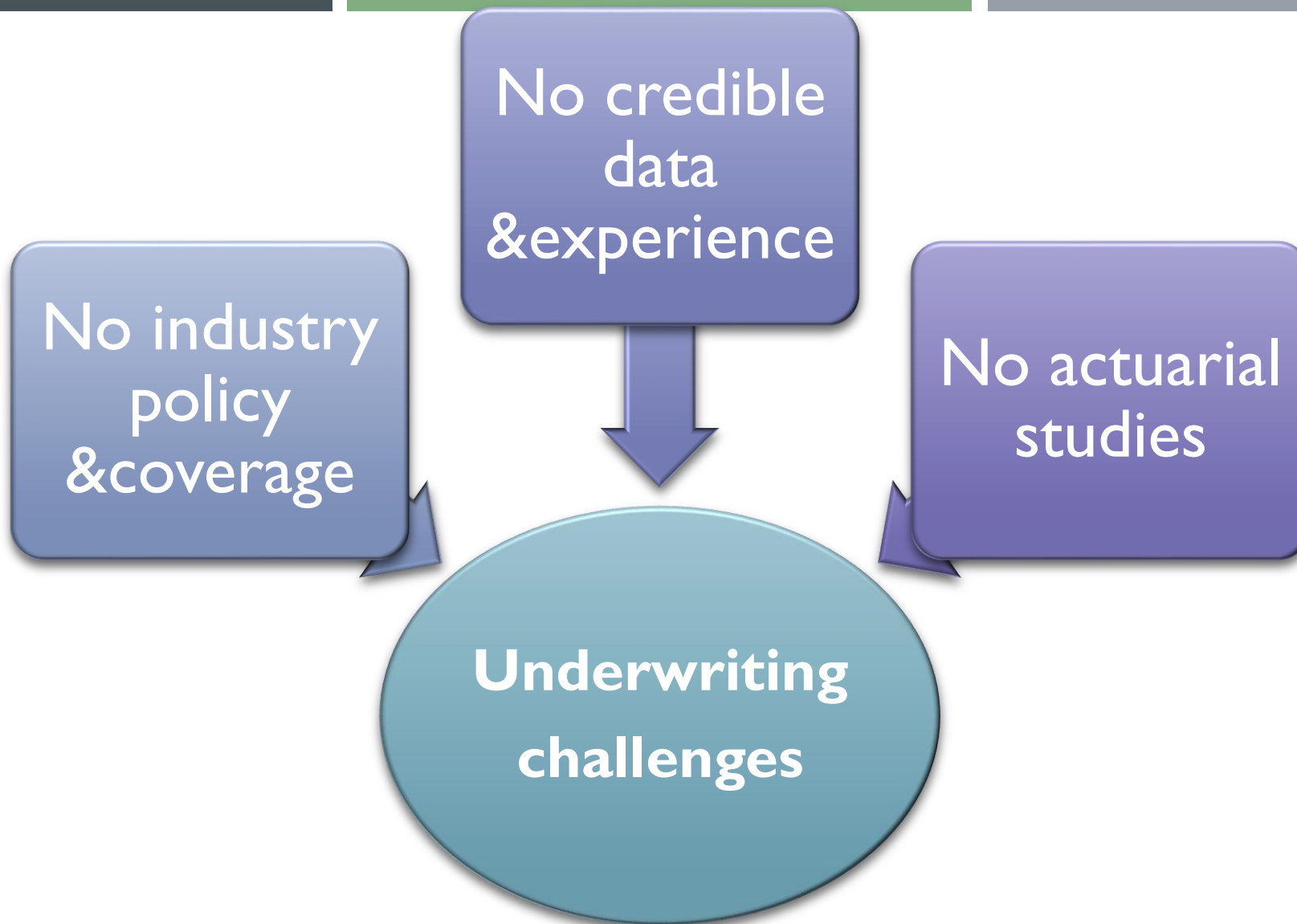
# INSURANCE LIABILITY FRAMEWORK

## Regulation (EC) 785 /2004

- includes air carriers and aircraft operators obligations regarding passengers, baggage, cargo, and third parties.
- EC stated that it “imposes minimum insurance obligations on air carriers and *non-commercial* aircraft operators in respect of liability for passengers, baggage, cargo and third parties”.
- Applied to the operation of drones (carrying zero passengers), these provisions are only relevant to any cargo carried and to third parties. However, it has been questioned as to whether third-party liability legislation is equally applicable to unmanned aircraft as it is to manned aircraft.

## Chicago Convention 1944 on civil aviation

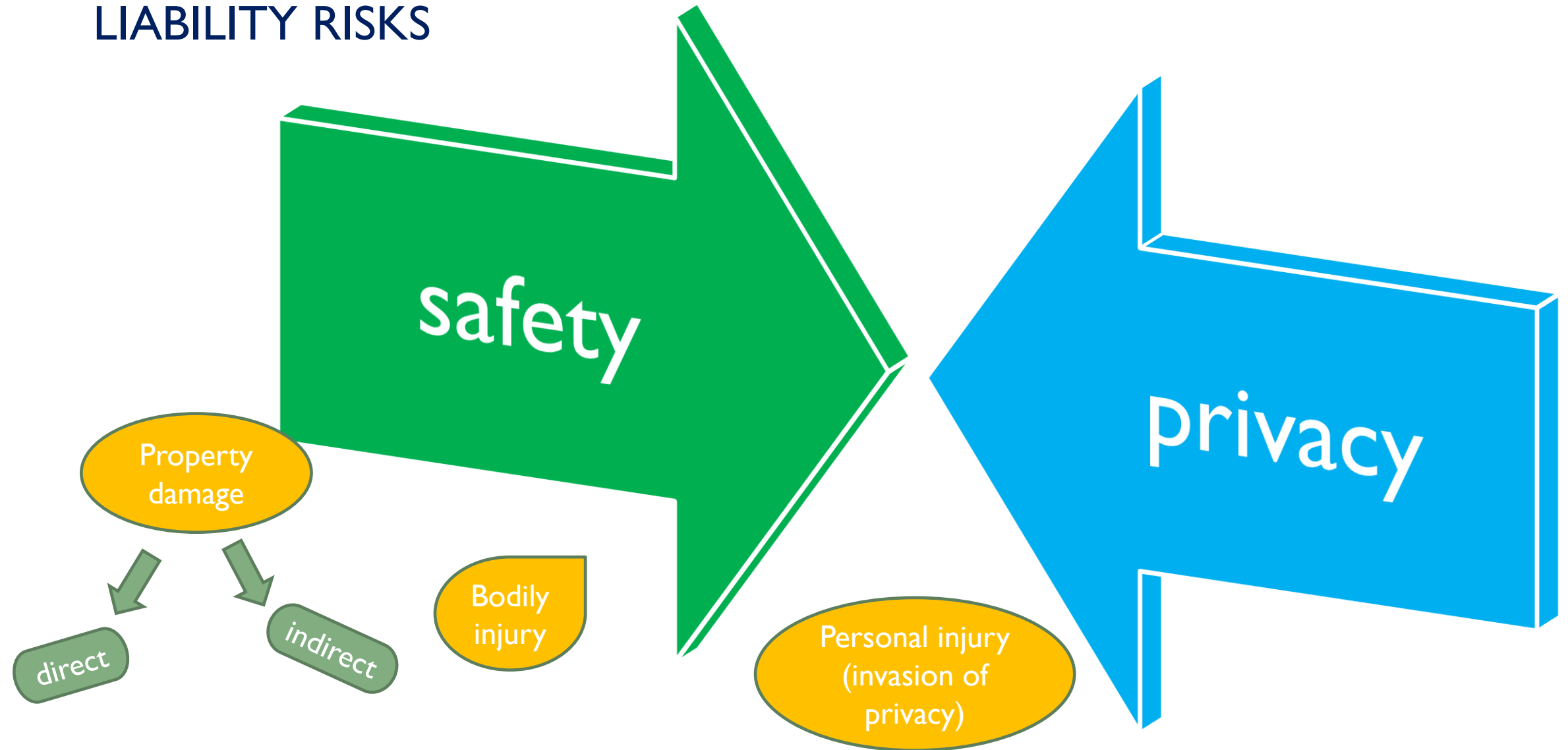
- “Each contracting State undertakes to *insure* that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft.”



Source: Swiss RE 2018



# LIABILITY RISKS



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INSURANCE COVERAGE





## SOME COVERAGE CHALLENGES

- **Silent risks or uncovered risks ?**
  - Invasion of privacy / nuisance
- **Compulsory insurance**
  - Only for duly registered and licensed ?
  - Also for unathorised use?
- **Guarantee funds ?**
- **What are the ,reasonable expectations' of those exposed to the risk ? :**
  - of the drone owners
  - of the public



## DRONES AND COVID19

- “Drones are playing a significant role in the current COVID-19 situation, assisting various authorities in several activities.
- There is an immediate need to make available suitable insurance products covering the various risks involved in the use of drones”



THANK YOU

