



Module 5

Development of Safety Performance Indicators (SPIs)

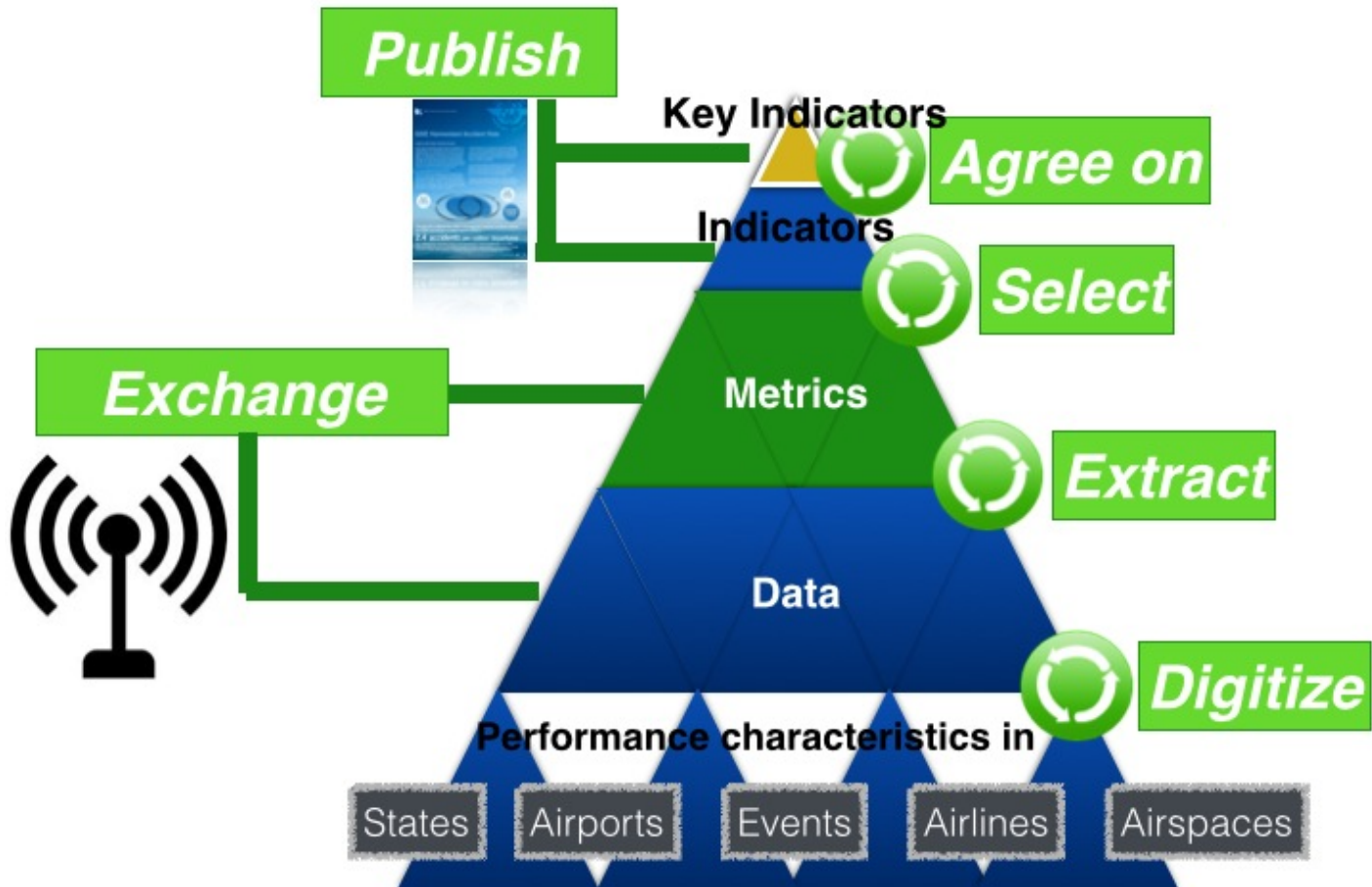


SSP Safety Performance Indicators (SPIs)

The State should:

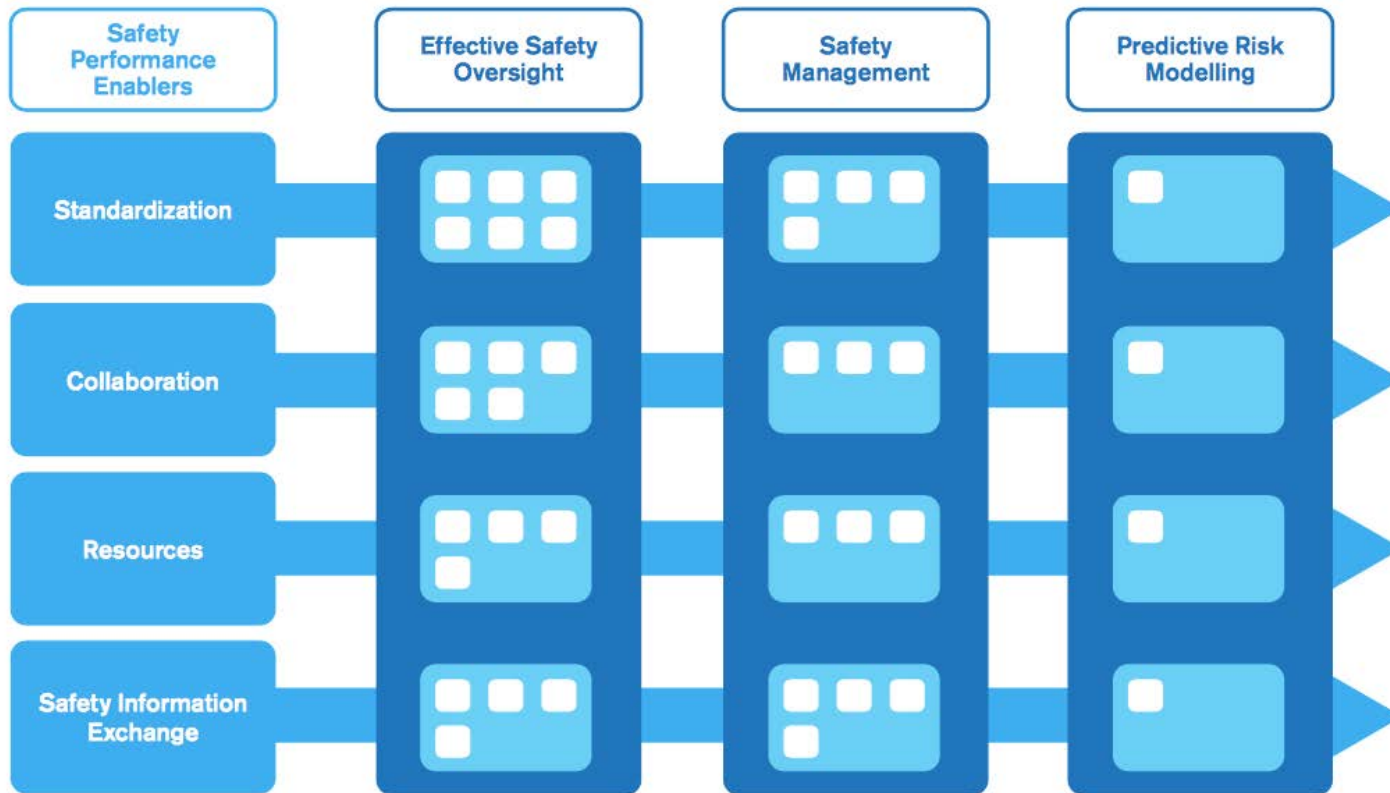
- Establish lower consequence safety and/or quality indicators with appropriate target and alert monitoring (mature ALoSP).
- Safety indicators development and selection should be congruent to the State's safety objectives and safety policy.
- They should be appropriate and relevant to the scope and complexity of the State's aviation activities.
- Periodic monitoring of the safety indicators for any undesirable trends, alert level breaches and target achievement should be performed.

SPI Pyramid



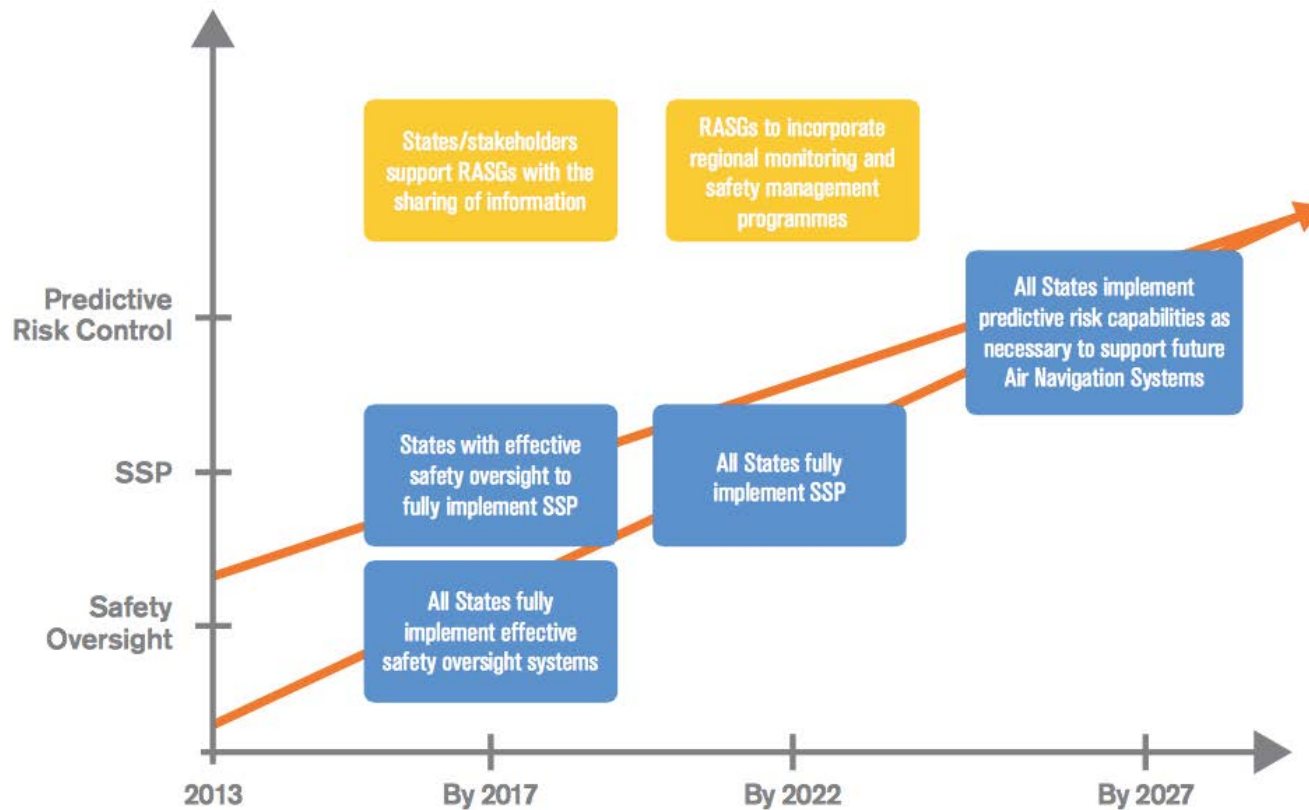
ICAO Global Aviation Safety Plan

Figure 1: GASP Framework



ICAO GASP Objectives

Figure 2: Overview of strategy to achieve GASP objectives





European Safety Plan

SAFETY PLAN FRAMEWORK		
SYSTEMIC ISSUES	OPERATIONAL ISSUES	EMERGING ISSUES
Working with States to implement and develop SSPs	COMMERCIAL AIR TRANSPORT BY AEROPLANES	New products, systems, technologies and operations
Working with States to foster the implementation of SMS in the industry	Runway Excursions	Environmental factors
Safety Management enablers	Mid-air Collisions	Regulatory considerations
Complexity of the system	Controlled Flight Into Terrain	
Competence of personnel	Loss of Control In Flight	
	Runway Incursions	
	Fire, Smoke and Fumes	
	OTHER TYPES OF OPERATION	
	Helicopters	
	General Aviation	
HUMAN FACTORS AND PERFORMANCE		



Belgian Safety Plan

Belgian Safety Plan 2010-2014 | 2011 Update

CONTENTS

Outline	2
Link between the European Aviation Safety Plan (EASp) and the Belgian Safety Plan	4
General Measures (GM) to further develop the Belgian Safety Programme (BSP)	5
GM1: Establishing a National Safety Library	5
GM2: Developing Safety Performance Indicators (SPI's)	6
GM3: Developing a strategy with respect to safety training and safety promotion	9
Operational measures (OM) to improve civil aviation safety	10
OM1: Establishing a Belgian Aviation Wildlife Hazard Committee and drafting a national action plan to prevent collisions with animals	10
OM2: Resolving problems related to ground handling in partnership with the market sector	13
OM3: Drafting regulations with respect to unruly passengers	15
OM4: Annual check of the reliability of the flight controls for commercial aircraft in Belgium	16
OM5: Complete the regulation with respect to the "Targeting of Aircraft with Lasers"	17
OM6: Implementation of the European Action Plan for the Prevention of Runway Incursions (EAPPRI)	18

CAA UK Objectives (CAP784)

1.10 In order to achieve a high level of safety, CAA has developed the following strategic objectives for aviation safety²:

- The CAA regulates the safety of UK aviation, in partnership with EASA, by approving and overseeing the organisations and individuals involved in UK aviation that fall within its remit;
- The CAA will continue to use and develop a risk-based approach to ensure that UK aviation complies with European and UK legislation and requirements;
- The CAA will work collaboratively with industry to continuously improve aviation safety and address safety issues;
- Where required, the CAA will take any necessary actions to ensure safety is not compromised and will ensure that the high safety standards within UK airspace, and its supporting infrastructure, are maintained, with potential risks identified and appropriate mitigating actions taken;
- The CAA will draw upon worldwide and UK data to identify safety trends applicable to UK aviation, prioritizing this information to focus on the most significant safety issues;
- The resulting safety improvement initiatives will be captured in the CAA Safety Plan, which will be used as a means of monitoring progress and effectiveness.



Dutch Objectives

1. A high level of safety and continual improvement

Towards what level of safety do we strive? The perception of safety changes through time, as does the confidence of Dutch citizens in the safety of Dutch aviation. For this reason, the target for aviation safety is not only expressed in figures, but also in the objective that the Netherlands, in keeping with the European objective, wishes to be among the best in the world. It is also in line with Cabinet policy that the Netherlands wants to be an ambitious and authoritative country in Europe and the world.

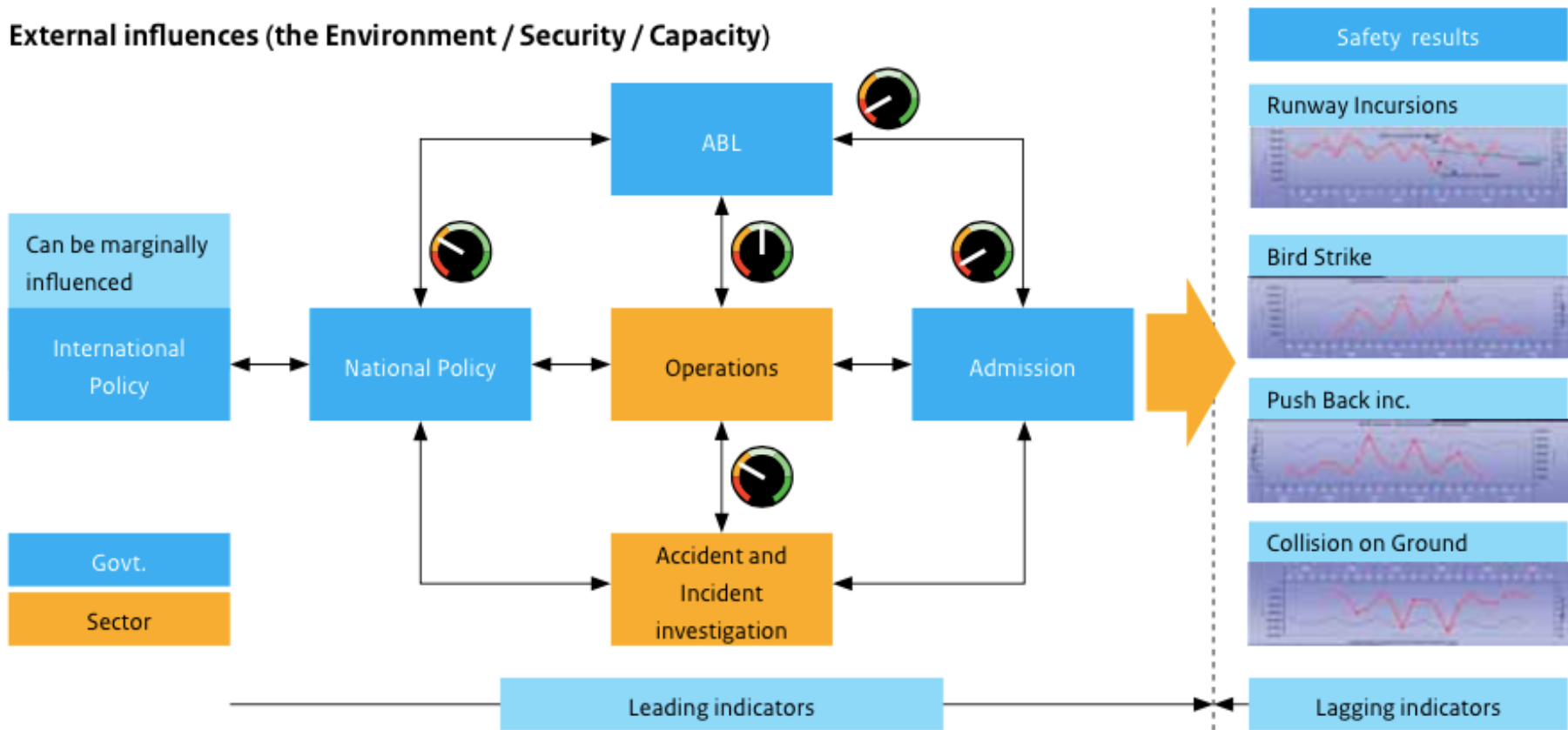
2. The sector takes responsibility itself. Red tape and administrative burden will be reduced.

Aviation is a sector in which it has been proven that safety is of paramount importance. This means that it is possible to grant more freedom for the sector to take responsibility itself on the basis of thorough safety management systems. For airlines which abide well by the rules, the burden of supervision declines as a result. Safety is actually expected to improve more if organisations focus on possible risks and start to tackle them, rather than just being inspected all the time. The sector has the responsibility of improving safety itself, without detailed rules imposed by the government.

The starting point is that the red tape and administrative burden for companies will be limited as much as possible. In addition, safety costs money. An attempt must also be made to restrict the costs of safety measures as much as possible. This demands a different role for the government organisation, tailored to this in qualitative terms. Appropriate regulations and meta-supervision must guarantee that there is room for own responsibility whilst countering abuse.

Dutch Vision

External influences (the Environment / Security / Capacity)





**What are your goals
and objectives?**



SPI Development

Step 1: Each small group defines 4-5 goals (brief, clear and rational sentences).

Step 2: Collectively, the group decides on a set of safety goals.

Step 3: Each small group gets a goal and develops a rationale for it.

Step 4: Collectively, the group identifies a list of relevant datasets/data sources and determines the availability of data.

Step 5: The group defines key indicators, supporting metrics and further elements needed to achieve each goal.