



# Apulian Cluster for Aerospace Technology



## Key Facts

- 10 80+ Companies
- 10 5000+ Direct employees
- 10 575M+€: Export (2016)
- 10 Since 2014 100+M€ in R&D activities

## Aeronautics

- Aerostructure (fixed and rotary wing),
- Propulsion system, Avionic, Software, Interiors

## ✓ Space

- Satellite (design and manufacturing)
- Satellite data management and service provision
- Downstream application



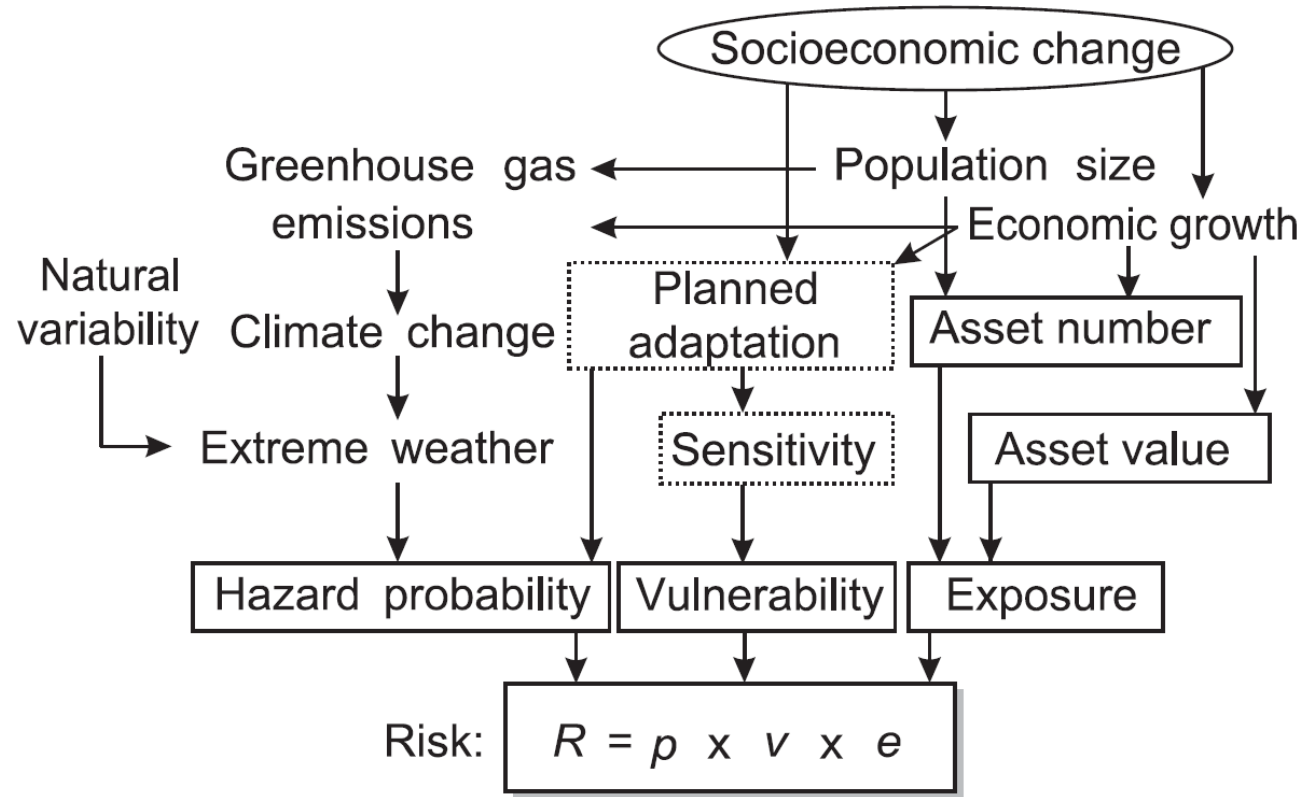


**Some people don't like change,  
but you need to embrace change  
if the alternative is disaster.**

Elon Musk

# Risk Modelling and Climate Change

**Framework for modelling risk from extreme weather events (from Bouwer, 2013)**











COPERNICUS LAND  
MONITORING SERVICE

## Thematic hotspot monitoring in coastal zones

New Product Update 2019-20



Copernicus  
Europe's eyes on Earth



European  
Environment  
Agency

Implemented by

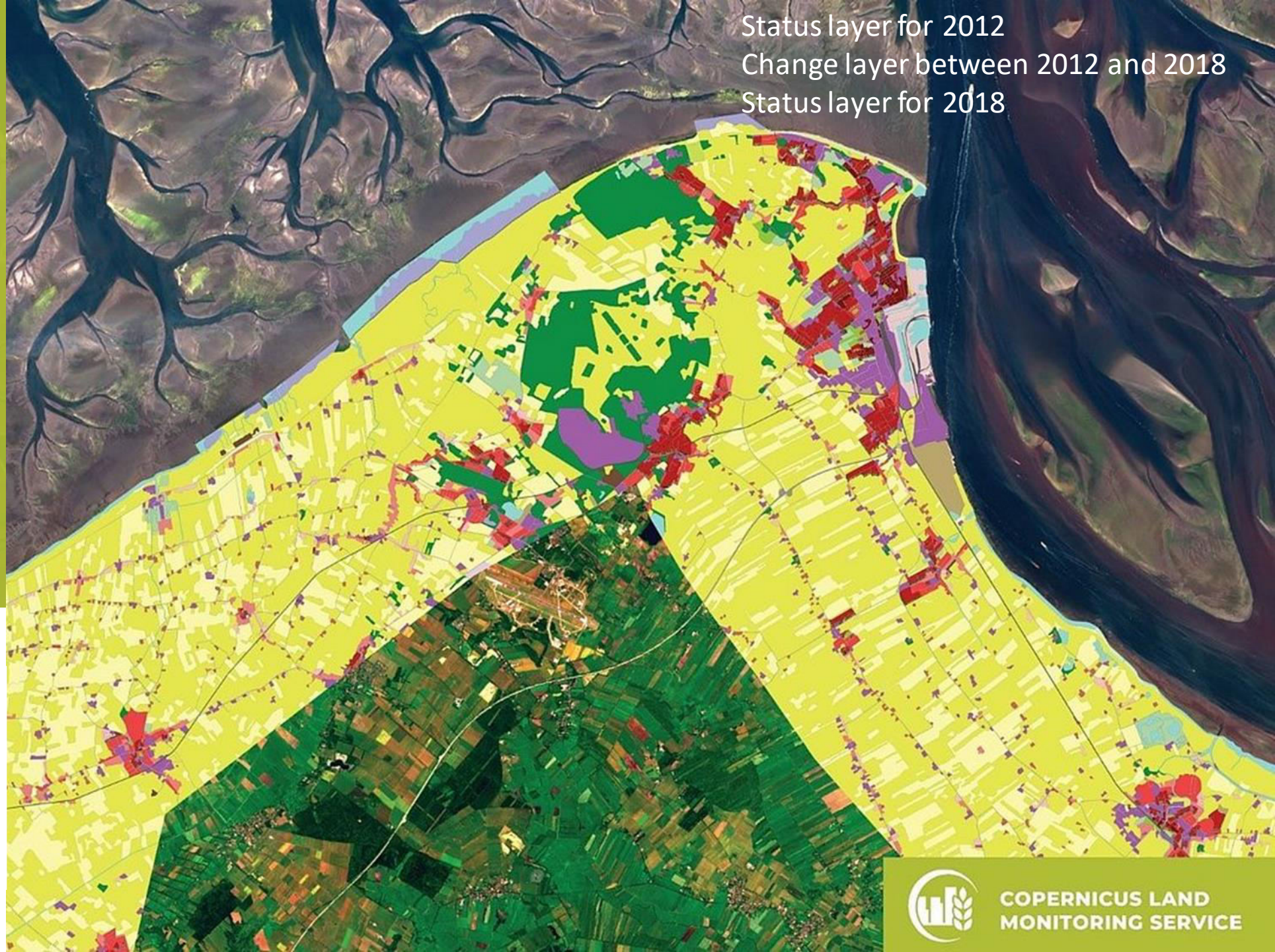
planetek  
italia

GeoVille

TELESPAZIO  
a LEONARDO and THALES company

planetek  
hellas

Status layer for 2012  
Change layer between 2012 and 2018  
Status layer for 2018



The new products will cover all European coastal territory to an inland depth of 10 km with a total area of approximately 730,000 km<sup>2</sup>. The products will have a minimum mapping unit of 0.5 ha and record around 60 LC/LU classes.



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# In the framework of the ARIA-3 the Climate Resilience Service within the ESA Atlantic Regional Initiative



End-Users

## Integrated Service Platform

CRS: Climate Resilience Service

CPS: Cities and Ports Service

POS: Protecting The Ocean Service

EA: Impact on Economic Activ.

CF: Coastal Flooding Risk Assessment

CE: Coastal Erosion Risk Assessment

PA: Protection of Coastal Assets

SM: Security of Ports & Maritime Transport

TH: Tourism and Public Health

PM: Ports Pollution Monitoring

ML: Detection & Monit. Marine Litter

ES: Good Environ. Status

Vulnerability of Critical Infrastructures  
Coastal Exposure  
Sea Level Rise  
Flood Extent Maps

Containers Counting

Movement and Vessel Activity at Ports

Change Detection

Bathymetry Near Shore

Detection of Meth. Atm. Pol. & Carbon

Detection of Oil Spill Incidents

Detection of Marine Litter

Sediment Disturbance

Algae blooms & Algae mats

Sewage Plumes

Chl-a

SST

Primary Productivity

EO-based Services



Data Access